

In the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel to the Water Authority, based upon 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 2016AB Bonds is 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. In the further opinion of Bond Counsel, interest on the 2016AB Bonds is not a specific preference item for purposes of the federal individual or corporate alternative minimum taxes, although Bond Counsel observes that such interest is included in adjusted current earnings when calculating corporate alternative minimum taxable income. Bond Counsel expresses no opinion regarding any other tax consequences related to the ownership or disposition of, or the amount, accrual or receipt of interest on, the 2016AB Bonds. See TAX STATUS.



**San Diego County Water Authority  
Water Revenue Refunding Bonds, Series 2016AB**

**\$98,945,000**

**San Diego County Water Authority  
Water Revenue Refunding Bonds,  
Series 2016A (Green Bonds)**

**\$197,395,000**

**San Diego County Water Authority  
Water Revenue Refunding Bonds,  
Series 2016B**

**Dated: Date of Delivery**

**Due: As shown below**

The San Diego County Water Authority Water Revenue Refunding Bonds, Series 2016A (Green Bonds) (the “2016A Bonds”), and the San Diego County Water Authority Water Revenue Refunding Bonds, Series 2016B (the “2016B Bonds” and together with the 2016A Bonds, the “2016AB Bonds”), will be issued pursuant to an Indenture, dated as of June 1, 2016 (the “Indenture”), by and between the San Diego County Water Authority (the “Water Authority”) and U.S. Bank National Association, as trustee (the “Trustee”). The 2016AB Bonds will be issued in denominations of \$5,000 or any integral multiple thereof and will mature on the dates and in the amounts set forth below. Interest on the 2016AB Bonds is payable semiannually on May 1 and November 1, commencing November 1, 2016.

The 2016AB Bonds will be issued as fully registered bonds and, when delivered, will be registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York (“DTC”). DTC will act as securities depository of the 2016AB Bonds. Individual purchases of the 2016AB Bonds will be made in book-entry form only. So long as the 2016AB Bonds are registered in the name of Cede & Co., payment of the principal of and interest and premium, if any, on the 2016AB Bonds will be payable to DTC or its nominee. DTC in turn is obligated to remit such payments to DTC Participants for subsequent disbursement to the beneficial owners of the 2016AB Bonds.

The 2016AB Bonds are being issued by the Water Authority to refund (i) a portion of the installment sale payments evidenced by San Diego County Water Authority Water Revenue Certificates of Participation, Series 2008A, and (ii) a portion of the contract payments securing San Diego County Water Authority Financing Agency Water Revenue Bonds, Series 2010A (Non-AMT Tax-Exempt).

The 2016AB Bonds are subject to optional redemption as described herein.

The 2016AB Bonds are secured by a pledge of Net Water Revenues (as defined herein).

**THE 2016AB BONDS ARE LIMITED OBLIGATIONS OF THE WATER AUTHORITY, PAYABLE SOLELY FROM A PLEDGE OF NET WATER REVENUES, AND NEITHER THE FULL FAITH AND CREDIT NOR THE TAXING POWER OF THE WATER AUTHORITY, THE STATE OF CALIFORNIA OR ANY OF ITS POLITICAL SUBDIVISIONS IS PLEDGED FOR THE PAYMENT THEREOF.**

**MATURITY SCHEDULE  
SERIES 2016A BONDS (GREEN BONDS)**

<b>Maturity (May 1)</b>	<b>Principal Amount</b>	<b>Interest Rate</b>	<b>Yield</b>	<b>Price</b>	<b>CUSIP*</b>
2030	\$20,410,000	5.00%	2.00%	126.711 <sup>c</sup>	797412CP6
2031	21,295,000	5.00	2.04	126.303 <sup>c</sup>	797412CQ4
2032	27,920,000	5.00	2.07	125.997 <sup>c</sup>	797412CR2
2033	29,320,000	5.00	2.12	125.490 <sup>c</sup>	797412CS0

**SERIES 2016B BONDS**

<b>Maturity (May 1)</b>	<b>Principal Amount</b>	<b>Interest Rate</b>	<b>Yield</b>	<b>Price</b>	<b>CUSIP*</b>
2026	\$ 8,715,000	5.00%	1.63%	130.565%	797412CT8
2027	9,150,000	5.00	1.76	129.196 <sup>c</sup>	797412CU5
2034	32,490,000	5.00	2.17	124.986 <sup>c</sup>	797412CV3
2035	34,115,000	5.00	2.22	124.484 <sup>c</sup>	797412CW1
2036	35,820,000	5.00	2.26	124.084 <sup>c</sup>	797412CX9
2037	37,615,000	5.00	2.30	123.685 <sup>c</sup>	797412CY7
2038	39,490,000	5.00	2.33	123.387 <sup>c</sup>	797412CZ4

**This cover page contains information for general reference only. It is not intended to be a summary of this issue. Potential purchasers are advised to read the entire Official Statement to obtain information essential to making an informed investment decision.**

The 2016AB Bonds are offered when, as and if issued and accepted by the Underwriters, subject to the approval of legality by Orrick, Herrington & Sutcliffe LLP, San Francisco, California, Bond Counsel, and to certain other conditions. Certain matters will be passed upon for the Water Authority by Mark J. Hattam, its General Counsel. Orrick, Herrington & Sutcliffe LLP, San Francisco, California, is also acting as Disclosure Counsel. Certain matters will be passed upon for the Underwriters by Norton Rose Fulbright US LLP, Los Angeles, California. It is expected that the 2016AB Bonds in book-entry form will be available for delivery through the facilities of DTC on or about June 23, 2016.

**Citigroup**

**Backstrom McCarley Berry & Co.**

**BOSC, Inc.**

**RBC Capital Markets**

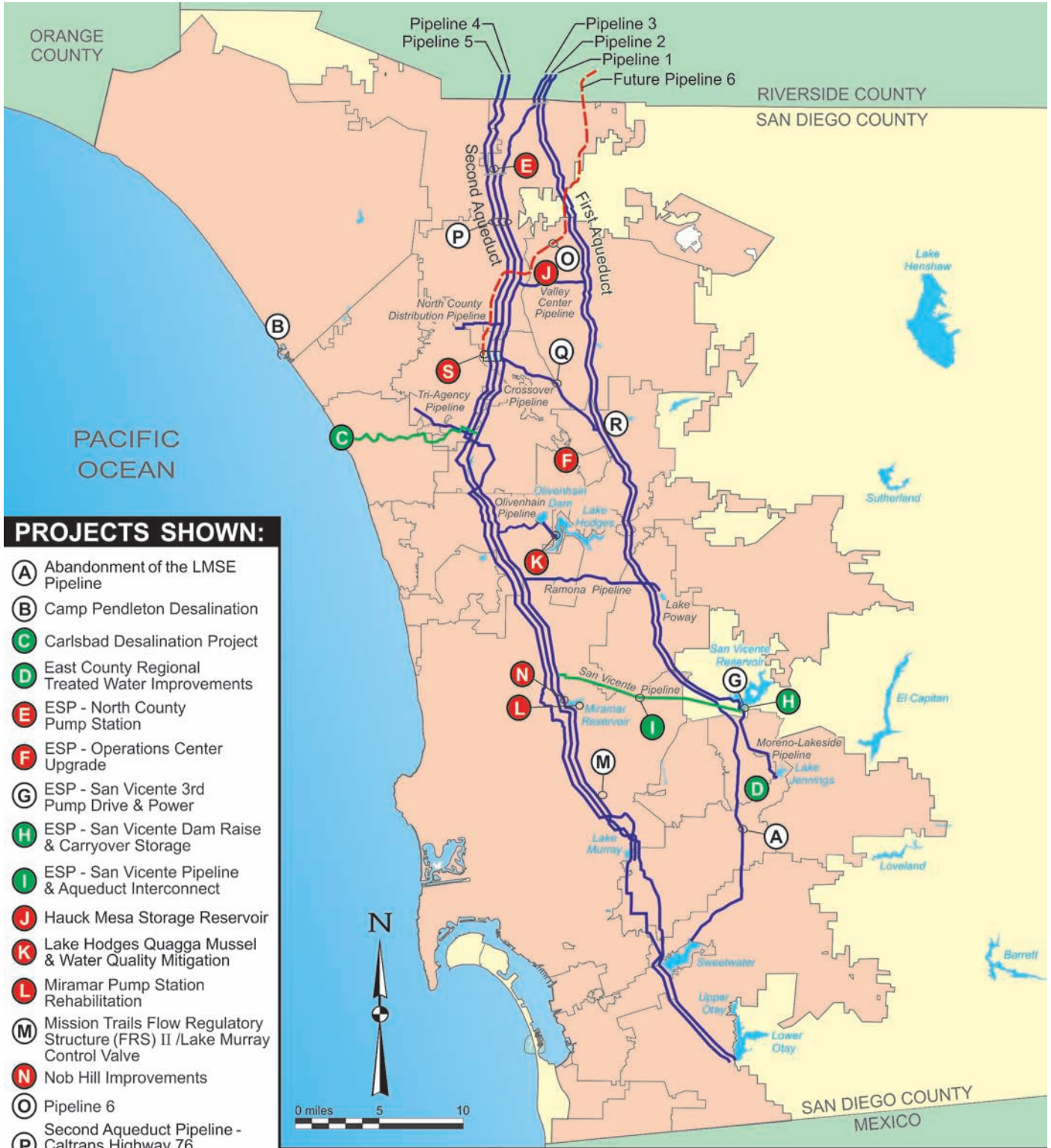
**Piper Jaffray & Co.**

**Stifel**

June 8, 2016

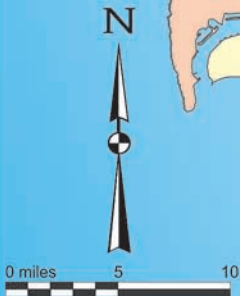
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<sup>c</sup> Priced to par call date of May 1, 2026.



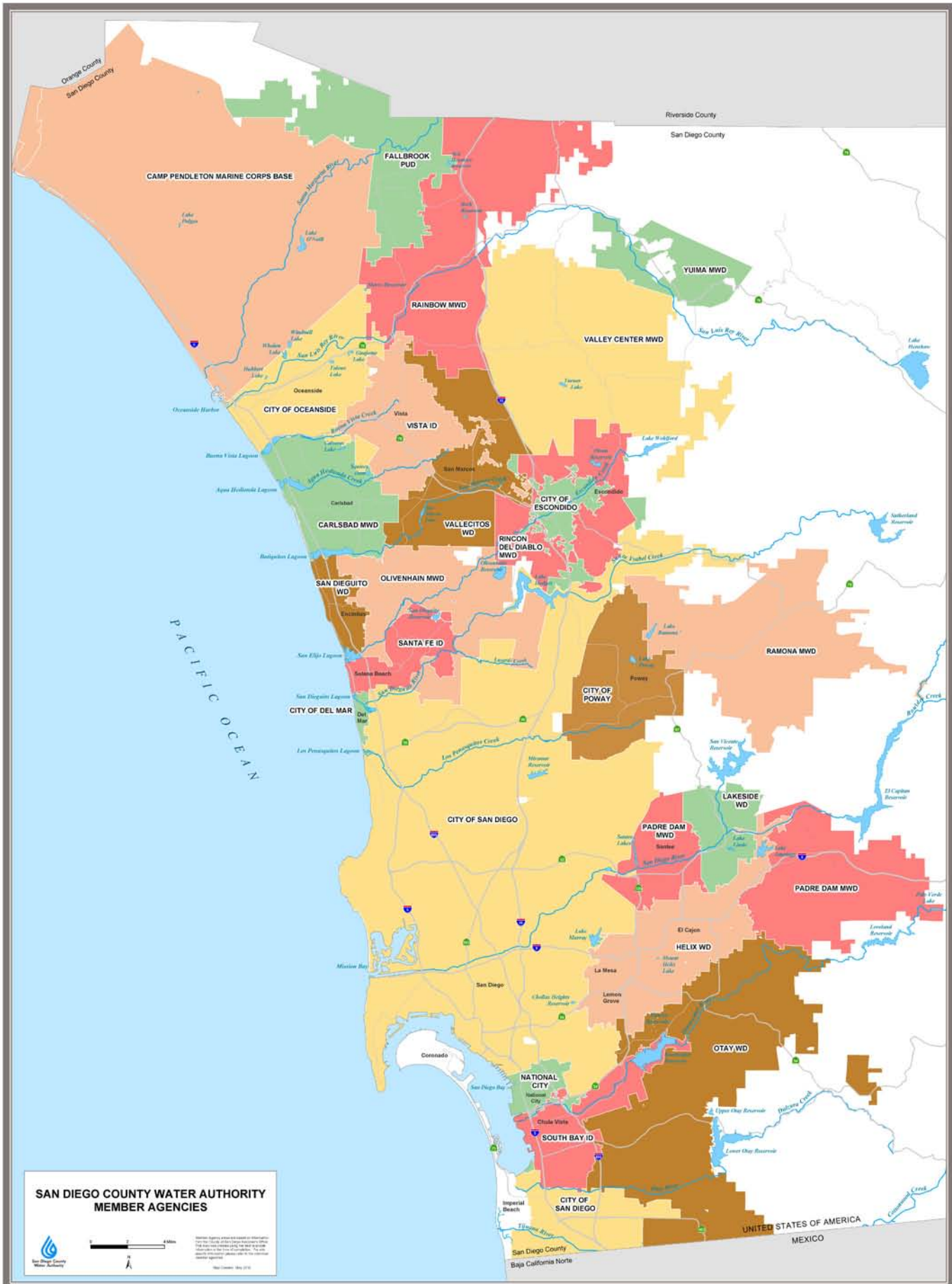
**PROJECTS SHOWN:**

- (A) Abandonment of the LMSE Pipeline
- (B) Camp Pendleton Desalination
- (C) Carlsbad Desalination Project
- (D) East County Regional Treated Water Improvements
- (E) ESP - North County Pump Station
- (F) ESP - Operations Center Upgrade
- (G) ESP - San Vicente 3rd Pump Drive & Power
- (H) ESP - San Vicente Dam Raise & Carryover Storage
- (I) ESP - San Vicente Pipeline & Aqueduct Interconnect
- (J) Hauck Mesa Storage Reservoir
- (K) Lake Hodges Quagga Mussel & Water Quality Mitigation
- (L) Miramar Pump Station Rehabilitation
- (M) Mission Trails Flow Regulatory Structure (FRS) II /Lake Murray Control Valve
- (N) Nob Hill Improvements
- (O) Pipeline 6
- (P) Second Aqueduct Pipeline - Caltrans Highway 76 Realignment
- (Q) Second Crossover Pipeline
- (R) System Storage
- (S) Twin Oaks Valley WTP Expanded Service Area




**LEGEND**

- |   |   |
|---|---|
| <p>WATER AUTHORITY SERVICE AREA WITH MEMBER AGENCY BOUNDARIES</p> | <p>PLANNING</p> <p>DESIGN</p> <p>CONSTRUCTION</p> |
|---|---|



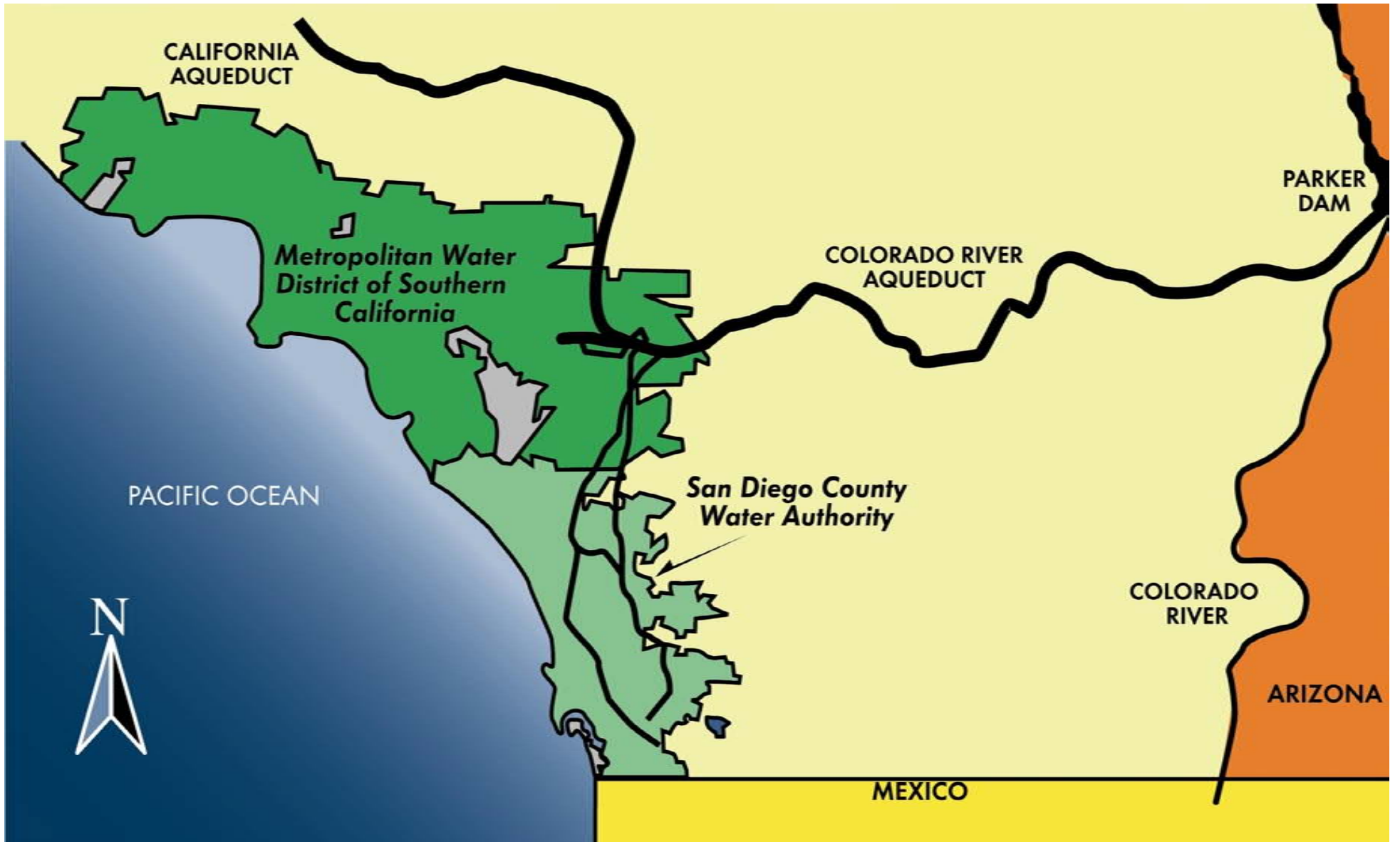
**SAN DIEGO COUNTY WATER AUTHORITY  
MEMBER AGENCIES**



Scale: 0 to 40 Miles

Map Date: 10/1/2015

Member Agencies shown are based on information provided by the agencies. The map is not intended to be used for legal purposes. The map is provided as a general reference only. The map is not intended to be used for legal purposes. The map is provided as a general reference only.



# SAN DIEGO COUNTY WATER AUTHORITY

4677 Overland Avenue  
San Diego, California 92123  
(858) 522-6600

Internet: <http://www.sdcwa.org>

## BOARD OF DIRECTORS

### Chair

MARK WESTON

### Vice-Chair

MARK MUIR

### Secretary

JIM MADAFFER

---

### REPRESENTATIVES OF THE MEMBER AGENCIES

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#### *CITIES*

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**Escondido**  
ED GALLO

**National City**  
RON MORRISON

**Oceanside**  
BRIAN BOYLE

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FERN STEINER  
YEN C. TU  
KENNETH WILLIAMS

#### *FEDERAL AGENCY*

**Pendleton Military  
Reservation**  
JOHN SIMPSON

#### *SPECIAL DISTRICTS*

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Municipal Water District**  
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KEITH LEWINGER

**Fallbrook Public  
Utility District**  
BRIAN J. BRADY

**Helix Water District**  
JOHN B. LINDEN  
DEANA VERBEKE

**Lakeside Water District**  
FRANK HILLIKER

**Olivenhain Municipal  
Water District**  
CHRISTY GUERIN

**Otay Water District**  
GARY CROUCHER  
MARK W. WATTON

**Padre Dam Municipal  
Water District**  
DOUG WILSON

**Rainbow Municipal  
Water District**  
TOM KENNEDY

**Ramona Municipal  
Water District**  
DAVID BARNUM

**Rincon del Diablo  
Municipal Water District**  
JAMES MURLAND

**San Dieguito Water  
District**  
MARK MUIR

**Santa Fe Irrigation  
District**  
MICHAEL T. HOGAN

**South Bay Irrigation  
District**  
JOSE PRECIADO

**Vallecitos  
Water District**  
BETTY EVANS

**Valley Center Municipal  
Water District**  
GARY ARANT

**Vista Irrigation District**  
MARTY MILLER

**Yuima Municipal  
Water District**  
RONALD W. WATKINS

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**SAN DIEGO COUNTY WATER AUTHORITY**

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**MAUREEN A. STAPLETON**

*General Manager*

**MARK J. HATTAM**

*General Counsel*

**SANDRA L. KERL**

*Deputy General Manager*

**FRANK BELOCK, JR.**

*Deputy General Manager*

**DENNIS A. CUSHMAN**

*Assistant General Manager*

**LISA MARIE HARRIS**

*Director of Finance/Treasurer*

**GERARD E. REED III**

*Director of Engineering*

**DAVID G. SHANK**

*Financial Planning Manager*

**FINANCIAL ADVISORS**

*Acacia Financial Group, Inc.  
Montague DeRose and Associates, LLC*

**INDEPENDENT AUDITORS**

*Macias, Gini & O'Connell, LLP  
Certified Public Accountants*

**BOND COUNSEL AND  
DISCLOSURE COUNSEL**

*Orrick, Herrington & Sutcliffe LLP*

**TRUSTEE**

*U.S. Bank National Association*

**VERIFICATION AGENT**

*The Arbitrage Group, Inc.*

No dealer, broker, salesperson or other person has been authorized by the Underwriters, the Water Authority or the Trustee to give any information or to make any representations other than those contained herein and, if given or made, such other information or representations must not be relied upon as having been authorized by any of the foregoing.

This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sale of 2016AB Bonds by a person in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of such jurisdiction. This Official Statement is not to be construed as a contract with the purchasers or any of the owners of 2016AB Bonds. Any statement made in this Official Statement involving estimates, forecasts or matters of opinion, whether or not expressly so stated, are intended solely as such and not as representations of fact. The information set forth herein has been furnished by the Water Authority and other sources that are believed to be reliable, but is not guaranteed as to accuracy or completeness, and is not to be construed as representations by the Underwriters. The information and expressions of opinion herein are subject to change without notice and neither the delivery of this Official Statement nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in the affairs of the Water Authority since the date hereof.

**CERTAIN STATEMENTS CONTAINED IN THIS OFFICIAL STATEMENT REFLECT NOT HISTORICAL FACTS BUT FORECASTS AND "FORWARD-LOOKING STATEMENTS." NO ASSURANCE CAN BE GIVEN THAT THE FUTURE RESULTS DISCUSSED HEREIN WILL BE ACHIEVED, AND ACTUAL RESULTS MAY DIFFER MATERIALLY FROM THE FORECASTS DESCRIBED HEREIN. IN THIS RESPECT, THE WORDS "ESTIMATE", "PROJECT", "ANTICIPATE", "EXPECT", "INTEND", "BELIEVE" AND SIMILAR EXPRESSIONS ARE INTENDED TO IDENTIFY FORWARD-LOOKING STATEMENTS. ALL PROJECTIONS, FORECASTS, ASSUMPTIONS, EXPRESSIONS OF OPINIONS, ESTIMATES AND OTHER FORWARD-LOOKING STATEMENTS ARE EXPRESSLY QUALIFIED IN THEIR ENTIRETY BY THE CAUTIONARY STATEMENTS SET FORTH IN THIS OFFICIAL STATEMENT.**

The Underwriters have provided the following for inclusion in the Official Statement in connection with the offering of the 2016AB Bonds: The Underwriters have reviewed the information in this Official Statement in accordance with, and as part of, their respective responsibilities to investors under the federal securities laws, as applied to the facts and circumstances of this transaction, but the Underwriters do not guarantee the accuracy or completeness of such information.

IN CONNECTION WITH THE OFFERING OF THE 2016AB BONDS THE UNDERWRITERS MAY OVERALLOT OR EFFECT TRANSACTIONS THAT MAY STABILIZE OR MAINTAIN THE MARKET PRICE OF THE 2016AB BONDS AT A LEVEL ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

While the Water Authority maintains a website for various purposes, none of the information on the Water Authority's website is intended to assist investors in making an investment decision or to provide any continuing information with respect to the 2016AB Bonds.

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**OFFICIAL STATEMENT**

**San Diego County Water Authority  
Water Revenue Refunding Bonds,  
Series 2016AB**

<b>\$98,945,000</b>	<b>\$197,395,000</b>
<b>San Diego County Water Authority Water Revenue Refunding Bonds, Series 2016A (Green Bonds)</b>	<b>San Diego County Water Authority Water Revenue Refunding Bonds, Series 2016B</b>

**INTRODUCTION**

This Official Statement, including the cover page and Appendices hereto, is provided to furnish certain information in connection with the offering of San Diego County Water Authority Water Revenue Refunding Bonds, Series 2016A (Green Bonds) (the “2016A Bonds”), in the aggregate principal amount of \$98,945,000, and its San Diego County Water Authority Water Revenue Refunding Bonds, Series 2016B (the “2016B Bonds”) in the aggregate principal amount of \$197,395,000.

The 2016A Bonds and the 2016B Bonds (together, the “2016AB Bonds”) are secured by a pledge of Net Water Revenues (defined below). Payment of the 2016AB Bonds from Net Water Revenues is on a parity with the payment of the Bonds (defined below) and Contracts (defined below) presently outstanding or hereafter incurred by the Water Authority in accordance with the General Resolution (defined below).

**The 2016AB Bonds constitute limited obligations of the Water Authority, payable solely from Net Water Revenues, and neither the full faith and credit nor the taxing power of the Water Authority, the State of California or any of its political subdivisions is pledged for the payment thereof.**

The 2016AB Bonds are being issued by the Water Authority to refund a portion of the Water Authority’s obligations under the 2008A Installment Sale Agreement (defined below) and the 2010A Contract of Indebtedness (defined below). See **THE CAPITAL IMPROVEMENT PROGRAM** and **PLAN OF REFUNDING**.

The 2016AB Bonds are being issued pursuant to the County Water Authority Act of the State of California and all laws amendatory thereof or supplemental thereto, including Articles 10 and 11 of Chapter 3 of Part 1 of Division 2 of Title 5 of the Government Code of the State of California (collectively, the “Act”) and an Indenture, dated as of June 1, 2016 (the “Indenture”), between the Water Authority and U.S. Bank National Association as trustee (the “Trustee”).

Brief descriptions of the 2016AB Bonds, the security and sources of payment for the 2016AB Bonds and the Water Authority and its Capital Improvement Program are provided herein. Such descriptions do not purport to be comprehensive or definitive. Definitions of certain capitalized terms used herein may be found in **APPENDIX C – SUMMARY OF PRINCIPAL LEGAL DOCUMENTS - Certain Definitions**. All references made to various documents herein are qualified in their entirety by reference to the forms thereof, all of which are available for inspection at the office of the Water Authority’s Clerk of the Board of Directors.

**The Water Authority also expects to issue in June 2016 its San Diego County Water Authority Subordinate Lien Water Revenue Refunding Bonds, Series 2016S-1, in the aggregate principal amount of \$87,685,000 (the “2016S-1 Bonds”). The 2016S-1 Bonds are not being offered by this Official Statement.**

**WATER AUTHORITY DEBT**

The Water Authority may borrow money and incur indebtedness and may issue bonds or other evidences of indebtedness, provided that the Water Authority may not incur indebtedness in excess of 15 percent of the assessed valuation of the taxable property within the Water Authority’s service area. Revenue bonds of the Water Authority, other than revenue refunding bonds, must be authorized by a majority vote of the qualified electors of the Water

Authority, and general obligation bonds must be authorized by a two-thirds majority vote of the qualified electors of the Water Authority. The Water Authority has no revenue bonds (other than revenue refunding bonds) or general obligation bonds outstanding. The Water Authority may purchase real or personal property (through installment sale agreements) and may also incur indebtedness by contract. Installment sale agreements are not limited in principal amount and contract indebtedness is limited in aggregate amount to 1/10 of 1 percent of the assessed value of property taxable for Water Authority purposes. As of June 30, 2015, 1/10 of 1 percent of the assessed value of property taxable for Water Authority purposes was approximately \$405 million. As of May 1, 2016 the Water Authority had contract indebtedness in an aggregate principal amount of \$96,165,000 outstanding. Any proposal to incur indebtedness by contract in excess of said 1/10 of 1 percent limit, and any proposal to purchase, lease or otherwise acquire rights, privileges or services in excess of 40 years requires majority approval of the qualified electors of the Water Authority. The Water Authority may also issue and sell, without voter approval, revenue refunding bonds to refund its outstanding indebtedness. The Water Authority may also issue and sell, without voter approval, commercial paper in the form of short-term revenue certificates for any Water Authority purpose, and may arrange for bank lines of credit or letters of credit in connection therewith. All of the Water Authority's payment obligations with respect to all of the Water Authority's outstanding installment sale agreements and contracts of indebtedness are evidenced by certificates of participation or are pledged to secure revenue bonds issued by the San Diego County Water Authority Financing Agency.

On May 11, 1989, the Water Authority adopted its Resolution No. 89-21, entitled "A Resolution of the Board of Directors of the San Diego County Water Authority Providing for the Allocation of Water System Revenues and Establishing Covenants to Secure the Payment of Obligations Payable from Net Water Revenues," which was supplemented by Resolution No. 97-52 of the Water Authority, adopted on December 11, 1997 and by Resolution No. 09-23 of the Water Authority, adopted on December 17, 2009 (as supplemented, the "General Resolution"). The 2016AB Bonds are payable from Net Water Revenues under the General Resolution on a parity with the Water Authority's Water Revenue Refunding Bonds, Series 2011A (the "2011A Bonds"), Water Revenue Refunding Bonds, Series 2011B (the "2011B Bonds"), Water Revenue Refunding Bonds, Series 2013A (the "2013A Bonds") and Water Revenue Refunding Bonds, Series 2015A (the "2015A Bonds" and, together with the 2011A Bonds, the 2011B Bonds and the 2013A Bonds, the "Bonds"), and with the installment payments payable by the Water Authority under the following outstanding installment sale agreements and contracts of indebtedness (collectively, the "Contracts"): 1998 Installment Sale Agreement and 1998 Contract of Indebtedness (the "1998 Contracts"), the 2005 Installment Sale Agreement and the 2005 Contract of Indebtedness (the "2005 Contracts"), the 2008A Installment Sale Agreement and 2008A Contract of Indebtedness (the "2008 Contracts"), and the 2010A Contract of Indebtedness and the 2010B Installment Sale Agreement (the "2010 Contracts").

The Water Authority's obligation to make installment payments under the Contracts are evidenced by the following certificates of participation or secure the following bonds issued by the San Diego County Water Authority Financing Agency (the "Agency"), and the Water Authority has itself issued the following revenue refunding bonds:

	<u>Initial Principal Amount</u>	<u>Principal Amount Outstanding as of May 1, 2016</u>
<b>Water Revenue Certificates of Participation:</b>		
Water Revenue Certificates of Participation, Series 1998A (the “1998A Certificates”)	\$ 180,000,000	\$ 11,685,000
Water Revenue Refunding Certificates of Participation, Series 2005A (the “2005A Certificates”)	107,455,000	43,495,000
Water Revenue Certificates of Participation, Series 2008A (the “2008A Certificates”)*	558,015,000	369,055,000
<b>San Diego County Water Authority Financing Agency Bonds:</b>		
Water Revenue Bonds, Series 2010A (the “2010A Bonds”)*	98,495,000	38,015,000
Water Revenue Bonds, Series 2010B (Taxable Build America Bonds) (the “2010B Bonds”)	526,135,000	526,135,000
<b>Water Revenue Refunding Bonds:</b>		
Water Revenue Refunding Bonds, Series 2011A	139,945,000	111,555,000
Water Revenue Refunding Bonds, Series 2011B	94,540,000	94,540,000
Water Revenue Refunding Bonds, Series 2013A	299,105,000	299,105,000
Water Revenue Refunding Bonds, Series 2015A	184,795,000	184,795,000
	<u>\$2,188,485,000</u>	<u>\$1,678,380,000</u>

The Contracts, the 2011A Bonds, the 2011B Bonds, the 2013A Bonds and the 2015A Bonds are all fixed interest rate obligations and all are payable from Net Water Revenues on a parity with payments on the 2016AB Bonds. Although the Water Authority may incur obligations payable as Maintenance and Operations Costs prior to payments on Bonds and Contracts, the Water Authority has no indebtedness outstanding which is payable from Net Water Revenues senior to payments on the Contracts and the Bonds, and the General Resolution does not allow the Water Authority to incur indebtedness payable from Net Water Revenues senior to payments on the Contracts and the Bonds. The Water Authority may issue revenue refunding bonds or enter into future installment sale agreements or contract indebtedness that will be payable from Net Water Revenues on a parity with the Contracts and the Bonds, subject to the requirements summarized in this section and in **SECURITY AND SOURCES OF PAYMENT – Additional Parity Obligations**.

Debt service reserve funds were created in connection with the execution and delivery of the 1998A Certificates, the 2005A Certificates and the 2008A Certificates. Amounts in such debt service reserve funds are not available to secure the 2016AB Bonds. No debt service reserve fund will be created to secure the 2016AB Bonds.

The Water Authority expects to issue the 2016S-1 Bonds in June 2016. In November 1995, the Water Authority established a commercial paper program in order to finance additional capital facilities. Upon completion of the transactions described under **PLAN OF REFUNDING**, including the issuance of the 2016S-1 Bonds, commercial paper notes issued under the program (the “Commercial Paper Notes”) will be outstanding in the aggregate principal amount of \$345,000,000 (\$245,000,000 of which will have liquidity support and \$100,000,000 of which will be extendable commercial paper). See **PLAN OF REFUNDING**. The Commercial Paper Notes, certain payments to the banks providing liquidity support for Commercial Paper Notes, and the 2016S-1 Bonds are

\* A portion of the 2008A Certificates and the 2010A Bonds will be refunded by the 2016AB Bonds. See **PLAN OF REFUNDING**.

payable from Net Water Revenues on a subordinate basis to the 2016AB Bonds and are referred to herein, together with any future Water Authority obligations issued on a parity therewith, as the “Subordinate Obligations.”

On November 29, 2012, the Water Authority Board of Directors (the “Water Authority Board” or the “Board”) approved the implementation and financing of a desalination project to be located in Carlsbad, California, including a desalination plant and 10-mile pipeline to deliver desalinated water from the plant to the Water Authority’s water system. The project has been financed in part with proceeds of two series of bonds, \$530,345,000 aggregate principal amount of California Pollution Control Financing Authority Water Furnishing Revenue Bonds, Series 2012 (Poseidon Resources (Channelside) LP Desalination Project) (the “Series 2012 Plant Bonds”), and \$203,215,000 aggregate principal amount of California Pollution Control Financing Authority Water Furnishing Revenue Bonds, Series 2012 (San Diego County Water Authority Desalination Project Pipeline) (the “Series 2012 Pipeline Bonds” and, together with the Series 2012 Plant Bonds, the “Desalination Bonds”), issued on December 24, 2012 by the California Pollution Control Financing Authority (the “CPCFA”). In connection with the desalination project, the Water Authority entered into a Carlsbad Seawater Desalination Project Water Purchase Agreement, dated December 20, 2012 (the “Desalination Water Purchase Agreement”), by and between the Water Authority and Poseidon Resources (Channelside) LP (“Poseidon”), and a Pipeline Installment Sale and Assignment Agreement (the “Desalination Installment Sale Agreement”), dated December 24, 2012, by and between the Water Authority and the San Diego County Water Authority Financing Agency. It is expected that payments made by the Water Authority under these agreements will constitute a substantial portion of the amounts ultimately applied to pay debt service payments on the Desalination Bonds as described under **FINANCIAL OPERATIONS – Financial Commitments Related to the Carlsbad Project**. The Water Authority’s obligations to make payments under the Desalination Water Purchase Agreement and the Desalination Installment Sale Agreement are, however, contingent upon ongoing delivery of product water to the Water Authority in the amounts set forth in the Desalination Water Purchase Agreement. Purchases of water pursuant to the Desalination Water Purchase Agreement constitute Operation and Maintenance Costs under the General Resolution, while installment payments to be made pursuant to the Desalination Installment Sale Agreement are obligations payable from amounts constituting Net Water Revenues on deposit in the General Reserve Fund established under the General Resolution, subordinate to the pledge of Net Water Revenues for the payment of Bonds, Contracts, Reimbursement Obligations and Subordinate Obligations. See **SECURITY AND SOURCES OF PAYMENT**.

#### **PLAN OF REFUNDING**

A portion of the proceeds of the 2016AB Bonds, together with other available monies, will be used, pursuant to an escrow agreement between U.S. Bank National Association (the “2008 Escrow Agent”) and the Water Authority, dated as of June 1, 2016 (the “2008 Escrow Agreement”), to acquire obligations of the United States of America (the “2008 Escrow Securities”) the principal of and interest on which, together with amounts held in cash, will provide monies sufficient to refund a portion of the Water Authority’s obligations under the 2008A Installment Sale Agreement resulting in the prepayment of 2008A Certificates (at a price equal 100% of the principal amount thereof) with certificate payment dates set forth below in the amounts set forth below (the “Refunded 2008A Certificates”) on May 1, 2018, and to pay interest evidenced by the Refunded 2008A Certificates to such date of prepayment. The 2008 Escrow Securities will be deposited with the 2008 Escrow Agent in trust for the payment of interest when due and the prepayment price of the Refunded 2008A Certificates. Upon deposit of the 2008 Escrow Securities in trust, the Refunded 2008A Certificates will no longer be outstanding under the trust agreement pursuant to which of the 2008A Certificates were executed and delivered.

A portion of the proceeds of the 2016AB Bonds, together with other available monies, will be used, pursuant to an escrow agreement among U.S. Bank National Association (the “2010 Escrow Agent”), the Agency and the Water Authority, dated as of June 1, 2016 (the “2010 Escrow Agreement”), to acquire obligations of the United States of America (the “2010 Escrow Securities”), the principal of and interest on which, together with amounts held in cash, will provide monies sufficient to refund a portion of the Water Authority’s obligations under the 2010A Contract of Indebtedness, resulting in the redemption of 2010A Bonds (at a redemption price equal to 100% of the principal amount thereof) with maturity dates set forth below in the amounts set forth below (the “Refunded 2010A Bonds”) on November 1, 2019, and to pay interest on the refunded 2010A Bonds to such date of redemption. The 2010 Escrow Securities will be deposited with the 2010 Escrow Agent in trust for the payment of interest when due at the redemption price of the Refunded 2010A Bonds. Upon deposit of the 2010 Escrow

Securities in trust, the Refunded 2010A Bonds will no longer be outstanding under the trust agreement pursuant to which the 2010A Bonds were issued.

#### Refunded 2008A Certificates

Maturity (May 1)	Principal Component Being Refunded	CUSIP*
2033	\$115,135,000	797415 MJ2
2038	204,955,000	797415 JZ0

#### Refunded 2010A Bonds

Maturity (May 1)	Principal Amount Being Refunded	CUSIP*
2026	\$9,965,000	79741T AN4
2027	7,960,000	79741T AQ7
2027	2,500,000	79741T AP9

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The balance of the proceeds of the 2016AB Bonds, net of Underwriters' discount, will be used to pay costs of issuance. See **SOURCES AND USES OF FUNDS**.

The mathematical accuracy of the computations of the adequacy of the maturing principal of and interest earned on the securities held pursuant to the Escrow Agreement to fully provide for all payments enumerated above will be verified upon delivery of the 2016AB Bonds by The Arbitrage Group, Inc., certified public accountants. See **VERIFICATION OF MATHEMATICAL COMPUTATIONS**.

Certain of the projects financed by the Refunded 2008A Certificates are environmentally beneficial. Consequently, the Series 2016A Bonds are being designated by the Water Authority as "Green Bonds." See **GREEN BONDS DESIGNATION**.

On May 11, 2016, the Water Authority issued \$135,000,000 aggregate principal amount of its San Diego County Water Authority Commercial Paper Notes, Series 9 (the "Series 9 Notes"), to refund, on June 1, 2016, the Water Authority's Subordinate Lien Water Revenue Refunding Bonds, Series 2011S-1, and \$48,370,000 aggregate principal amount of commercial paper notes. In June 2016, the Water Authority expects to issue the Series 2016S-1 Bonds in the aggregate principal amount of \$87,685,000, and to increase to \$100,000,000 the outstanding aggregate principal amount of its Extendable Commercial Paper Notes, Series 1 (the "ECP Notes") for the purpose of refinancing additional commercial paper notes. The Series 9 Notes, the Series 2016S-1 Bonds and the ECP Notes are not being offered hereby.

#### GREEN BONDS DESIGNATION

The Series 2016A Bonds are being designated by the Water Authority as "Green Bonds." The purpose of designating the offered bonds as "Green Bonds" is to allow investors to invest directly in bonds which finance environmentally beneficial projects ("Green Projects"). For purposes of such determination, the Water Authority

considers the lining of portions of the earthen All-American Canal to conserve Colorado River water financed with the proceeds of the Refunded 2008A Certificates to be a Green Project. See **WATER AUTHORITY WATER SUPPLY – Quantification Settlement Agreement – All-American Canal and Coachella Canal Lining Projects**. The Series 2016A Bonds will not constitute “exempt facility bonds” issued to finance “qualified green building and sustainable design projects” within the meaning of Section 142(1) of the Code.

The proceeds of the Series 2016A Bonds will be used to refund a portion of the Refunded 2008A Certificates. The proceeds of the Refunded 2008A Certificates that were used to finance the Green Projects have been spent and construction of the Green Projects has been completed. No additional reporting on the status of the Green Projects is anticipated.

The Series 2016B Bonds are not being designated as “Green Bonds.” The Indenture does not restrict the use of proceeds of future issuances of Bonds to the financing of Green Projects and in the future the Water Authority and the San Diego County Water Authority Financing Agency may issue bonds which are not designated as Green Bonds.

The repayment obligations of the Water Authority with respect to the Series 2016AB Bonds are not conditioned on the satisfaction of any certification relating to the status of the Series 2016A Bonds as Green Bonds. See **SECURITY AND SOURCES OF PAYMENT**.

## **THE 2016AB BONDS**

### **General**

The 2016A Bonds will be issued in the aggregate principal amount of \$98,945,000 and the Series 2016B Bonds will be issued in the aggregate principal amount of \$197,395,000. The 2016AB Bonds will be issued in denominations of \$5,000 or any integral multiple thereof, and will be dated to the date of delivery thereof and will mature on May 1 in the years and in the amounts set forth on the cover page hereof. Interest on the 2016AB Bonds is payable from their dated date at the rates set forth on the cover page hereof, on May 1 and November 1 of each year, commencing November 1, 2016.

The 2016AB Bonds, when issued, will be registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York (“DTC,” and, together with any successor securities depository, the “Securities Depository”). DTC will act as Securities Depository for the 2016AB Bonds so purchased. Individual purchases of the 2016AB Bonds will be made only in book-entry form. Purchasers of the Series 2016AB will not receive physical certificates representing their beneficial ownership interest in the 2016AB Bonds. So long as the 2016AB Bonds are registered in the name of Cede & Co., payment of the principal of and interest and premium, if any, on the 2016AB Bonds will be payable to DTC or its nominee. DTC in turn is obligated to remit such payments to DTC Participants for subsequent disbursement to the Beneficial Owners. See **APPENDIX E – BOOK-ENTRY SYSTEM**.

**THE 2016AB BONDS ARE LIMITED OBLIGATIONS OF THE WATER AUTHORITY, PAYABLE SOLELY FROM A PLEDGE OF NET WATER REVENUES, AND NEITHER THE FULL FAITH AND CREDIT NOR THE TAXING POWER OF THE WATER AUTHORITY, THE STATE OF CALIFORNIA OR ANY OF ITS POLITICAL SUBDIVISIONS IS PLEDGED FOR THE PAYMENT THEREOF.**

### **Redemption**

*Optional Redemption.* The 2016AB Bonds maturing on or after May 1, 2027 are subject to redemption prior to their stated maturity date at the option of the Water Authority, from any source of available funds, as a whole or in part on any date on or after May 1, 2026 (the “Par Call Date”), at a redemption price equal to the principal amount of such 2016AB Bonds called for redemption, together with accrued interest thereon to the date fixed for redemption, without premium.

The 2016AB Bonds are subject to redemption prior to their stated maturity date at the option of the Water Authority, from any source of available funds, in a whole or in part on any date on or after November 1, 2016 and prior to the Par Call Date at the “Make Whole Redemption Price” equal to the greater of: (i) one hundred two

percent (102%) of the Amortized Value (defined below) of the 2016AB Bonds to be redeemed; or (ii) an amount equal to the sum of the present values of the remaining scheduled payments of the principal and interest on the 2016AB Bonds to be redeemed, from and including the date of redemption to the Par Call Date, discounted to the date on which the 2016AB Bonds are to be redeemed on a semiannual basis, at a discount rate equal to the Applicable Tax-Exempt Bond Rate (defined below) to the Par Call Date.

“Amortized Value” means the principal amount of the 2016AB Bonds to be redeemed multiplied by the price of such 2016AB Bonds expressed as a percentage, calculated based on the industry standard method of calculating bond prices, with a delivery date equal to the date of redemption, a maturity date equal to the Par Call Date of such 2016AB Bonds and a yield equal to the original offering yield of such 2016AB Bonds.

“Applicable Tax-Exempt Bond Rate” means the “Interpolated AAA Yields” rate for the Par Call Date as published by the Municipal Market Data (“MMD”) at least five calendar days, but no more than 45 calendar days, prior to the redemption date of the 2016AB Bonds to be redeemed. If no such date is established for the applicable year, the “Interpolated AAA Yields” rate for the published maturities most closely corresponding to the applicable year will be determined, and the Applicable Tax-Exempt Bond Rate will be interpolated from those rates on a straight-line basis. Should MMD no longer publish the “Interpolated AAA Yields” rate, then the Applicable Tax-Exempt Bond Rate will equal the “Consensus Scale” rate for the applicable year as published by Municipal Market Advisors (“MMA”). In the further event that MMA no longer publishes the “Consensus Scale,” the Applicable Tax-Exempt Bond Rate will be determined by Citigroup Global Markets Inc. or a successor determined by the Water Authority, as the quotation agent, based upon the rate per annum equal to the semiannual equivalent yield to maturity for those tax-exempt general obligation bonds rate in the highest rating category by Moody’s Investors Service, Inc. and Standard & Poor’s Ratings Services, with a maturity date equal to the Par Call Date of such 2016AB Bonds having characteristics (other than the ratings) most comparable to those of such 2016AB Bonds in the judgment of the quotation agent. The quotation agent’s determination of the Applicable Tax-Exempt Bond Rate shall be final and binding in the absence of manifest error.

*Partial Redemption.* If less than all of the Outstanding 2016AB Bonds are to be redeemed at any one time, the Water Authority shall select the maturities of the 2016AB Bonds and the principal amount of each such maturity to be redeemed in its sole discretion. If less than all 2016AB Bonds maturing by their terms on any one date are to be redeemed at any one time, the Trustee shall select the 2016AB Bonds of such maturity to be redeemed in any manner that it deems appropriate and fair and shall promptly notify the Water Authority in writing of the numbers of such 2016AB Bonds so selected for redemption. For purposes of such selection, the 2016AB Bonds shall be deemed to be composed of \$5,000 multiples and any such multiple may be separately redeemed.

#### **Notice, Rescission and Effect of Redemption**

*Notice of Redemption.* Notice of redemption is required to be given by the Trustee, not less than 20 nor more than 60 days prior to the redemption date to (i) the respective Owners of the 2016AB Bonds designated for redemption by first class mail at their addresses appearing on the registration books of the Trustee, (ii) the Securities Depositories and (iii) the Municipal Securities Rulemaking Board (the “MSRB”). Notice of redemption to the Securities Depositories and the MSRB is required to be given by registered mail or overnight delivery or facsimile transmission. Each notice of redemption is required to state the date of such notice, the redemption price, the place of redemption (including the name and appropriate address of the Trustee), the CUSIP number of the maturity or maturities, and if less than all of any such maturity is to be redeemed, the distinctive certificate numbers of the 2016AB Bonds of such maturity to be redeemed, the redemption price thereof and, in the case of 2016AB Bonds to be redeemed in part only, the respective portions of the principal amount thereof to be redeemed. Each such notice is also required to state that on said date there will become due and payable on each of said 2016AB Bonds to be redeemed in part only, the specified portion of the principal amount thereof to be redeemed, together with interest accrued thereon to the redemption date, and that from and after such redemption date interest thereon will cease to accrue, and require that the 2016AB Bonds be then surrendered at the address of the Trustee specified in the redemption notice.

So long as the 2016AB Bonds are held in book-entry only form, notice of redemption will be provided by the Trustee only to DTC and not to the Beneficial Owners of 2016AB Bonds under the DTC book-entry only system. Neither the Water Authority nor the Trustee is responsible for notifying the Beneficial Owners, who are to

be notified in accordance with the procedures in effect for the DTC book-entry system. See **APPENDIX E – BOOK-ENTRY SYSTEM**.

Neither the failure to receive any such notice of redemption nor any defect therein will affect the validity of the proceedings for the redemption of such 2016AB Bonds or the cessation of the accrual of interest on the redemption date.

*Conditional Notice of Optional Redemption.* Any notice of optional redemption of the 2016AB Bonds may be conditional and if any condition stated in the notice of redemption shall not have been satisfied on or prior to the redemption date, said notice shall be of no force and effect and the Water Authority shall not be required to redeem such 2016AB Bonds and the redemption shall be cancelled and the Trustee shall within a reasonable time thereafter give notice, to the persons and in the manner in which the notice of redemption was given, that such condition or conditions were not met and that the redemption was cancelled.

*Right to Rescind or Cancel Redemption.* The Water Authority shall have the right to rescind any optional redemption by written notice of rescission. In addition, any notice of optional redemption shall be cancelled and annulled if for any reason funds are not available on the date fixed for redemption for the payment in full of the 2016AB Bonds then called for redemption. Any such rescission or cancellation shall not constitute an Event of Default under the Indenture. The Trustee shall mail notice of rescission or cancellation of such redemption in the same manner as the original notice of redemption was sent.

*Effect of Redemption.* If notice of redemption has been duly given and money for the payment of the redemption price of the 2016AB Bonds called for redemption is held by the Trustee, then on the redemption date designated in such notice the 2016AB Bonds so called for redemption shall become due and payable, and from and after the date so designated interest on such 2016AB Bonds shall cease to accrue, and the Owners of such 2016AB Bonds shall have no rights in respect thereof except to receive payment of the redemption price thereof.

## SOURCES AND USES OF FUNDS

The sources and uses of funds in connection with the 2016AB Bonds are anticipated to be as follows:

### SOURCES:

Principal Amount of the 2016A Bonds .....	\$98,945,000.00
Principal Amount of the 2016B Bonds.....	197,395,000.00
Original Issue Premium.....	74,362,338.95
Funds of the Water Authority relating to the Refunded 2008A Certificates and 2010A Bonds.....	<u>1,416,729.00</u>
TOTAL .....	<u>\$372,119,067.95</u>

### USES:

Deposit to Escrow Fund relating to the Refunded 2008A Certificates .....	\$347,303,803.99
Deposit to Escrow Fund relating to the Refunded 2010A Bonds .....	23,190,091.60
Costs of Issuance <sup>1</sup> .....	<u>1,625,172.36</u>
TOTAL .....	<u>\$372,119,067.95</u>

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<sup>1</sup> Includes Underwriters' discount, legal fees, financial advisory fees, rating agency fees, printing expenses and other costs relating to the issuance and delivery of the 2016AB Bonds.

## SECURITY AND SOURCES OF PAYMENT

Capitalized terms used herein and not otherwise defined shall have the meanings set forth in **APPENDIX C – SUMMARY OF PRINCIPAL LEGAL DOCUMENTS – Certain Definitions**.

### General

The Indenture provides that the 2016AB Bonds shall constitute Bonds under the General Resolution secured by a pledge of Net Water Revenues as provided therein. Under the General Resolution, Net Water Revenues are pledged to secure the payment by the Water Authority of all Bond Payments, Installment Payments and Reimbursement Payments relating to Bonds and Contracts and other evidences of indebtedness or obligations payable on a parity therewith, and, subordinate thereto, the payment of all Subordinate Obligations. Obligations that are not Maintenance and Operation Costs, Bond Payments, Installment Payments, Reimbursement Payments or Subordinate Obligations are payable from amounts in the General Reserve Fund described below.

**The 2016AB Bonds constitute limited obligations of the Water Authority, payable solely from Net Water Revenues, and neither the full faith and credit nor the taxing power of the Water Authority, the State of California or any of its political subdivisions is pledged for the payment thereof.**

Payment of the 2016AB Bonds from Net Water Revenues is on a parity with the payment of any Bonds and Contracts presently outstanding or hereafter incurred by the Water Authority in accordance with the General Resolution.

### Pledge of Net Water Revenues

The Indenture provides that the 2016AB Bonds shall constitute Bonds under the General Resolution secured by a pledge of Net Water Revenues as provided therein. The Indenture further provides that the Owners shall be beneficiaries of all of the obligations assumed by the Water Authority and the covenants made by the Water Authority in the General Resolution.

In addition, all amounts (including proceeds of the sale of the 2016AB Bonds) held by the Trustee in any fund or account established under the Indenture (other than amounts on deposit in the Rebate Fund) are irrevocably pledged to the payment of the interest on and principal of and redemption premiums, if any, on the 2016AB Bonds as provided in the Indenture and shall not be used for any other purpose while any of the 2016AB Bonds remain Outstanding; provided, however, that out of such moneys there may be applied such sums for such purposes as are permitted under the Indenture.

### **Deposit of Net Water Revenues**

To provide for the payment of the principal of and interest on the 2016AB Bonds as the same shall become due and payable, the Water Authority shall, from Net Water Revenues on deposit in the Installment Payment Fund established under the General Resolution on a parity with the payment of all other Bond Payments, Installment Payments and Reimbursement Payments (each as defined in the General Resolution), transfer to the Trustee for deposit in the Debt Service Fund from time to time amounts sufficient, together with other moneys available therefor, for the timely payment of principal of and interest on the 2016AB Bonds. Such payment shall be on a parity with the application of Net Water Revenues to the payment of principal and accreted value of, premium, if any, interest on, and any reserve fund requirements for, or other obligations with respect to, any Bonds and Contracts.

The Water Authority agrees and covenants that on or before the Business Day immediately preceding May 1 and November 1 of each year, beginning November 1, 2016, the Water Authority shall, from amounts in the Installment Payment Fund (on a parity with the payment of all other Bond Payments, Installment Payments and Reimbursement Payments), transfer to the Trustee for deposit in the Debt Service Fund, which fund the Trustee shall establish, maintain and hold in trust so long as any 2016AB Bonds remain outstanding, a sum equal to the amount of interest and principal becoming due on the next succeeding May 1 or November 1, as the case may be; provided, no such transfer need be made if the amount on deposit in the Debt Service Fund is at least equal to the amount of interest and principal becoming due and payable on the 2016AB Bonds on such May 1 or November 1, as the case may be.

All money on deposit in the Debt Service Fund shall be used and withdrawn by the Trustee solely for the purpose of paying the interest on and principal of the 2016AB Bonds as such interest and principal become due and payable.

No debt service reserve fund to secure the 2016AB Bonds is created under the Indenture.

### **Net Water Revenues**

*Net Water Revenues.* Net Water Revenues, the source of payment for the 2016AB Bonds, is defined by the General Resolution to be, for any fiscal year, the Water Revenues during such fiscal year less the Maintenance and Operation Costs during such fiscal year.

*Current Water Revenues; Water Revenues.* “Water Revenues” is defined under the General Resolution as Current Water Revenues plus amounts transferred to the Water Revenue Fund from the Rate Stabilization Fund less amounts transferred from the Water Revenue Fund to the Rate Stabilization Fund.

Under the General Resolution, “Current Water Revenues” generally include all gross income and revenue received or receivable by the Water Authority from its ownership and operation of the Water System, including income derived from water sales, Water Standby Availability Charges, capacity charges, infrastructure access charges, sales of hydroelectric power associated with the Water System and certain investment earnings, but excluding any proceeds of taxes and any refundable deposits made to establish credit and advances or contributions in aid of construction.

Interest Subsidy Payments received by the Water Authority with respect to the San Diego County Water Authority Financing Agency Water Revenue Bonds, Series 2010B, constitute Current Water Revenues. The Water Authority has amended the General Resolution to provide that Interest Subsidy Payments are treated as a reduction to Debt Service rather than as Current Water Revenues. Such amendment has not yet, however, become effective. See **General Resolution Amendments**.

*Rate Stabilization Fund.* In order to avoid fluctuations in its water rates, the Water Authority may transfer portions of its Current Water Revenues from time to time to the Rate Stabilization Fund, and from time to time transfer moneys from the Rate Stabilization Fund to the Water Revenue Fund. Such transfers from the Rate Stabilization Fund are to be used by the Water Authority solely to pay Maintenance and Operation Costs. It is expected that the amounts to be transferred into and out of the Rate Stabilization Fund will be budgeted by the Water Authority on an annual basis in order to provide sufficient Water Revenues to meet its capital improvement funding objectives and its covenant obligations under the General Resolution. As of June 30, 2015, approximately \$115.4 million was on deposit in the Rate Stabilization Fund. See **FINANCIAL OPERATIONS - Financial Management Policies** and **PROJECTED OPERATING RESULTS – Projected Operating Revenue**.

*Maintenance and Operation Costs.* The Water Authority is required to pay all Maintenance and Operation Costs from the Water Revenue Fund as they become due. Such costs include all costs paid or incurred by the Water Authority for maintaining and operating the Water System, including water purchases, determined in accordance with Generally Accepted Accounting Principles, as more fully set forth in the General Resolution. Maintenance and Operation Costs exclude depreciation, replacement and obsolescence charges or reserves therefor and amortization of intangibles, premiums and discounts, and interest expense. Also excluded are maintenance and operation costs paid from other than Water Revenues, including, without limitation, costs paid from ad valorem property tax revenues.

The Water Authority may enter into contracts or leases with respect to the payment of certain maintenance and operation expenses. However, amounts paid pursuant to any contract or lease longer than five years (an “Obligation”) shall be treated as Maintenance and Operation Costs only if the Water Authority determines at the time it enters into the Obligation that (a) the treatment of payments on such Obligation as Maintenance and Operation Costs will not impair its ability to comply with its rate covenant (hereinafter described) during the succeeding five fiscal years (or during the five years after the commercial operation date of the project being financed with the Obligation, if later), and (b) the properties, services or commodities to be furnished pursuant to the Obligation can be economically and beneficially utilized by the Water Authority. If these criteria cannot be met, amounts due under the Obligation shall be paid out of the Subordinate Obligation Payment Fund or the General Reserve Fund (each hereinafter described).

#### **Application of Water Revenues Under the General Resolution**

The General Resolution established five special funds which are held by the Water Authority: a Water Revenue Fund; a Rate Stabilization Fund; an Installment Payment Fund; a Subordinate Obligation Payment Fund; and a General Reserve Fund.

*Water Revenue Fund.* Under the General Resolution, all Current Water Revenues are deposited initially in the Water Revenue Fund. The Water Revenue Fund may also receive transfers from the Rate Stabilization Fund, and the Water Authority may make transfers from the Water Revenue Fund to the Rate Stabilization Fund.

Amounts in the Water Revenue Fund are utilized to pay Maintenance and Operation Costs as they become due and payable. Remaining amounts, constituting Net Water Revenues, are set aside and deposited or transferred by the Water Authority, as the case may be, at the following times in the following order of priority:

(a) Installment Payment Fund. On or before the last business day of each month, the Water Authority shall deposit in the Installment Payment Fund a sum equal to the Monthly Accrued Debt Service for such month, plus a sum equal to all Reimbursement Payments then due and payable, provided that no such deposit need be made if amounts on deposit in the Installment Payment Fund equal the amount of Bond Payments or Installment Payments due with respect to all Bonds and Contracts on the next succeeding Interest Payment Date (with respect to interest), Principal Payment Date (with respect to principal) and Accreted Value Payment Date (with respect to Accreted Value) for such Bonds or Contracts, and the Reimbursement Payments then due and payable.

The 2016AB Bonds constitute “Bonds” under the General Resolution.

(b) Bond or Contract Reserve Fund. On or before the last business day of each month, the Water Authority shall transfer to each trustee for deposit in the applicable Bond or Contract Reserve Fund an amount equal to the amount, if any, required to be deposited therein to build up or replenish such Bond or Contract Reserve Fund as, and to the extent, required by the applicable Contract or Trust Agreement.

No debt service reserve fund will be created to secure the 2016AB Bonds.

(c) Subordinate Obligation Payment Fund. On or before the last business day of each month, the Water Authority shall deposit in the Subordinate Obligation Payment Fund the sum or sums required to be deposited under or pursuant to the indenture or other instrument securing each Subordinate Obligation.

(d) Subordinate Obligation Reserve Fund. On or before the last business day of each month, the Water Authority shall transfer to each trustee with respect to Subordinate Obligations for deposit in the debt service reserve fund with respect to such Subordinate Obligations an amount equal to the amount, if any, required to be deposited therein to build up or replenish such debt service reserve fund as and to the extent required by the applicable Subordinate Obligation or indenture or other instrument securing such Subordinate Obligation.

(e) General Reserve Fund. On the last business day of each month, the Water Authority shall, after making each of the foregoing deposits and transfers, transfer all money remaining in the Water Revenue Fund to the General Reserve Fund. The Water Authority may withdraw money in the General Reserve Fund for any lawful purpose of the Water Authority except to make transfers to the Rate Stabilization Fund.

The Water Authority covenants in the General Resolution to keep appropriate accounting records in which complete and correct entries shall be made of all transactions relating to the Water System. To fulfill this requirement, the Water Authority employs enterprise accounting principles and practices in accordance with Generally Accepted Accounting Principles. See **APPENDIX A – WATER AUTHORITY FINANCIAL STATEMENTS**. Consistent with such accounting principles and practices and as authorized by the General Resolution, the Water Authority does not maintain on its books the specific funds named in the General Resolution. The Water Authority does, however, account for Water Revenues, Maintenance and Operation Costs, Debt Service and Monthly Accrued Debt Service in a manner consistent with and authorized by the General Resolution, and the accounting system employed by the Water Authority enables the Water Authority to calculate Net Water Revenues and to allocate Water Revenues in the priority specified in the General Resolution.

#### **Rate Covenant**

The Water Authority covenants under the General Resolution that it will at all times fix, prescribe and collect or cause to be collected rates, fees and charges for Water Service which are reasonably fair and nondiscriminatory and which will be at least sufficient to yield, during the next succeeding fiscal year of the Water Authority, Net Water Revenues sufficient for the payment of all amounts payable from Net Water Revenues (including Subordinate Obligations) and at least equal to 120 percent of the Debt Service on all Bonds and Contracts for such fiscal year. The Water Authority may make adjustments from time to time in such rates, fees and charges and may make such classification thereof as it deems necessary, but shall not reduce the rates, fees and charges then in effect unless the Net Water Revenues from such reduced rates, fees and charges will at all times be sufficient to meet the requirements of such covenant.

The Water Authority has amended the General Resolution to provide that Interest Subsidy Payments are treated as a reduction to Debt Service rather than as Current Water Revenues. Such amendment has not yet, however, become effective. See **General Resolution Amendments**.

#### **Additional Parity Obligations**

The Water Authority may at any time issue any Bonds or execute any Contract the payments under and pursuant to which are payable from the Net Water Revenues on a parity with the 2016AB Bonds; provided:

(a) For any period of 12 consecutive calendar months within the 24 calendar month period next preceding the month in which such Bonds are issued or such Contract is executed, as the case may be, as evidenced by a certificate of the Water Authority (together with supporting calculations prepared by the Water Authority), (1) the Net Water Revenues shall have been equal to at least 120 percent of the Maximum Annual Debt Service on all Bonds and Contracts outstanding after the issuance of such Bonds or the execution of such Contract, as the case may be, and (2) the Net Water Revenues shall have been sufficient for the payment of all amounts payable from Net Water Revenues during such 12-month period and at least equal to 120 percent of Debt Service on all Bonds and Contracts outstanding during such 12-month period; or

(b) (1) For any period of 12 consecutive calendar months within the 24 calendar month period next preceding the month in which such Bonds are issued or such Contract is executed, as the case may be, as evidenced by a certificate of the Water Authority (together with supporting calculations prepared by the Water Authority), the Net Water Revenues shall have been sufficient for the payment of all amounts payable from Net Water Revenues during such 12-month period and at least equal to 120 percent of Debt Service on all Bonds and Contracts outstanding during such 12-month period, and (2) as evidenced by a certificate of the Water Authority (together with supporting calculations and assumptions prepared by the Water Authority), in each of the five succeeding fiscal years, projected Net Water Revenues shall be sufficient for the payment of all amounts payable from Net Water Revenues in each such fiscal year and at least equal to 120 percent of Debt Service on all Bonds and Contracts to be outstanding in each such fiscal year; and

(c) The Water Authority shall certify that it is not then in default under any Trust Agreement or with respect to any Bonds or Contracts; and

(d) No Bond or Contract shall allow the declaration of Bond Payments or Installment Payments to be immediately due and payable in the event of default by the Water Authority thereunder or under the applicable Trust Agreement unless such remedy is made applicable to all Bonds and Contracts then outstanding. (None of the Water Authority's Outstanding Bonds or Contracts allows such a declaration.)

Notwithstanding the foregoing provisions, there shall be no limitations on the ability of the Water Authority to execute any Contract or to issue any Bonds at any time to refund any outstanding Bonds or any outstanding Contract or to execute Reimbursement Agreements.

#### **General Resolution Amendments**

The Water Authority has amended the General Resolution pursuant to Resolution 09-23, adopted on December 17, 2009, to provide that Interest Subsidy Payments are treated as a reduction to Debt Service rather than as Current Water Revenues. Such amendment will become effective, however, only if and when the consent of a majority of holders of each series of outstanding certificates of participation or bonds have been obtained. The consents of the holders of all series of outstanding certificates of participation and bonds other than the 1998A Certificates, the 2005A Certificates and the 2008A Certificates have been obtained. **By their purchase from the Underwriters of 2016AB Bonds, the purchasers of such 2016AB Bonds consent to such amendment.**

#### **Limitations on Remedies**

The ability of the Water Authority to comply with its covenants under the Indenture may be adversely affected by actions or events outside of the control of the Water Authority and may be adversely affected by actions taken (or not taken) by voters, property owners, taxpayers or payers of assessments, fees and charges. See **CONSTITUTIONAL LIMITATIONS**. Furthermore, any remedies available to the Trustee or the owners of the 2016AB Bonds upon the occurrence of an event of default under the Indenture are in many respects dependent upon judicial actions which are often subject to discretion and delay and could prove both expensive and time consuming to obtain. The 2016AB Bonds are not subject to acceleration upon the occurrence of an event of a default under the Indenture.

In addition to the limitations on remedies contained in the Indenture, the rights and obligations under the Indenture may be subject to bankruptcy, insolvency, 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 limitations on legal remedies against public entities in the State of California. The opinion to be delivered by Orrick, Herrington & Sutcliffe LLP, bond counsel, concurrently with the issuance of the 2016AB Bonds, that the Indenture constitutes a valid and binding obligation of the Water Authority will be subject to such limitations and the various other legal opinions to be delivered concurrently with the issuance of the 2016AB Bonds will be similarly qualified. A complete copy of the proposed form of opinion of bond counsel is set forth in Appendix F hereto. In the event the Water Authority fails to comply with its covenants under the Indenture or to pay principal and interest on the 2016AB Bonds, there can be no assurance that available remedies will be adequate to fully protect the interests of the holders of the 2016AB Bonds.

## DEBT SERVICE SCHEDULE

The table below sets forth the principal and interest payable on the 2016AB Bonds, total payments due with respect to the 1998A Certificates, the 2005A Certificates, the 2008A Certificates, the 2010A Bonds, the 2010B Bonds, the 2011A Bonds, the 2011B Bonds, the 2013A Bonds and the 2015A Bonds and the total payments due:

Year (ending May 1)	1998A Certificates Debt Service	2005A Certificates Debt Service	2008A Certificates Debt Service	2010A Bonds Debt Service	2010B Bonds Debt Service <sup>3</sup>	2011A Bonds Debt Service	2011B Bonds Debt Service	2013A Bonds Debt Service	2015A Bonds Debt Service	2016AB Bonds Principal	2016AB Bonds Interest	Total Debt Service <sup>1</sup>
2017	\$ 555,038	\$17,288,488	\$16,953,250	\$ 4,878,300	\$ 32,294,166	\$ 13,290,150	\$ 4,707,000	\$ 13,981,519	\$ 8,909,750		\$ 12,676,767	\$ 125,534,427
2018	555,038	16,185,725	19,043,000	4,878,100	32,294,166	13,289,150	4,707,000	13,981,519	8,909,750		14,817,000	128,660,448
2019	555,038	724,500	9,172,000	4,881,300	32,294,166	13,291,550	4,707,000	27,986,519	15,859,750		14,817,000	124,288,823
2020	555,038	724,500	9,266,250	4,882,800	32,294,166	13,294,050	4,707,000	27,986,369	16,257,250		14,817,000	124,784,423
2021	555,038	7,449,500			32,294,166	13,289,800	21,982,000	12,722,619	23,682,500		14,817,000	126,792,623
2022	555,038	7,446,438			32,294,166	13,293,050	21,973,250	12,722,619	23,682,250		14,817,000	126,783,810
2023	555,038				32,294,166	13,292,300	2,956,750	29,842,619	30,417,750		14,817,000	124,175,623
2024	555,038				32,294,166	13,291,550	2,956,750	29,842,069	30,415,000		14,817,000	124,171,573
2025	555,038				34,029,166	13,289,550	2,956,750	29,845,819	28,678,250		14,817,000	124,171,573
2026	555,038				38,412,672	13,290,050	2,956,750	29,839,569	14,634,500	\$ 8,715,000	14,817,000	123,220,579
2027	555,038				38,280,582	13,292,400	2,956,750	29,841,569	14,637,500	9,150,000	14,381,250	123,095,088
2028	12,240,038 <sup>2</sup>				38,143,146		16,676,750	29,839,069	22,932,000		13,923,750	133,754,753
2029					37,994,752		16,675,750	29,845,819	22,932,000		13,923,750	121,372,071
2030					37,845,092		16,675,500	29,842,819		20,410,000	13,923,750	118,697,161
2031					37,688,245		16,679,250	29,842,819		21,295,000	12,903,250	118,408,564
2032					40,798,599			29,842,819		27,920,000	11,838,500	110,399,918
2033					40,564,519			29,842,338		29,320,000	10,442,500	110,169,356
2034					49,367,818			29,841,000		32,490,000	8,976,500	120,675,318
2035					48,917,086					34,115,000	7,352,000	90,384,086
2036					48,444,488					35,820,000	5,646,250	89,910,738
2037					47,958,182					37,615,000	3,855,250	89,428,432
2038					47,440,714					39,490,000	1,974,500	88,905,214
2039					46,910,549							46,910,549
2040					46,359,924							46,359,924
2041					45,791,385							45,791,385
2042					45,192,170							45,192,170
2043					44,570,129							44,570,129
2044					43,927,501							43,927,501
2045					43,256,218							43,256,218
2046					42,558,516							42,558,516
2047					41,836,327							41,836,327
2048					41,081,276							41,081,276
2049					40,295,292							40,295,292
TOTALS <sup>1</sup>	\$18,345,450	\$49,819,150	\$54,434,500	\$19,520,500	\$1,326,017,677	\$146,203,600	\$144,274,250	\$467,489,492	\$261,948,250	\$296,340,000	\$265,171,017	\$3,049,563,885

1. Totals may not add due to rounding.
2. Includes amounts expected to be paid from debt service reserve fund monies.
3. Reflects gross interest amount; does not reflect interest subsidy payments expected to be received in connection with the 2010B Bonds.

## THE WATER AUTHORITY

### Organization, Purpose and Powers

The Water Authority was organized on June 9, 1944, under the Act for the primary purpose of supplying water to San Diego County for wholesale distribution to the Water Authority's member agencies in order to meet their respective needs for beneficial uses and purposes.

The Water Authority is authorized to acquire water and water rights within or outside the State of California (the "State"); to develop, store and transport such water; to provide, sell and deliver water for beneficial uses and purposes and to provide, sell and deliver water of the Water Authority not needed or required for beneficial purposes of its member agencies to areas outside the boundaries of the Water Authority.

The Act also authorizes the Water Authority to exercise the power of eminent domain; to levy and collect taxes; to fix, prescribe and collect rates or other charges for the delivery of water, use of facilities or property or provisions for service; and to fix in each fiscal year a Water Standby Availability Charge on land within the boundaries of the Water Authority to which water is made available by the Water Authority.

The Water Authority is authorized by the Act to utilize any part of its water, and any parts of its facilities used for the development, storage, and transportation of water, to provide, generate, and deliver hydroelectric power, and may acquire, construct, operate and maintain any and all of its facilities for such utilization, and the Act authorizes the Water Authority to purchase, lease, sell and otherwise dispose of real or personal property. The Water Authority is authorized to contract to provide, sell and deliver hydroelectric power to the United States of America, to the State for the State Water Project and to any other person engaged in the sale of electric power at retail or wholesale. The Water Authority is also authorized to acquire, construct, own, operate, control or use works for supplying its member agencies with gas or electricity and to purchase, sell and exchange gas and electricity from, to and with any public agency, private company or person engaged in the retail sale of gas or electricity.

### Member Agencies

The Water Authority was organized by 11 member agencies in 1944. The Water Authority currently has 24 member agencies, consisting of 6 cities, 17 special districts, and the Pendleton Military Reservation. Reference is made to the map in the front portion of this Official Statement for the location of the member agencies. Pursuant to the provisions of the Act, additional member agencies may join the Water Authority. Subject to certain limitations, the Act also permits member agencies to withdraw from the Water Authority.

The following are the member agencies of the Water Authority:

#### Cities

Del Mar  
Escondido  
National City

Oceanside  
Poway  
San Diego

#### Special Districts

Carlsbad Municipal Water District  
Fallbrook Public Utility District  
Helix Water District  
Lakeside Water District  
Olivenhain Municipal Water District  
Otay Water District  
Padre Dam Municipal Water District  
Rainbow Municipal Water District  
Ramona Municipal Water District

Rincon del Diablo Municipal Water District  
San Dieguito Water District  
Santa Fe Irrigation District  
South Bay Irrigation District  
Vallecitos Water District  
Valley Center Municipal Water District  
Vista Irrigation District  
Yuima Municipal Water District

#### Federal Agency

Pendleton Military Reservation

## Board of Directors, Management and Employee Relations

*Board of Directors.* The decision-making body of the Water Authority is its 36-member Board of Directors (the “Board”). Each of the member agencies of the Water Authority has at least one representative on the Board. Any member agency may appoint one additional representative for each full five percent (5%) of total assessed value of property taxable for Water Authority purposes that is within the public agency. As a result, the City of San Diego is currently entitled to representation by ten directors and Helix Water District, Otay Water District and Carlsbad Municipal Water District are each currently entitled to representation by two directors.

Under the Act, a member agency’s vote is based on its “total financial contribution” to the Water Authority since the Water Authority was organized in 1944. Total financial contribution includes all amounts paid in taxes, assessments, fees and charges to or on behalf of the Water Authority or The Metropolitan Water District of Southern California (“MWD”). The Act authorizes each Board member to cast one vote for each \$5,000,000, or major fractional part thereof, of the total financial contribution paid by the member agency. As of January 1, 2016, the member agencies’ voting entitlements are as follows:

### CALENDAR YEAR 2016 MEMBER AGENCY VOTING ENTITLEMENTS

<u>Agency</u>	<u>Votes</u>	<u>Percent</u>
Carlsbad Municipal Water District	82.041	3.53%
City of Del Mar	6.889	0.30
City of Escondido	82.867	3.57
Fallbrook Public Utility District	55.032	2.37
Helix Water District	159.420	6.88
Lakeside Water District	17.482	0.75
City of National City	16.125	0.69
City of Oceanside	118.764	5.12
Olivenhain Municipal Water District	72.211	3.11
Otay Water District	130.533	5.62
Padre Dam Municipal Water District	63.084	2.72
Pendleton Military Reservation	2.405	0.10
City of Poway	49.085	2.11
Rainbow Municipal Water District	94.486	4.07
Ramona Municipal Water District	35.619	1.53
Rincon del Diablo Municipal Water District	34.198	1.47
City of San Diego	924.805	39.85
San Dieguito Water District	24.966	1.08
Santa Fe Irrigation District	36.533	1.57
South Bay Irrigation District	48.765	2.10
Vallecitos Water District	60.848	2.62
Valley Center Municipal Water District	125.877	5.42
Vista Irrigation District	70.590	3.04
Yuima Municipal Water District	8.933	0.38
TOTALS	<u>2,321.558<sup>1</sup></u>	<u>100.00%<sup>1</sup></u>

<sup>1</sup> May not foot due to rounding

Directors are appointed by the respective member agencies. Although directors are appointed for a six-year term, the Act states that all directors serve at the pleasure of the agencies that appointed them. The Act further provides that member agencies with more than one representative may require through ordinance that its directors vote as a block, as determined by a majority of such member agency’s representatives. The City of San Diego has adopted such an ordinance. Another provision of the Act states that, except as otherwise provided in the Act, a vote in excess of 55 percent is required for Board action. At such time as the City of San Diego’s proportion of financial contribution equals 38 percent or less, however, all questions will be required to receive only a majority of the vote.

Mark Weston, representing the City of Poway, serves as Chair of the Board; and Mark Muir, representing the San Dieguito Water District, serves as Vice-Chair of the Board. Jim Madaffer, representing the City of San Diego, is the current Secretary of the Board.

The Board has five main standing committees: Administrative and Finance; Engineering and Operations; Imported Water; Legislation, Conservation and Outreach; and Water Planning. These committees review Water Authority matters and recommend action to be taken by the Board.

*Management.* Maureen A. Stapleton serves as General Manager of the Water Authority. Ms. Stapleton became General Manager of the Water Authority in January 1996 following nine years of service at the City of San Diego as Deputy City Manager and Assistant City Manager. Ms. Stapleton has over 35 years of experience in municipal government in a variety of positions. Ms. Stapleton received her Bachelor of Science degree from California State Polytechnic University, Pomona and earned her Master of Public Administration from California State University Consortium, Long Beach.

Mark J. Hattam serves as the Water Authority's General Counsel. Mr. Hattam joined the Water Authority in March 2016. Before joining the Water Authority, Mr. Hattam was a partner in the San Diego office of Allen Matkins Leck Gamble Mallory & Natsis LLP where his practice focused on federal and state litigation regarding water rights, commercial disputes, real estate, insurance and environmental regulation. Mr. Hattam received his Bachelor of Arts degree from the University of Colorado and his J.D. from Loyola Law School.

Frank Belock, Jr. serves as Deputy General Manager of the Water Authority. Mr. Belock joined the Water Authority in August 2007. Before joining the Water Authority, Mr. Belock was employed by the Parsons Corporation serving in the capacity of Area Manager for the San Diego office. Mr. Belock is a California registered professional civil engineer. Prior to his employment with Parsons, he served as Water Department Director and Director of Engineering and Capital Projects for the City of San Diego. Mr. Belock received his Bachelor of Science degree in Civil Engineering from the University of Vermont and his Master of Public Administration from San Diego State University.

Sandra L. Kerl serves as Deputy General Manager of the Water Authority. Ms. Kerl joined the Water Authority in November 2009 following over 25 years of service in municipal management. Most recently Ms. Kerl served as City Manager in the City of La Mesa. She received a Bachelor of Arts degree in political science from Cal Poly, San Luis Obispo and a Master of Business Administration Degree from the University of Redlands.

Dennis A. Cushman serves as Assistant General Manager of the Water Authority. Prior to his appointment as Assistant General Manager in August 2002, Mr. Cushman served as Public Affairs Director of the Water Authority beginning in July 1997. Mr. Cushman has more than 20 years of experience in public affairs and management in the public and private sectors. He holds a Bachelor of Arts degree in journalism from San Diego State University.

Lisa Marie Harris serves as the Director of Finance/Treasurer of the Water Authority. Ms. Harris joined the Water Authority in May 2014 and has more than 23 years of financial experience in both the public and private sector, including working at the County of San Diego as Chief Deputy Treasurer, the State Treasurer's Office as Executive Director of the California Debt and Investment Advisory Commission, the City and County of San Francisco, San Francisco International Airport as the Assistant Deputy Airport Director for Budget and Finance, and most recently for Siebert Brandford Shank & Co., LLC, an investment banking firm, as Senior Vice President. Ms. Harris received her bachelor's degree in Economics from University of California, Berkeley and her Master's degree in Public Policy from the University of Michigan.

Gerard (Jerry) E. Reed III serves as Director of Engineering of the Water Authority. Mr. Reed has over 26 years of experience in engineering in both the private and public sectors. He has been with the Water Authority since 1995 and has worked on and managed some of the Water Authority's largest and most complex projects, including the Olivenhain Dam and San Vicente Dam Raise. Prior to joining the Water Authority, Mr. Reed worked as an engineering consultant for 6 years designing water and sewer projects. He has a Bachelor of Science degree in civil engineering from Northeastern University in Boston, Massachusetts and is a registered civil engineer in California.

David G. Shank serves as the Financial Planning Manager for the Water Authority. Mr. Shank joined the Water Authority in 2006. Prior to joining the Water Authority, Mr. Shank served as a consultant for Malcolm Pirnie and a resource economist for the United States Department of Agriculture's Economic Research Service. Mr. Shank received a Master of Science degree from the University of California, Davis in Resource Economics, a Master of Science degree from the University of Illinois at Urbana-Champaign in Environmental Engineering and a Bachelor of Arts degree from Emory University in Economics.

*Employee Relations.* As of January 1, 2016, the Water Authority had 248.4 full-time equivalent employees. Approximately 80 percent of the employees are members of Teamsters Local 911 which is the recognized employee organization designated to represent them in their employment relations with the Water Authority, including wages, hours and other terms and conditions of employment. The Water Authority's current labor contracts with Local 911 are in effect through the fiscal year ending June 30, 2019.

*CalPERS Defined Benefit Pension Plan.* The Water Authority contributes to the California Public Employees Retirement System ("CalPERS"), an agent multiple-employer public employee defined benefit pension plan. CalPERS provides retirement, disability benefits, and death benefits to plan members and beneficiaries.

The Water Authority's pension cost or contribution to CalPERS for fiscal years ended June 30, 2014 and June 30, 2015 were \$5,253,134 and \$5,273,604, respectively. As of June 30, 2014, the Water Authority's Net Pension Liability was \$57.8 million based on the market value of plan assets (representing a funded ratio of 71.2% based on the market value of assets).

For the fiscal years ended June 30, 2014 and June 30, 2015, the Water Authority's total employer contracted contribution rates were 19.735% and 21.389%, respectively, of covered payroll. In addition, for "Classic" employees as defined by CalPERS, the Water Authority pays seven percent of the employee's eight percent required contribution and the employee pays the remaining one percent. The value of the seven percent member contribution is reported to CalPERS as additional compensation, known as Employer Paid Member Contributions ("EPMC"). As of July 1, 2014, all "Classic" employees have been contributing eight percent of their salary to the CalPERS pension (one percent towards Employee's contribution and seven percent towards the Employer's required contribution).

"New" members, as defined by The California Public Employees' Pension Reform Act of 2012 ("PEPRA") are subject to the terms of PEPRA's two percent at 62 formula and other provisions. PEPRA defined "new" members as employees who have never been a member of any California public retirement system before January 1, 2013, moved between public retirement systems lacking reciprocity or moved between employers in the same public retirement system with more than six months of break in service. "New" members pay at least 50% of the actuarially determined normal rate for such member's defined benefit plan. The Water Authority's New Members contributed 6.5% of salary to CalPERS (subject to an annual cap based on salary) and are enrolled in the two percent at 62 benefit formula with no EPMC benefit.

For additional information on the Water Authority's retirement plan obligation, see **APPENDIX A – WATER AUTHORITY FINANCIAL STATEMENTS.**

*Other Post-Employment Benefits ("OPEB").* The Water Authority established a Retiree Healthcare Plan ("Plan"), a single-employer defined benefit retiree healthcare plan. This Plan, which is administered by the Water Authority, provides employees who retire directly from the Water Authority at age 55 with five years of service a cash subsidy for monthly medical insurance premiums up to a cap of \$200 per employee or \$320 for employee plus spouse. Payments cease at age 65 when the retiree or spouse is eligible for Medicare. If applicable, a cash subsidy for the monthly medical premium continues up to a cap of \$160 for a spouse until age 65 is attained. Surviving spouses are also eligible for this benefit. Employees who retire directly from the Water Authority at age 55 with five years of service are eligible to continue medical coverage as a participant with active employees at a blended premium rate until eligible for Medicare at age 65 as an implied subsidy. The required contribution is based on projected pay-as-you-go financing requirements.

Governmental Accounting Standards Board Statement No. 45 requires each employer to calculate its actuarial accrued liability on explicit and implicit other post-employment benefits. It also requires a calculation of the annual required contribution, representing the annual contribution that will fund the current active and retired

members' other post-employment benefits by the end of their working lifetimes. For the fiscal years ended June 30, 2014 and June 30, 2015, the Water Authority contributed \$110,650 and \$127,116 in current premiums, respectively. The Water Authority's unfunded actuarial accrued liability/(surplus) for the Plan was approximately (\$92,000) (representing a funded status of 102 percent), based on its most recent actuarial valuation dated as of June 30, 2015. During fiscal year 2015, the Water Authority contracted with the California Employers' Retiree Benefit Trust to begin funding its OPEB obligation. The Water Authority contributed \$4.3 million to prefund the trust and contributed a total of \$4.6 million for the fiscal year ended June 30, 2015. For additional information on the Water Authority's obligations under the Plan, see **APPENDIX A – WATER AUTHORITY FINANCIAL STATEMENTS**.

### **WATER AUTHORITY SERVICE AREA**

The Water Authority's service area lies within the foothill and coastal areas of the westerly third of San Diego County, encompassing approximately 945,500 acres (1,486 square miles). When the Water Authority was established in 1944, its service area consisted of 94,707 acres. Growth has primarily resulted from the addition of and annexation of additional service areas by member agencies. The City of San Diego, with 213,121 acres, is the largest service area within the Water Authority's total service area. In its 2013 county population estimate, the United States Bureau of the Census ranked San Diego County the second largest county by population in California. Of the total population of San Diego County, 97 percent live within the Water Authority's service area. Based upon population estimates provided by the member agencies, it is estimated that the population of the Water Authority's service area as of June 30, 2015 was 3,146,771. The population of the City of San Diego, estimated at 1,326,238 as of June 30, 2015, represented approximately 42 percent of the total population of the Water Authority's service area.

The Water Authority's service area is a semi-arid region where historically the natural occurrence of water from rainfall and groundwater provides a firm water supply for only a small portion of the water needs of the current population. Since 1990, the Water Authority has provided an average of 85 percent of the water supply within its service area, with annual amounts ranging from a high of 95 percent in fiscal year ended June 30, 1990 to a low of 75 percent in fiscal year ended June 30, 1999. In fiscal year ended June 30, 2015, the Water Authority provided an estimated 91 percent of the water supply within its service area (excluding estimated conservation savings). As a wholesaling entity, the Water Authority serves its member agencies.

For additional demographic and economic information relating to San Diego County, see **APPENDIX B – ECONOMY OF SAN DIEGO COUNTY**.

The following table sets forth the area of the Water Authority served by each member agency and the population of each member agency service area as estimated by the respective member agencies.

**AREA AND POPULATION – WATER AUTHORITY MEMBER AGENCIES**  
(as of June 30, 2015)

Member Agency	Total Member Agency Service Area (acres)	Percent of Total Water Authority Service Area	Population Estimate	Percent of Total Water Authority Service Area Population
Carlsbad M.W.D.	20,640.0	2.18%	84,838	2.70%
City of Del Mar	1,442.0	0.15	4,238	0.13
City of Escondido	21,569.0	2.28	134,053	4.26
Fallbrook P.U.D.	27,988.0	2.96	35,000	1.11
Helix W.D.	31,350.0	3.32	270,375	8.59
Lakeside W.D.	11,488.0	1.22	35,500	1.13
City of National City	4,812.4	0.51	59,200	1.88
City of Oceanside	26,982.5	2.85	171,183	5.44
Olivenhain M.W.D.	30,942.1	3.27	83,368	2.65
Otay W.D.	80,320.0	8.50	217,000	6.90
Padre Dam M.W.D.	54,402.2	5.75	89,171	2.83
Pendleton Military Reservation	134,625.0	14.24	64,000	2.03
City of Poway	25,047.0	2.65	48,774	1.55
Rainbow M.W.D.	47,260.4	5.00	19,944	0.63
Ramona M.W.D.	45,868.0	4.85	33,360	1.06
Rincon del Diablo M.W.D.	10,596.1	1.12	29,955	0.95
City of San Diego	213,121.0	22.54	1,326,238	42.15
San Dieguito W.D.	5,652.7	0.60	37,168	1.18
Santa Fe I.D.	10,359.0	1.10	19,400	0.62
South Bay I.D.	13,836.9	1.46	132,200	4.20
Vallecitos W.D.	28,334.0	3.00	99,796	3.17
Valley Center M.W.D.	64,253.0	6.80	25,394	0.81
Vista I.D.	21,146.2	2.24	124,746	3.96
Yuima M.W.D.	13,460.0	1.42	1,870	0.06
<b>Total Water Authority</b>	<b>945,495.5<sup>1</sup></b>	<b>100.00%<sup>1</sup></b>	<b>3,146,771<sup>1</sup></b>	<b>100.00%<sup>1</sup></b>

<sup>1</sup> May not add due to rounding

**WATER AUTHORITY WATER SUPPLY**

The Water Authority’s mission is to provide its service area a safe and reliable water supply. Historically, the principal source of supply for the Water Authority’s service area has been water purchased by the Water Authority from MWD for sale to the Water Authority’s member agencies. However, historic supply shortage events and continued population growth in the Water Authority’s service area have reinforced the need for diversification of the Water Authority’s water supply. Therefore, consistent with its mission statement, the Water Authority has actively pursued a strategy of supply diversification that includes the acquisition and importation of additional water supplies, the development of additional local water supply projects and enhancements to the reliability of its water supply via local and regional water storage capacity. Water supplies utilized within the Water Authority service area originate from two sources: (1) water imported by the Water Authority and (2) local supplies (such as local runoff, groundwater, recycled water, and seawater desalination). The Water Authority has implemented programs and supported new technologies to increase local supply development. A significant milestone in local supply development was reached at the end of 2015, when the construction of the Claude “Bud” Lewis Carlsbad Desalination Plant (the “Carlsbad Project”) was completed and commercial operations began. Delivery of water from this drought proof local supply followed approval in 2012 by the Water Authority Board of a long-term Water

Purchase Agreement with Poseidon Resources Inc. for the purchase of 48,000 to 56,000 acre-feet per year of desalinated seawater from the Carlsbad Project. (Quantities of water are expressed in terms of acre-feet. An acre-foot is the amount of water that will cover one acre to a depth of one foot and is equivalent to approximately 326,000 gallons, which is approximately the average annual water use of two households of four persons each.) See **The Claude “Bud” Lewis Carlsbad Desalination Plant**.

MWD remains the Water Authority’s largest source of imported water. See **Water Purchases from The Metropolitan Water District of Southern California**. MWD obtains its water supply from two primary sources: the Colorado River, via MWD’s Colorado River Aqueduct, and the State of California Department of Water Resources’ State Water Project (“SWP”), via the Edmund G. Brown California Aqueduct. A map in the front portion of this Official Statement provides the location of the Colorado River Aqueduct and the California Aqueduct. See **MWD Water Supply and INFORMATION CONCERNING THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA**.

As an alternative to purchasing all of its imported water from MWD, the Water Authority is diversifying its purchases through core supply transfers and dry-year transfers. Since 2003, the Water Authority has been receiving a portion of its imported water pursuant to the terms of the Quantification Settlement Agreement (“QSA”) among the State acting by and through the Department of Fish and Wildlife (“DFW”), the Coachella Valley Water District (“CVWD”), the Imperial Irrigation District (“IID”) and the Water Authority, executed on October 10, 2003, the Water Transfer Agreement (defined below) and other QSA related agreements. See **Quantification Settlement Agreement**. Water that the Water Authority receives from IID is conveyed through the Colorado River Aqueduct pursuant to an exchange agreement with MWD. The Water Authority began receiving transferred water from IID in December 2003. Starting with the initial delivery of 10,000 acre-feet, the amount of water to be delivered is increasing according to an agreed-upon schedule until the maximum transfer yield of 200,000 acre-feet per year is achieved in 2021. In addition, the Water Authority’s portfolio includes imported supplies from water conserved as a result of the lining of the All-American Canal and the Coachella Canal. The Water Authority began receiving water from the Coachella Canal Lining Project in 2007 and from the All-American Canal Lining Project in 2009. In 2014, the Water Authority received approximately 80,000 acre-feet from the Coachella Canal Lining Project and All-American Canal Lining Project transfers. See **Quantification Settlement Agreement**. The Water Authority also successfully secured dry-year water transfers to provide supplemental supplies to the region during MWD’s mandatory cutbacks to full service customers that started in July 2009 and ended in April 2011. Dry-year transfers are short-term transfers or leases, typically agreed to and completed within one to three years.

The Water Authority’s progress in supply diversification for its service area (including local water supplies of member agencies) for the five fiscal years of June 30, 2011 through June 30, 2015 is set forth in the following table:

#### WATER AUTHORITY SERVICE AREA WATER SUPPLY

	<b>Fiscal Year Ended June 30 (In Acre-Feet)</b>				
<u>Supply Source</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
MWD	260,337	282,947	296,548	325,729	305,039
IID Transfer <sup>1</sup>	75,000	76,639	103,361	100,000	100,000
Canal Lining	81,507	79,965	80,139	80,256	80,123
Dry Year Transfer	—	—	—	—	—
Surface Water <sup>2</sup>	67,111	61,018	46,069	40,396	4,071
Groundwater <sup>3</sup>	19,928	17,862	20,393	19,223	23,643
Recycled Water	23,062	24,007	27,391	28,932	26,485
<b>Total</b>	<b>526,945</b>	<b>542,438</b>	<b>573,901</b>	<b>594,536</b>	<b>539,361</b>

<sup>1</sup> U.S. Bureau of Reclamation deferred 16,722 acre-feet of IID Transfer water to calendar year 2012, from calendar year 2011, due to underfallowing. The combined fiscal year 2012 and 2013 IID Transfer totals of 180,000 acre-feet, shown above, are consistent with the QSA delivery schedule.

<sup>2</sup> Fluctuations in surface water use attributed to variation in local hydrology.

<sup>3</sup> Includes Yuima Municipal Water District supplemental groundwater use.

The Water Authority continues to pursue regional supply diversification efforts through the support of long-term planning efforts for local surface water, groundwater, recycled water, potable reuse, local seawater desalination and conservation efforts. See **Future Water Supply**.

Water storage facilities are also critical to assuring consistent water availability notwithstanding fluctuation in available supply. The Water Authority has entered into agreements to expand available storage capacity. See **WATER AUTHORITY WATER FACILITIES – Water Storage**. One of the purposes of the Water Authority’s Capital Improvement Program is to enhance the Water Authority’s own storage capacity. See **THE CAPITAL IMPROVEMENT PROGRAM**.

### **Local Water Supplies**

In 1990, San Diego County area local supplies consisted almost exclusively of surface water and groundwater sources which represented only five percent of the region’s total water supply. These sources are heavily dependent upon precipitation and are cyclical in nature. Over the last several decades, total local supplies have ranged from a low of approximately 26,000 acre-feet in fiscal year ended June 30, 1991 to more than 151,000 acre-feet in fiscal year ended June 30, 1999. A number of the member agencies have storage facilities for the impounding of local runoff and water purchased from the Water Authority. The total capacity of storage within the Water Authority’s service area is over 746,000 acre-feet. See **WATER AUTHORITY WATER FACILITIES – Water Storage**. Such storage is generally only available to the member agencies operating these facilities, and is generally not available for use by other member agencies. The Water Authority does have periodic agreements with member agencies to establish subaccounts in member agency reservoirs in order to optimize water supplies in the case of scheduled shutdowns. However, some member agencies are able to sell water to certain other agencies under separate agreements.

In fiscal year ended June 30, 2015, local supplies (excluding savings achieved through water conservation) accounted for approximately 9 percent of the region’s water supply portfolio. Recent increases in local supplies were achieved through the development of recycled water supplies and expanded groundwater use. The Water Authority encouraged development of these additional cost-effective local water supply projects through the award of Local Water Supply Development (“LWSD”) incentives of up to \$200 per acre-foot for recycled water and groundwater produced and beneficially reused within the Water Authority’s service area. The LWSD program reimburses member agencies for all or a portion of the difference between the actual per acre-foot cost of producing recycled water, and the revenue generated by the LWSD participant through the sale of that acre-foot of recycled water (not to exceed \$200 per acre-foot). In February 2008, the program was expanded to include funding for local brackish and seawater desalination projects. However, there currently is no funding appropriated for new LWSD program projects.

The Water Authority also provided financial assistance through the Local Investigations and Studies Assistance (“LISA”) program for conceptual-level studies to evaluate potential new member agency local water supply projects. The LISA program provided matching grant funding on a 50-50 cost sharing basis for exploratory project development activities including feasibility studies, field investigations, and environmental studies and documentation. Funding phases of the Water Authority’s LISA program were completed in fiscal year 2013. This multi-year funding program granted 13 member agencies a total of \$5.2 million in matching funds. The projects included planning and design efforts related to groundwater, water recycling and seawater desalination. The LISA program has been discontinued.

The Water Authority is also currently administering a California Proposition 50 grant-funded Recycled Water Retrofit Assistance Program, funded through the San Diego Integrated Regional Water Management Program using Proposition 50 funds, that provides a portion of the reasonable costs incurred by the Water Authority’s member agencies and their public agency customers for retrofit work completed to facilitate the conversion from potable to recycled water for landscape irrigation and other uses. As of May 3, 2016, \$491,615 of this grant funding had been awarded.

## **The Claude “Bud” Lewis Carlsbad Desalination Plant**

The Carlsbad Project is a seawater desalination plant and conveyance pipeline recently constructed by Poseidon Resources (Channelside) LP (“Poseidon”), a subsidiary of Poseidon Water LLC, which develops water and wastewater infrastructure. The Carlsbad Project is located on an approximately six-acre parcel adjacent to the Encina Power Station in Carlsbad, California. The Carlsbad Desalinated Water Conveyance Pipeline connects the Carlsbad Project with the Water Authority’s existing treated water pipeline 3 which transports the water to the Water Authority’s Twin Oaks Valley Water Treatment Plant (“TOVWTP”) for blending with imported water and subsequent delivery to member agencies. Construction began on the project in late 2012 and was completed in December 2015 when commercial operations began. The Carlsbad Project is expected to provide a reliable local supply of up to 56,000 acre-feet per year for the region.

On November 29, 2012, the Water Authority Board approved a 30-year Desalination Water Purchase Agreement between the Water Authority and Poseidon. The Desalination Water Purchase Agreement obligates Poseidon to design, construct and operate the desalination plant in accordance with the standards and design requirements set forth therein. Poseidon entered into a Desalination Facility Engineering, Procurement and Construction Agreement (the “Plant EPC Contract”) with Kiewit Shea Desalination, a joint venture of Kiewit Infrastructure West Co. and J.F. Shea Construction Company. The Plant EPC Contract provided for the design, engineering, procurement, construction, start-up, commissioning and performance testing of the Plant. IDE Americas, a subsidiary of IDE Technologies, Ltd., an international provider of design, construction, and operation services for desalination plants, is the desalination process subcontractor for the Carlsbad Project. In addition, Poseidon also entered into an Operation, Maintenance, Repair and Replacement Agreement, dated December 20, 2012, with IDE Americas providing for the operation, maintenance, repair and replacement of the desalination plant during a 30-year operating period. The Board also approved a Design-Build Agreement for Product Water Pipeline Improvements Relating to the Carlsbad Seawater Desalination Project, dated December 20, 2012 (the “Desalination Pipeline DBA”), by and between the Water Authority and Poseidon, providing for the construction of a 10-mile pipeline to connect the Carlsbad Project to the Water Authority’s aqueduct system (the “Desalination Pipeline”). Construction of the Desalination Pipeline is complete.

With the commencement of commercial operation of the Carlsbad Project in December 2015, the Desalination Water Purchase Agreement obligates the Water Authority to purchase from Poseidon, and obligates Poseidon to sell to the Water Authority, all of the product water produced by the Carlsbad Project meeting the Water Authority’s quality standards. The Water Authority has agreed to purchase annually from the Carlsbad Project a minimum of 48,000 acre-feet of product water meeting such quality standards, subject to availability of qualifying water from the Carlsbad Project. The Water Authority can request that Poseidon supply to the Water Authority up to an additional 8,000 acre-feet of water annually from the Carlsbad Project. Since commercial operations began in December 2015, through March 2016 approximately 10,000 acre-feet of desalinated ocean water has been delivered to the Water Agency. Two Water Authority member agencies, Vallecitos Water District and Carlsbad Municipal Water District, will purchase a combined total of 6,000 acre-feet of the desalinated water from the Water Authority as their own local supply under separate agreements with the Water Authority, and can elect to purchase a proportionate share of the additional 8,000 acre-feet. Vallecitos Water District began purchasing desalinated water from the Water Authority in January 2016. Carlsbad Municipal Water District approved its purchase agreement with the Water Authority in April 2016 and will begin purchasing desalinated water shortly.

The Water Authority has made a number of improvements to its aqueduct system and the TOVWTP to integrate desalinated water into the Water Authority’s aqueduct system. The Water Authority improvements cost approximately \$80 million, which the Water Authority funded from monies on hand. See **FINANCIAL OPERATIONS – Financial Commitments Related to the Carlsbad Project**.

Initial operation of the Carlsbad Project is through co-use of ocean intake and discharge facilities operated by the owner of the Encina Power Station that utilizes ocean water for once through cooling of its power generation equipment. The power plant requires approximately 600 mgd of ocean water to cool its equipment which is far in excess of the feedwater and brine dilution water (approximately 300 mgd) Poseidon requires to produce approximately 50 mgd of desalinated water. On May 10, 2010, the SWRCB approved a policy that required coastal power plants in California using ocean water for once through cooling purposes to meet standards equivalent to closed cycle evaporative cooling or shut the plant down. NRG, the owner and operator of the Encina Power Station plans to comply by ceasing operation of the existing plant by December 31, 2017. As part of its compliance with its

National Pollutant Discharge Elimination System (“NPDES”) permit, Poseidon is required to upgrade its ocean water intake when the Encina Power Station no longer uses its once through cooling facilities and the Carlsbad Desalination Plant is considered to be in “stand alone” operations. Poseidon is also required to comply with new desalination intake and discharge regulations, adopted in May 2015 as part of an amendment to the California Ocean Plan (the “Ocean Plan”) by the SWRCB, through which it established regulations concerning both the intake of ocean water for desalination and the discharge of saline brine from the reverse osmosis desalination process into the Pacific Ocean.

To comply with the new Ocean Plan regulations and avoid disruption of water production from the Carlsbad Project, Poseidon has begun designing the new intake facilities. Poseidon will be renewing its NPDES permit for the Plant’s brine discharge and will be required to meet the Ocean Plan requirements. Both the NPDES and Ocean Plan compliance for the Carlsbad Project will be addressed through a permit issued by the San Diego Regional Water Quality Control Board (“San Diego RWQCB”). Poseidon’s permit application follows the approach detailed in the SWRCB State Ocean Plan Regulations. Poseidon will have to demonstrate to the San Diego RWQCB that its design and operation of the intake and discharge facilities meets the requirements of the Ocean Plan. The regulations provide specific guidelines for intakes and discharge. Failure to reach agreement with the San Diego RWQCB on the compliance approach could result in delays or added cost. The Desalination Water Purchase Agreement caps the Water Authority’s financial responsibility for capital costs associated with the new open ocean intake (related to stand-alone operation) at \$21.3 million (inflation adjusted). Although there is not a similar cap on expenses for meeting State Ocean Plan requirements the Desalination Water Purchase Agreement does limit the amount Poseidon can increase the unit price of water to 10% annually and no more than a cumulative total of 30% for the term of the agreement.

See **FINANCIAL OPERATIONS - Cost of Seawater Desalination Water from Carlsbad Project.**

### **Water Transfers**

Core water transfers have emerged as one of the Water Authority’s primary alternatives to heavy reliance upon purchases from MWD, thus helping the Water Authority accomplish its supply diversification goal. In general, water transfers typically involve purchasing water for a specified period of time from an agency or district that then reduces its water use by the equivalent amount. The principle behind water transfers is that market forces will work to reallocate water supplies. The Water Authority/IID core water transfer, included in the QSA, is an example of this principle and will ultimately provide the Water Authority with 200,000 acre-feet per year by 2021. Since deliveries began in December 2003, IID Transfer deliveries through fiscal year ended June 30, 2015 totaled 750,000 acre-feet. An additional 575,422 acre-feet have been received by the Water Authority as a result of conservation from the All-American and Coachella Canal linings.

### **Quantification Settlement Agreement**

The QSA establishes a plan for California to reduce its overuse of Colorado River water over a 15-year period. The Water Authority’s Water Transfer Agreement with IID, described in detail below, is a cornerstone of the QSA. The Water Authority’s Colorado River Program manages the implementation of the Water Authority’s agreements under the QSA, including the Water Transfer Agreement and the agreements relating to lining of portions of the All-American and Coachella Canals. The Water Authority expects to receive approximately 46 percent of its water supply from the water transfer and canal lining projects by 2020.

The following table details the existing priorities of the California users of Colorado River water under the 1931 Seven-Party Agreement. The Water Authority is entitled to Priority 3(a) under its Water Transfer Agreement with IID. The Colorado River supplies purchases from MWD fall under Priority 4 and, when available 5(a) and 5(b).

**PRIORITIES UNDER THE 1931 CALIFORNIA SEVEN-PARTY AGREEMENT<sup>1</sup>**

<b>Priority</b>	<b>Description</b>	<b>Acre-Feet Annually</b>
1	Palo Verde Irrigation District gross area of 104,500 acres of land in the Palo Verde Valley	} 3,850,000
2	Yuma Project in California not exceeding a gross area of 25,000 acres in California	
3(a)	Imperial Irrigation District and other lands in Imperial and Coachella Valleys <sup>2</sup> to be served by All-American Canal	
3(b)	Palo Verde Irrigation District - 16,000 acres of land on the Lower Palo Verde Mesa	
4	Metropolitan Water District of Southern California for use on the coastal plain	550,000
	<b>SUBTOTAL</b>	4,400,000
5(a)	Metropolitan Water District of Southern California for use on the coastal plain	550,000
5(b)	Metropolitan Water District of Southern California for use on the coastal plain <sup>3</sup>	112,000
6(a)	Imperial Irrigation District and other lands in Imperial and Coachella Valleys to be served by the All-American Canal	} 300,000
6(b)	Palo Verde Irrigation District - 16,000 acres of land on the Lower Palo Verde Mesa	
	<b>TOTAL</b>	5,362,000
7	Agricultural use in the Colorado River Basin in California	Remaining surplus

Source: MWD.

<sup>1</sup> Agreement dated August 18, 1931, among Palo Verde Irrigation District, IID, CVWD, MWD, the City of Los Angeles, the City of San Diego and the County of San Diego. These priorities were memorialized in the agencies' respective water delivery contracts with the Secretary of the Interior.

<sup>2</sup> The CVWD serves Coachella Valley.

<sup>3</sup> In 1946, the City of San Diego, the Water Authority, MWD and the Secretary of the Interior entered into a contract that merged and added the City of San Diego and the County of San Diego's rights to storage and delivery of Colorado River water to the rights of MWD.

*Water Authority/Imperial Irrigation District Water Transfer.* In September 1995, the Water Authority approved a Memorandum of Understanding with IID to negotiate a long-term transfer of conserved agricultural water. In July 1996, the Water Authority and IID agreed to draft terms for a Cooperative Water Conservation and Transfer Program. On April 29, 1998, the Water Authority and IID approved an Agreement for the Transfer of Conserved Water (the "Water Transfer Agreement"). Concurrently with its approval of the QSA on October 10, 2003, the Water Authority executed a Revised Fourth Amendment to the Water Transfer Agreement and commenced implementation of the water transfer. The Water Transfer Agreement provides that reliable water saved through conservation measures in Imperial Valley will be transferred to the Water Authority through existing MWD facilities. This water supply is highly reliable because it is part of IID's Colorado River Water, Priority 3(a). This water would likely remain available to the Water Authority even if Colorado River supplies to MWD were interrupted under its lower Priority 4. Implementation of the water transfer began in 2003 with a transfer of 10,000

acre-feet of water. Since 2003, IID has increased the amount of water conserved and transferred to the Water Authority according to the schedule described in the Water Transfer Agreement\*.

In 2016, the Water Authority will receive 100,000 acre-feet of conserved water from the Water Transfer Agreement. The Water Transfer Agreement provides for annual deliveries through 2047 as follows:

**SCHEDULED ANNUAL WATER TRANSFER  
DELIVERIES**

<u>Calendar Year</u>	<u>Transfer Amount<sup>‡</sup></u>
2016	100,000
2017	100,000
2018	130,000
2019	160,000
2020	190,000
2021 – 2047	200,000

*All-American Canal and Coachella Canal Lining Projects.* As part of the QSA and related negotiations, MWD assigned to the Water Authority its rights to develop approximately 80,000 acre-feet per year of conserved Colorado River water from projects to line portions of the earthen All-American Canal (the “All-American Canal Lining Project” or “AACLP”) and the Coachella Canal (the “Coachella Canal Lining Project” or “CCLP” and, collectively with the AACLP, the “Canal Lining Projects”) pursuant to an Allocation Agreement among various parties to the QSA (the “Allocation Agreement”). Construction work on the CCLP was complete in April 2007 and it produces about 21,500 acre-feet of conserved water annually to the Water Authority. Water began flowing in the AACLP in 2009, and 56,200 acre-feet of water is conserved annually for the Water Authority. The AACLP and CCLP also provide an additional 16,000 acre-feet of water supply annually for use by certain Indian tribes and local agencies located in northern San Diego County. The Water Authority is also entitled to receive up to an additional 4,850 acre-feet of water supply annually from water saved on environmental mitigation of the CCLP. The Water Authority has received approximately 616,000 acre-feet of water supply from Canal Lining Projects through 2015. Conserved water from the Canal Lining Projects is expected to provide the Water Authority’s service area with more than 8.5 million acre-feet of water over the 110-year life of the agreement.

*Exchange Agreement.* The 2003 Exchange Agreement between the Water Authority and MWD provides for transportation of Colorado River water from the Canal Lining Projects and the IID water transfer through MWD facilities. Under the Exchange Agreement, MWD is required to deliver water from the IID water transfer and Canal Lining Projects for up to 45 years and 110 years, respectively. The Water Authority agreed to pay MWD’s lawful wheeling rate for transportation of these water supplies. The Water Authority has received 800,000 acre-feet of water supply from the IID water transfer through 2015. See **FINANCIAL OPERATIONS – Cost of MWD Water – MWD Water Rate Challenge.**

*Quantification Settlement Agreement Related Litigation.* On November 5, 2003, IID filed a validation action in Imperial County Superior Court, seeking a judicial determination that 13 agreements associated with the Water Authority/IID water transfer and the QSA are valid, legal and binding. Other lawsuits also were filed contemporaneously challenging the execution, approval and implementation of the QSA on various grounds. All of the QSA cases were coordinated in Sacramento Superior Court. A final judgment invalidating 11 of the 13 agreements in phase 1 of the trial was entered on February 11, 2010, and subsequently appealed. On December 7, 2011 the Court of Appeal issued its opinion reversing the judgment and remanding to the trial court for further

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\* In 2011, as a result of the uncertainty created by litigation challenging the QSA, IID chose to delay the start-up of its conservation program, which caused 16,722 acre-feet of the 80,000 acre-feet transfer obligation to be produced in early calendar year 2012, rather than 2011.

‡ An additional 10,000 acre-feet of water is scheduled for calendar years 2020-2022 consisting of 2,500 acre-feet in 2020 and 2022, and 5,000 acre-feet in 2021 through the Early Transfer Water provision in the Revised Fourth Amendment to the Water Transfer Agreement.

proceedings. *Quantification Settlement Agreement Cases* (2011) 201 Cal. App. 4th 758. The Appellate Court decision resolved many issues in the case, including the validity and constitutionality of the QSA. Trial on compliance with the California Environmental Quality Act (“CEQA”) was held in November 2012. On July 31, 2013, the court issued judgments rejecting all of the claims asserted by the QSA opponents and found that environmental reviews conducted by the water agencies fully complied with CEQA. On May 26, 2015, the California Court of Appeal dismissed the remaining appeals.

*Salton Sea Environmental Issues.* Implementation of the QSA requires certain mitigation of the impacts of QSA programs on the Salton Sea. The Salton Sea is an important habitat for a wide variety of fish-eating birds as a stopover spot along the Pacific flyway. Some of these birds are listed as threatened or endangered species under the federal or California Endangered Species Acts (respectively, the “Federal ESA” and the “California ESA” and, collectively, the “ESAs”). Located at the lowest elevations of an inland basin and fed primarily by agricultural drainage with no outflows other than evaporation, the Salton Sea is on a trend towards hyper-salinity, which has already impacted the Salton Sea’s fishery. This fishery in the Salton Sea has historically been suitable habitat for the fish-eating birds. The transfer of water from IID to the Water Authority will reduce the volume of agricultural runoff from IID into the Salton Sea, which in turn may accelerate the natural trend of the Salton Sea to hyper-salinity and potentially increase particulate matter (“PM10”) emissions or “dust” as the sea’s shoreline recedes. The appropriate mitigation for impacts to the Salton Sea from the Water Authority/IID water transfer and the larger issue of Salton Sea restoration has been addressed by State legislation implementing the QSA. In passing that legislation, the State Legislature committed the State to undertake restoration of the Salton Sea ecosystem. Restoration of the Salton Sea is subject to selection and approval of an alternative by the State Legislature and funding of the associated capital improvements and operating costs. The Secretary of Natural Resources recommended an \$8.9 billion preferred alternative for restoration of the Salton Sea to the State Legislature in May 2007. While withholding authorization of the preferred alternative, the State Legislature approved funds from Proposition 84 to undertake demonstration projects and investigations called for in the Secretary’s recommendation.

The primary strategy to mitigate the reduction in inflows resulting from QSA water transfers in the Imperial and Coachella valley was to deliver water to the Salton Sea for a 15 year period from 2003 to 2017. This 15 year period was intended to allow the State to identify and select a Preferred Alternative for Salton Sea Restoration. Since 2003, however, the State has made only minimal progress toward the Salton Sea’s restoration, and it appears unlikely a State-sponsored restoration plan will be implemented by 2017 as required by the QSA enabling legislation. The Water Authority believes that the failure of the State to make progress toward fulfilling its Salton Sea restoration obligations may minimize the effectiveness of existing QSA mitigation measures. As such the Water Authority has been an active participant in state and local efforts to support and help implement incremental small-scale projects as funds become available. As part of this approach, there are a number of “pilot” or “demonstration” projects that have been constructed that are proving to be useful examples of how the receding shoreline can be managed on a pay-as-you-go basis. When viewed in the larger context, these incremental projects, along with similar efforts being made by the QSA JPA (defined below), will serve to work together to improve the environment of the Salton Sea and surrounding area.

On November 18, 2014, IID filed a petition with the State Water Resources Control Board (the “SWRCB”) seeking modification of SWRCB Revised Order WRO 2002-2013, which approved the long-term transfers from IID to the Water Authority and to CVWD. In its petition, IID requested the SWRCB modify this order to require the State of California to fulfill its commitment to restore the Salton Sea as a condition of transfer. The SWRCB held a workshop on March 18, 2015 to receive public input on the issues surrounding the petition, including the status of mitigation and restoration efforts at the Salton Sea, if there is a necessary and appropriate role for the SWRCB, and what changes, if any, should be made to WRO 2002-2013. Participants at the workshops included the State’s resources and environmental protection agencies, the QSA JPA parties, representatives from Imperial and Riverside Counties, and other interested stakeholders and environmental organizations.

Following the SWRCB workshop, the State has made some progress in moving forward to meet its obligations to restore the Salton Sea. In May 2015, California Governor Jerry Brown created a Salton Sea Task Force, led by a newly appointed Assistant Secretary for Salton Sea Policy, and consisting of representatives from the California Natural Resources Agency, the California Environmental Protection Agency and related state departments. Further, State legislation signed in October 2015 tasks the Natural Resources Agency with providing a list of “shovel ready” projects at the Salton Sea. The Salton Sea Task Force has called for the creation of up to

12,000 acres of wetlands and seashore restoration over the next five years, and for work to begin on an additional 25,000 acres of restoration by 2020. An advisory committee is being established to ensure the work is guided by the best available science.

The SWRCB held a second public workshop on January 5, 2016, to receive agency updates and public input regarding the status of agency actions identified by the Salton Sea Task Force. The SWRCB received updates from the Natural Resources Agency, California Air Resources Board (“ARB”), the Colorado River Basin Regional Water Quality Control Board, and other agencies and members of the public. The ARB presented findings from its analysis of air quality monitoring data collected around the Salton Sea, which was funded by the QSA JPA. Based on the data, there is no apparent transport of PM10 from the Salton Sea area, but rather exceedances of PM10 are likely associated with the desert areas west of the Salton Sea.

Looking forward, the Governor’s proposed budget for Fiscal Year 2016-17 includes an allocation of \$80.5 million in Proposition 1 funding for Salton Sea projects that expand habitat and suppress dust to meet the task force’s short-term goals of up to 12,000 acres of restoration. It also provides funding for the Assistant Secretary for Salton Sea Policy position, for three existing positions to implement water transfers, develop restoration projects, and manage wildlife resources, and for a new SWRCB attorney to serve as staff lead to facilitate the SWRCB’s role of providing for the sustainable management of the Salton Sea.

Work has begun on two short-term projects. A 420-acre shallow habitat structure is under construction at Red Hill Marina in a Federal project led by the Sonny Bono National Wildlife Refuge and funded, in part, by the State’s Salton Sea Restoration Fund. The second project, a 620-acre habitat project led by the State of California Department of Water Resources (“DWR”), will begin construction in 2016. Work is already underway to build the transmission lines that will power the project. The 620 acres represent phase one of the project. At full build-out, as funds become available, the project will total nearly 4,000 acres.

The Water Authority will continue dialogue with State and local elected officials to encourage the State to meet its restoration obligations at the Salton Sea; and through the QSA JPA will continue to explore alternative mitigation measures that would be designed to provide accelerated, more effective air quality mitigation as well as wildlife habitat creation of higher functional value that does not preclude Salton Sea restoration opportunities.

*QSA Joint Powers Authority.* The QSA JPA Agreement, which was executed in October 2003, established the Quantification Settlement Agreement Joint Powers Authority (“QSA JPA”). The purpose of the QSA JPA is to administer the funding of environmental mitigation requirements related to QSA water transfers. The QSA JPA collects, holds, invests, and disburses funds needed for mitigation projects. The QSA JPA is comprised of representatives from the DFW, CVWD, IID and the Water Authority. CVWD, IID, and the Water Authority are required to provide up to \$133 million (in 2003 dollars, discounted at six percent per annum) to pay for the QSA mitigation program. Under terms of the QSA JPA Agreement, the collective financial obligation of the three water agencies is capped at \$133 million in 2003 dollars (\$288 million in nominal dollars), of which the Water Authority is responsible for \$52.2 million in 2003 dollars (\$94 million in nominal dollars). The QSA JPA modified its payment schedules on May 20, 2015 to advance \$40.5 million to pay for environmental mitigation requirements. Advance payments made by the water agencies are discounted at a rate of six percent. This modification includes an advance from the Water Authority of \$10 million over six years beginning in fiscal year ending June 30, 2016, which will result in a nominal savings to the Water Authority of approximately \$4.61 million. The Water Authority’s obligations are payable from Net Water Revenues subordinate to the Bonds and Contracts and the Subordinate Obligations. The table below shows a history of payments the Water Authority has made to date and scheduled payments through 2025:

**HISTORICAL AND SCHEDULED  
WATER AUTHORITY PAYMENTS TO QSA JPA**

<u>Calendar Year</u>	<u>Historical Payments</u>	<u>Calendar Year</u>	<u>Payments Due December 31</u>
2003	\$2,340,273	2016	\$10,054,386
2004	1,032,775	2017	10,164,814
2005	1,100,347	2018	8,664,667
2006	1,314,855	2019	2,810,053
2007	5,599,469	2020	1,900,836
2008	4,363,369	2021	3,801,632
2009	8,141,875	2022	1,517,597
2010	2,770,483	2023	1,221,837
2011	3,084,803	2024	1,345,439
2012	3,496,247	2025	1,047,693
2013	5,245,201		
2014	5,291,989		
2015	8,076,346		

The water agencies are also responsible for providing \$30 million (in 2003 dollars) for the Salton Sea Restoration Fund, which is administered by DFW. CVWD and the Water Authority paid their full obligations to this fund in fiscal year ended June 30, 2005 (\$8.3 million for CVWD, and \$11.8 million for the Water Authority (in 2003 dollars)). IID is paying its share of these funds according to a payment schedule.

**See Quantification Settlement Agreement Related Litigation.**

*Potential Colorado River Shortage.* The Bureau of Reclamation has been meeting with various Lower Basin states and water agencies to try to address a potential shortage of Colorado River water due to current and anticipated water levels at Lake Mead. See **MDW Water Supply – Colorado River Operations, Shortages and Surplus Guidelines**. Though under the existing Law of the River, California is not legally required to reduce Colorado River diversions, the other Lower Basin states have proposed that California voluntarily reduce its Colorado River water use if future reservoir levels reach unprecedented operational levels. Per the QSA and Conserved Water Transfer Agreement with IID, the Water Authority would be required to take a pro-rata reduction in its water transfer supplies if the Secretary of the Interior declares an official shortage in the Lower Colorado River Basin.

**Water Purchases from The Metropolitan Water District of Southern California**

The Water Authority is a member agency of MWD. MWD was created in 1928, under authority of the Metropolitan Water District Act (California Statutes 1927, Chapter 429, as reenacted in 1969 as Chapter 209, as amended) (the “MWD Act”). MWD’s primary purpose is to provide wholesale imported water to its member agencies. The MWD service area comprises approximately 5,200 square miles and includes portions of the six counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura. There are 26 member agencies of MWD, consisting of 14 cities, 11 municipal water districts and the Water Authority. A Board of Directors, currently numbering 37 members, governs MWD. Each member agency has at least one representative on the MWD’s Board. Representation and voting rights are based upon the assessed valuation of property within each member agency. The Water Authority has four members on the MWD’s Board and its voting entitlement is 17.44 percent as of August 15, 2015. The population of the MWD service area is currently estimated to be more than 19 million.

Historically, the Water Authority has been the largest purchaser of water from MWD. In the fiscal year ended June 30, 2015, the Water Authority’s estimated water purchases from MWD represented approximately 20.9 percent of MWD’s total sales. In addition, under an exchange agreement, MWD transported about 180,000 acre-feet of the Water Authority’s independently obtained Colorado River water to the Water Authority. See discussion under **Quantification Settlement Agreement**.

In the fiscal year ended June 30, 2015, MWD supplied approximately 1.72 million acre-feet of water to its member agencies. MWD faces a number of challenges in providing a reliable and high quality water supply for Southern California. These include, among others: (1) population growth within the service area; (2) increased environmental regulations, which may impact treatment techniques and operations of facilities; (3) regulatory restrictions on the operation of the SWP; (4) variable weather conditions; (5) cost associated with maintaining its supplies; and (6) increasing water rates' impact on its water sales. Supply deficiencies can occur during periods of drought. While MWD plans and manages reserve supplies to account for normal occurrences of drought conditions, increased regulatory restrictions and prolonged droughts may impact MWD's ability to provide water to its member agencies. See **MWD Water Supply**.

The MWD Act provides a preferential right for the purchase of water by each of the MWD member agencies. This preferential right is based upon a ratio of all payments made to MWD by each member agency on tax assessments and payments toward the capital and operating expenses of MWD, except purchases of water, to all such payments made by all member agencies. Based upon the formula as applied by MWD, as of June 30, 2015 the Water Authority has a statutory preferential right to 18.42% of MWD's total available supply. The Water Authority's lawsuit challenging MWD's rates and charges includes a claim that MWD's calculation of preferential rights fails to properly account for payments made by the Water Authority under the 2003 Amended and Restated Agreement between MWD and the Water Authority for the Exchange of Water. On August 28, 2015, a Superior Court judge ruled, among other things, that MWD has been under-calculating the Water Authority's preferential right to MWD water supplies. On November 19, 2015, a final judgment was entered in San Francisco Superior Court concluding the trial court's review of the Water Authority's MWD rate litigation filed in 2010 and 2012. Included in the judgement was an order for MWD to recalculate the Water Authority's preferential right to MWD water supply. The trial court's decision is in appeal. See **FINANCIAL OPERATIONS – Cost of MWD Water – MWD Water Rate Challenge**.

It is MWD's declared policy to meet all its member agencies' wholesale water needs, including those of the Water Authority. In the most recent three water supply shortages in the early 1990's and 2000's, the MWD Board has adopted allocation plans using financial penalties to limit the amount of water MWD supplies to its member agencies. Operating under the 2008 Water Supply Allocation Plan (the "Water Supply Allocation Plan" or the "WSAP") as amended in December 2014, MWD's allocation of water takes into consideration population growth, local supply investments, changes in local supply conditions, demand hardening from conservation, groundwater replenishment needs of some of its member agencies, and each member agency's dependence on MWD supplies. MWD implemented Level 2 of its WSAP in fiscal year 2010 and most of fiscal year 2011. MWD terminated the WSAP Level 2 allocation in April 2011 based on the water supply outlook, improved storage conditions, and reduced water demands. Due to renewed and worsening statewide drought conditions, on February 11, 2014, MWD declared a water supply alert. The alert is part of a set of comprehensive actions to address the state's dry conditions, which includes urging its service area's cities, counties, local public water agencies and retailers to achieve extraordinary voluntary conservation. On April 14, 2015, MWD's Board approved a water shortage allocation for fiscal year 2016; WSAP Level 3, or 15 percent reduction on MWD demand, which took effect on July 1, 2015. On May 10, 2016, MWD rescinded its WSAP Level 3 allocation, effective immediately, due to improved supply conditions. See **INFORMATION CONCERNING THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA**.

### **MWD Water Supply**

*Colorado River Water.* Under applicable laws, agreements and treaties governing the use of water from the Colorado River, California is entitled to 4.4 million acre-feet of Colorado River water annually, plus one-half of any surplus that may be available collectively for Arizona, California and Nevada as declared on an annual basis by the United States Secretary of the Interior. Under a priority system that governs the distribution of Colorado River water made available to California, MWD holds the fourth priority right of 550,000 acre-feet per year and a fifth priority right of 662,000 acre-feet per year. MWD's fourth priority right is within California's basic annual apportionment of 4.4 million acre-feet; however, its fifth priority right is outside of this entitlement and therefore is not considered a firm supply. (For a description of the priority of various California water users see the chart under **Quantification Settlement Agreement**.) Until 2003, MWD had been able to take full advantage of its fifth priority right as a result of the availability of surplus water and apportioned but unused water by other states. However, Arizona and Nevada increased their use of water from the Colorado River, thus reducing the availability of unused apportionment for

California. In addition, beginning in 2003, a severe drought in the Colorado River Basin reduced storage reserves in system reservoirs, thus eliminating MWD's access to surplus water since that time. Prior to 2003, MWD was able to divert approximately 1.2 million acre-feet (its aqueduct capacity) in any year, but since that time, MWD's Colorado River water deliveries, inclusive of the Water Authority's QSA water, have been limited to a low of approximately 633,000 acre-feet in 2006 and a high of approximately 1,105,232 acre-feet in 2009. Average annual net deliveries from 2003 to 2014 were approximately 838,000 acre-feet, with annual volumes dependent primarily on increasing transfers of conserved water and on availability of unused higher priority agricultural water within California. MWD has entered into agreements with other Colorado River water users to mitigate its loss of access to Colorado River surplus supplies. See **Management of California's Colorado River Water Supply** and **MWD Colorado River Supply Programs**. For 2015, MWD diverted 923,000 acre-feet of Colorado River supplies, inclusive of transporting 180,000 acre-feet of the Water Authority's QSA supplies, to its service area.

*Colorado River Aqueduct.* The Colorado River Aqueduct is owned and operated by MWD. Work on the Colorado River Aqueduct commenced in 1933 and water deliveries started in 1941. Additional facilities were completed by 1961 to meet additional requirements of MWD's member agencies. The Colorado River Aqueduct is 242 miles long, starting at Lake Havasu and terminating at Lake Mathews in Riverside County. After deducting evaporation and seepage losses in transporting and storing the water and considering maintenance requirements, the maximum aqueduct capacity available for delivery by MWD to its member agencies is approximately 1.2 million acre-feet per year.

*Management of California's Colorado River Water Supply.* In response to Arizona and Nevada increasing use of their respective apportionments in the late 1990s and the uncertainty of continued surpluses on the Colorado River, the Colorado River Board of California ("CRB"), in consultation with MWD, IID, the Palo Verde Irrigation District ("PVID"), CVWD, the Los Angeles Department of Water and Power, and the Water Authority, embarked on the development of a plan for reducing California's use of Colorado River water to its basic annual apportionment of 4.4 million acre-feet (the "California Plan"). In 1999, MWD, IID, CVWD and the State agreed to a set of Key Terms aimed at managing California's Colorado River supply. These Key Terms were incorporated into CRB's May 2000 California Plan that proposed to optimize the use of Colorado River supply through water conservation, transfers from higher priority agricultural users to the Water Authority's and MWD's service area, and storage programs.

Many of the core elements of the California Plan are being implemented by the QSA. The QSA establishes Colorado River water use limits for IID, CVWD and MWD, provides for specific acquisitions of conserved water and water supply arrangements, for up to 75 years for the Water Authority/IID water transfer and other transfers, and 110 years for the canal lining water, and allows MWD to take surplus water pursuant to the terms of the Interim Surplus Guidelines. The QSA also allows MWD to enter into other cooperative Colorado River supply programs, modify existing conservation and cooperative water supply agreements consistent with the QSA, and set aside several disputes among California's Colorado River water agencies. See **Quantification Settlement Agreement** for a discussion of the Water Authority's QSA supplies.

*MWD Colorado River Supply Programs.* MWD has taken steps to increase its access to Colorado River water through agreements with agencies that have higher priority rights to the water. Under the 1988 Conservation Agreement between MWD and IID, IID constructed conservation projects that are providing 105,000 acre-feet of conserved water per year to MWD. However, under the California Colorado River priority system, the amount of water MWD could receive for consumptive use was limited without the QSA. Under the QSA, MWD agreed to forgo up to 20,000 acre-feet of this water for CVWD's use. And in doing so, MWD firmed up its 1988 IID transfer to be taken from IID's Priority 3 supply. In 1992, MWD entered into an agreement with the Central Arizona Water Conservation District ("CAWCD") to demonstrate the feasibility of CAWCD storing Colorado River water in central Arizona for the benefit of an entity outside of Arizona. The CAWCD agreement created 80,909 acre-feet of long-term storage credits for MWD. By 2010, MWD recovered the entire amount it stored in CAWCD. In August 2004, MWD and PVID entered into a Land Management Crop Rotation and Water Supply Program. This program can produce up to 133,000 acre-feet of water to MWD under certain conditions. MWD water conservation programs with the agricultural agencies were made possible through the quantification of water under the QSA and are dependent on the continuation of the QSA and the accounting of Colorado River water that it makes possible. In October 2004, MWD entered into a storage and interstate release agreement with Southern Nevada Water Authority ("Nevada"). Under this program, which was later amended in 2015, Nevada can request MWD to store unused

Nevada apportionment in California. It is expected that Nevada will not request return of this water before 2022, or two years earlier if shortage is declared for Lake Mead. The stored water improves near-term water supply reliability for MWD, but obligates MWD to return water to Nevada in future years. MWD has obligated itself to return 287,000 acre-feet of water to Southern Nevada under this agreement. In November 2012, MWD authorized execution of agreements for an international pilot project with Mexico that could produce 47,500 acre-feet of the water supply. The conserved water will be credited to MWD's intentionally-created surplus water account in Lake Mead no later than 2017. See **Colorado River Operations, Shortage, and Surplus Guidelines**. In December 2013, MWD and IID executed an agreement under which IID will pay half of MWD's program costs, or \$2.5 million, in return for half of the project supplies, or 23,750 acre-feet.

*Colorado River Operations, Shortage, and Surplus Guidelines*. In December 2007, the Secretary of the Interior executed a Record of Decision ("ROD") for guidelines that determine potential shortage allocations among the Lower Basin states and revise reservoir operations (Colorado River Interim Guidelines for Lower Basin Shortages and the Coordinated Operations for Lake Powell and Lake Mead). Under the guidelines, California would not have to share in any of the potential annual shortages identified by the Secretary up to 500,000 acre-feet. The ROD also extended existing Interim Surplus Guidelines ("ISG") until 2026, which determine when surplus water is available for California, Arizona and Nevada. Availability of ISG surplus water depends upon whether drought conditions continue and how fast storage in the Colorado River Basin can recover from present conditions. The ROD also provided a way for Lower Basin Colorado River water contractors and others to create a storage account, under Intentionally Created Surplus ("ICS") provisions. Under ICS provisions, MWD can implement water conservation programs to create a storage account in Lake Mead of up to 1,500,000 acre-feet. When other surplus is not available and the Colorado River is not in shortage condition, MWD could call for the delivery of up to 375,000 acre-feet of this stored water in any year. At the start of 2016, MWD had 46,000 acre-feet in its ICS accounts, comprised of water conserved by fallowing in the Palo Verde Valley and from the yield allocated to MWD from the Drop 2 Reservoir Project and the Yuma Desalter pilot program. Also under the terms of the 2007 agreement, IID is allowed to store up to 25,000 acre-feet per year of conserved water in Lake Mead with a cumulative limit of 50,000 acre-feet. In August 2015, the MWD Board approved an amendment through which IID may generate an additional 75,000 acre-feet per year of conserved water to be stored as ICS within MWD's facilities, with a cumulative limit of 200,000 acre-feet for a three-year term. When requested by IID, MWD would be required to return to IID the lesser of either: 50,000 acre-feet per year or, in a year in which MWD's member agencies are under a shortage allocation, 50 percent of the cumulative amount of water IID stored with MWD under the proposed amendment. MWD's return requirement would be reduced by 5 percent if IID requests return prior to 2020. Commencing in 2020, IID's storage balance would be reduced by up to 3 percent per year. In 2014, IID stored 18,867 acre-feet each in Lake Mead and MWD's system.

Prolonged drought conditions have plagued the Upper Colorado River Basin since 2000. Below average runoff has continued this year with the most recent mid-April projections indicating 78% of normal runoff into Lake Powell for water year 2016 (October 1, 2015 to September 30, 2016). Storage levels at Lake Powell and Lake Mead influence the likelihood of surplus or shortage conditions. On June 25, 2015 Lake Mead's elevation dropped to 1,074 feet, its lowest level since the lake filled in the 1930s. As of May 4, 2016, Lake Mead's elevation was approximately 1,076 feet. Lake Mead's level has declined several dozen feet in the past few years as the Colorado River faces continued impacts of long-term drought in the Colorado River Basin. Each ten-foot elevation change in Lake Mead's elevation represents approximately one million acre-feet of storage. The U.S. Bureau of Reclamation's most recent hydrologic modeling results from April 2016 indicate no shortage allocations will be implemented this year. The Colorado River Basin States are collaborating on drought contingency planning efforts to help build elevation in Lake Mead and reduce the chance of a shortage declaration in upcoming years.

*Environmental Considerations*. Several fish species and other wildlife species either directly or indirectly have the potential to affect Colorado River operations, thus changing power operations and the amount of water deliveries to the Colorado River Aqueduct. A number of species that are on either "endangered" or "threatened" lists under the Federal ESA or the California ESA are present in the area of the Lower Colorado River. To address this issue, a broad-based state/federal/tribal/private regional partnership, which includes water, hydroelectric power and wildlife management agencies in Arizona, California and Nevada, developed a multi-species conservation plan for the main stem of the Lower Colorado River (the Lower Colorado River Multi-Species Conservation Program or "MSCP"). The MSCP allows MWD to obtain federal and state permits for any incidental take of protected species

resulting from current and future water and power operations and diversions on the Colorado River for a term of 50 years. The MSCP also covers operations of federal dams and power plants on the Colorado River.

*Seismic Considerations.* Portions of the Colorado River Aqueduct are located near earthquake faults, including the San Andreas Fault. The five pumping plants on the Colorado River Aqueduct have been buttressed to better withstand seismic events. Other components of the Colorado River Aqueduct are monitored for any necessary rehabilitation and repair. Supplies are dispersed throughout MWD's service area, and a six-month reserve supply of water normally held in local storage provides reasonable assurance of continuing water supplies during and following seismic events. MWD has developed an emergency plan that calls for specific levels of response appropriate to an earthquake's magnitude and location. However, no assurance can be made that a significant seismic event would not cause damage to project structures, which could thereby interrupt the supply of water from the Colorado River Aqueduct.

*State Water Project.* MWD's other major source of water is the SWP. The State-owned SWP is operated by DWR. The SWP transports Feather River water stored in, and released from Oroville Dam and unregulated flows diverted directly from the San Francisco Bay/Sacramento-San Joaquin Delta Estuary ("Bay-Delta") south via the California Aqueduct to four delivery points to MWD near the northern and eastern boundaries of MWD's service area. The total length of the California Aqueduct is 444 miles.

MWD is one of 29 agencies that have long-term contracts for a water supply with DWR. MWD is the largest of the 29 agencies in terms of the population it serves (approximately 18.4 million), the share of SWP water to which it is entitled, and the total amount of annual payments made to DWR. MWD's water supply contract with DWR provides for the delivery of up to 1,911,500 acre-feet per year, or about 46 percent of project deliveries. MWD also has a "call" on 100,000 acre-feet per year of water it transferred to CVWD and the Desert Water Agency, if needed, and is required to pay for the financial obligations associated with that water supply during the call period.

The SWP was originally intended to produce 4.2 million acre-feet of water supply annually. The first SWP facilities were completed in the early 1970s; at that time, it was envisioned that additional facilities would be constructed as the demand for SWP water increased. Several factors, including public opposition and increased costs, combined to delay the construction of additional facilities. The quantity of SWP water supply available for delivery each year is determined by hydrology, operational considerations and, most recently, pumping restrictions due to environmental concerns. Water supplies received from the SWP by MWD from 2002 through 2015, including water from water transfers, groundwater banking and exchange programs, varied from a low of 549,000 acre-feet in calendar year 2015 to a high of 1,800,000 acre-feet in calendar year 2004. MWD's water supply from the SWP for calendar year 2015 was twenty percent of its contracted amount, or 382,000 acre-feet. MWD was able to deliver approximately 549,000 acre-feet of water supply in calendar year 2015 through the SWP by also pulling approximately 147,000 acre-feet of water it had previously stored in its Central Valley groundwater accounts and approximately 36,000 acre-feet in carryover storage.

Reflecting on the improved hydrologic conditions, DWR increased the MWD's SWP allocation for calendar year 2016 to 60 percent, or approximately 1,147,000 acre-feet. MWD's final SWP allocation will depend on the hydrology. For the first time since 2012, the runoff forecast is projected to be above normal. As a result, the MWD Board rescinded its WSAP allocation effective immediately at its May 2016 board meeting.

*Bay-Delta Regulatory and Planning Activities.* The water supply and reliability challenges affecting the SWP are largely a result of longstanding environmental issues in the Bay-Delta estuary. In addition to its importance to urban and agricultural water users, the Bay-Delta is of critical ecological importance. The Bay-Delta is the largest estuary on the West Coast of the United States and provides habitat for more than 750 plant and animal species. One hundred fifty years of human activity have contributed to the destruction of habitat, the decline of several estuarine and anadromous fish species, and the deterioration of water quality. These activities have historically included increasing water demands from urban and agricultural water uses, the dredging and filling of tidal marshes, the construction of levees, urban runoff, wastewater discharges, agricultural drainage, runoff from abandoned mines, and the introduction of non-native species.

The SWRCB is the agency responsible for setting water quality standards and administering water rights throughout California. SWRCB decisions can affect the availability of water to users of SWP water, including

MWD. SWRCB exercises its regulatory authority over the Bay-Delta by means of public proceedings leading to regulations and decisions. These include the Bay/Delta Water Quality Control Plan (“WQCP”), which establishes the water quality standards and proposed flow regime of the estuary, and water rights decisions that assign responsibility for implementing the objectives of the WQCP to users throughout the system by adjusting their respective water rights. Since 2000, the SWRCB’s Water Rights Decision 1641 (“D-1641”) has governed the SWP’s ability to export water from the Bay-Delta for delivery to SWP contractors. See **State Water Project Operational Constraints**. Currently, the SWRCB is reviewing San Joaquin River flows and southern Delta salinity as well as potential modifications to the 2006 Bay-Delta Plan and its implementation. On January 29 2014, DWR and the Bureau of Reclamation filed a petition requesting changes to D-1641 terms that govern outflows in the Bay-Delta. The SWRCB approved elements of the temporary urgency change petition which enable water to be conserved in reservoirs in case of continued drought, and other changes allow more flexible operations of gates based on evolving water quality conditions and fish migration information.

The CALFED Bay-Delta Program was a collaborative effort among state and federal agencies to develop a long-term solution to improve water supplies in California and the health of the Bay-Delta watershed. In August 2000, the federal government and the State issued a ROD and related documents approving the final programmatic environmental documentation for the CALFED Bay-Delta Program. Implementing the CALFED Bay-Delta Program during the first seven years resulted in investment of \$3 billion on a variety of projects and programs to begin addressing the Bay-Delta’s water supply, water quality, ecosystem, and levee stability problems. To guide future development of the CALFED Bay-Delta Program and identify a strategy for managing the Bay-Delta as a sustainable resource, then-Governor Schwarzenegger in September 2006 established, by Executive Order, a Delta Vision process. The Delta Vision process was tied to legislation that created a cabinet-level committee tasked with developing a strategic vision for the Delta. The 41-member Delta Vision Blue Ribbon Task Force issued its Delta Vision Strategic Plan (the “Strategic Plan”) on October 17, 2008, providing its recommendations for long-term sustainable management of the Bay-Delta. The Strategic Plan was reviewed by the Delta Vision Committee, chaired by the State Secretary for Natural Resources. The Implementation Report summarizing the Delta Vision Committee’s recommendations was submitted to then-Governor Schwarzenegger on December 31, 2008. These recommendations include completing the Bay-Delta Conservation Plan (“BDCP”) and associated environmental assessments to permit ecosystem revitalization and water conveyance improvements, identifying and reducing stressors to the Bay-Delta ecosystem, strengthening levees, increasing emergency preparedness, continuing funding for the CALFED ecosystem restoration program, updating Bay-Delta regulatory flow and water quality standards to protect beneficial uses of water and working with the State Legislature on a comprehensive water bond package to fund Bay-Delta infrastructure projects.

On November 4, 2009, the State Legislature passed a comprehensive package of water legislation that included five bills addressing California’s statewide water situation, with particular emphasis on the Bay-Delta. The water legislation signed into law (the “2009 State Water Legislation”) includes, among other things, a 20 percent water conservation mandate for most localities in the State by 2020, new regulations regarding voluntary monitoring of groundwater levels by localities, and an \$11.14 billion State general obligation bond measure that would provide funding for projects and programs throughout the State and in the Bay-Delta. The bond measure was scheduled to be included on the November 2010 ballot, but the State Legislature postponed the bond election first, to 2012, and subsequently, to 2014. In August 2014, the California Legislature replaced the 2009 bond measure with a smaller water bond. California Proposition 1, the Water Bond, was approved by voters on November 4, 2014. The measure will enact the Water Quality, Supply, and Infrastructure Improvement Act of 2014. Among other things, it authorized \$7.12 billion in general obligation bonds for state water supply infrastructure projects, and provided specific spending proposals, such as \$520 million to improve water quality, \$1.495 billion for multi-benefit ecosystem and watershed protection and restoration projects, and \$2.7 billion for water storage projects, dams and reservoirs.

The 2009 State Water Legislation also directed that the Bay-Delta be managed with the dual goals of water supply reliability and ecosystem protection. It created two new governmental agencies – the Sacramento-San Joaquin Delta Conservancy and the Delta Stewardship Council. The Sacramento-San Joaquin Delta Conservancy will implement ecosystem restoration activities in the Bay. The Delta Stewardship Council, formed in February 2010, is CALFED’s successor agency; it was directed to adopt and oversee implementation of a comprehensive management plan for the Bay-Delta (the “Delta Plan”) by January 1, 2012. The Delta Plan was intended to lay the foundation for projects and programs that will meet the state’s co-equal goals of improving

statewide water supply reliability while providing a healthy ecosystem. The Delta Plan was adopted by the Delta Stewardship Council on May 16, 2013. Subsequently, its 14 regulatory policies were approved by the Office of Administrative Law. The Delta Plan became effective with legally-enforceable regulations on September 1, 2013. The 2009 State Water Legislation also provides that the BDCP, when completed and successfully permitted as a habitat conservation plan, be incorporated into the Delta Plan. Originally, the BDCP was being developed as a 50-year habitat conservation plan with the goals of restoring the Sacramento-San Joaquin Delta ecosystem and securing California's water supplies. A full public draft BDCP and environmental impact reports were released in December 2013. The public draft BDCP and environmental impact reports were available to the public for review in accordance with the California Natural Community Conservation Planning Act ("NCCPA") and Section 10 of the Federal ESA. The public review and comment period closed on July 29, 2014. Key elements of the public draft BDCP included the construction of a double-bore tunnel to move water under the Delta for 30 miles to the state and federal aqueducts at a combined capacity of up to 9,000 cubic feet per second when water is available in the Sacramento River. The operations would be phased in over several years and the conveyance design using gravity flow would maximize energy efficiency and minimize environmental impact. The water ratepayers of the SWP, including MWD, and federal Central Valley Project ("CVP") contractors would fund the conveyance portion of the project. MWD's SWP-related costs are generally reflected in charges to MWD's member agencies, including the Water Authority. The Water Authority submitted comment letters on the draft BDCP on May 30, 2014 and July 28, 2014. In late 2014, DWR announced significant refinements needed to the proposed BDCP and associated documents, including changes intended to reduce impacts to Delta communities and improve the long-term reliability and operation of the proposed tunnels. More recently, in April 2015, Governor Brown unveiled an even more scaled back BDCP, separating the restoration effort from the tunnel construction, reportedly to accelerate the restoration of the Delta ecosystem and fix the state's aging infrastructure. On July 9, 2015, DWR released a set of Partially Recirculated Draft environmental documents on the BDCP and the "California WaterFix" for public comment, which ended on October 30, 2015. The California WaterFix, considered the new preferred alternative, includes facilities similar to those under the BDCP, but will be developed pursuant to Federal ESA Section 7 and corresponding State permit rather than the HCP/NCCPA regulations as planned under the BDCP. In doing so, the California WaterFix will function under the same permit standards as how the SWP is currently being operated. The final planning documents are expected to be completed in mid-2016. How the cost of the facilities will be allocated among water contractors has not been agreed upon.

*Endangered Species Act Considerations.* The listing of several fish species as threatened or endangered under the Federal ESA or the California ESA have adversely impacted SWP operations and limited the flexibility of SWP operations. Currently, five species (the winter-run and spring-run Chinook salmon, Delta smelt, North American green sturgeon and Central Valley steelhead) are listed under the ESAs. In addition, on June 25, 2009, the Commission of the Department of Fish and Game, now DFW, declared the longfin smelt a threatened species under the California ESA.

The Federal ESA requires that before any federal agency authorizes funds or carries out an action it must consult with the appropriate federal fishery agency to determine whether the action would jeopardize the continued existence of any threatened or endangered species, or adversely modify habitat critical to the species' needs. The result of the consultation is known as a "biological opinion." In the biological opinion the federal fishery agency determines whether the action would cause jeopardy to a threatened or endangered species or adverse modification to critical habitat and recommends reasonable and prudent alternatives or measures that would allow the action to proceed without causing jeopardy or adverse modification. The biological opinion also includes an "incidental take statement." The incidental take statement allows the action to go forward even though it will result in some level of "take," including harming or killing some members of the species, incidental to the agency action, provided that the agency action does not jeopardize the continued existence of any threatened or endangered species and complies with reasonable mitigation and minimization measures recommended by the federal fishery agency.

The United States Fish and Wildlife Service released a biological opinion on the impacts of the SWP and CVP on Delta smelt on in December 2008. In June 2009, the National Marine Fisheries Service released a biological opinion for salmonid species. These biological opinions on delta smelt and salmonid species contain water supply restrictions what could have a range of impacts on MWD's deliveries from the SWP depending on hydrologic conditions.

In addition to the litigation under the Federal ESA, other environmental groups sued DWR on October 4, 2006 in the Superior Court of the State of California for Alameda County alleging that DWR was “taking” listed species without authorization under the California ESA. On April 18, 2007, the Alameda County Superior Court issued its Statement of Decision finding that DWR was illegally “taking” listed fish species through operation of the SWP export facilities. The Superior Court order DWR to “cease and desist from further operation” of those facilities within 60 days unless it obtained take authorization from the California Department of Fish and Game. DWR appealed the order. The appeal stayed the order pending the outcome of the appeal. The Court of Appeal stayed processing of the appeal in 2009 to allow DWR time to obtain incidental take authorization for the delta smelt and salmon under the California ESA, based on consistency of the federal biological opinions with California ESA requirements (“Consistency Determinations”). After the California Department of Fish and Game issued the Consistency Determinations under the California ESA, appellants DWR and State Water Contractors dismissed their appeals. The Court of Appeal subsequently issued a decision finding that DWR was a “person” under the California ESA and subject to its take prohibitions. The State Water Contractors and Kern County Water Agency have filed suit in state court challenging the Consistency Determinations under the California ESA that have been issued for both Delta smelt and salmon. Those lawsuits challenging the Consistency Determinations have been stayed and await final ruling in federal court regarding the validity of the Delta smelt and salmon biological opinions.

*State Water Project Operational Constraints.* DWR has altered the operations of the SWP to accommodate species of fish listed under the ESAs. These changes in project operations have adversely affected SWP deliveries. DWR reported that SWP deliveries to contractors for calendar year 2008 through 2014 were reduced by a total of approximately 3.0 million acre-feet as a result of pumping restrictions. The impact on total SWP deliveries attributable to the Delta smelt and salmonid species biological opinions combined is estimated to be one million acre-feet in an average year, reducing SWP deliveries from approximately 3.3 million acre-feet to approximately 2.3 million acre-feet, and are estimated to range from 0.3 million acre-feet during critically dry years to 1.3 million acre-feet in above normal water years.

Operational constraints are likely to remain in place until a long-term solution to the problems in the Bay-Delta is identified and implemented. New litigation, listings of additional species or new regulatory requirements could further adversely affect future SWP operations by requiring additional export reductions, releases of additional water from storage or other operational changes impacting water supply availability. The Water Authority cannot predict the ultimate outcome of any of the litigation or regulatory processes described above but believes they could have a materially adverse impact on the availability and cost of SWP and MWD water supplies.

*SWP Contract Extension Negotiations.* During the 1960s, as the SWP was being constructed, long term contracts were signed with 29 public water agencies known as the “SWP Contractors.” MWD is the largest SWP Contractor, having contracted with DWR for the delivery of 1,911,500 acre-feet per year, or about 46 percent of SWP deliveries. The majority of the capital costs associated with the development and maintenance of the SWP is financed using revenue bonds. These bonds have historically been sold with 30 year terms that extend to the year 2035, the year in which most of the SWP contracts expire. As the years progress, it is becoming more challenging to affordably finance capital expenditures for the SWP since bonds used to finance these expenditures are limited to terms that only extend to the year 2035, less than 30 years from now. In order to ensure continued affordability of debt service, in May 2013, the SWP Contractors initiated negotiations with DWR to extend the termination date of the contracts. The extension of the contracts will allow DWR to continue to sell bonds with 30 year terms, thereby ensuring the debt service on these bonds remains affordable to SWP Contractors and their water customers. In June 2014, DWR and the SWP Contractors reached an Agreement in Principle to extend the contract to 2085 and to make certain changes related to the financial management of the SWP going forward. The Water Authority cannot predict the ultimate outcome of the finalized contract extension described above but it could have a materially adverse impact on the cost of SWP and MWD water supplies.

*Seismic Considerations.* Major portions of the California Aqueduct are located parallel to and near the San Andreas and other faults. All major faults are crossed either by canal at ground level or by pipeline at very shallow depths to ease repair in case of damage from movement along a fault. SWP facilities are designed to withstand earthquakes without major damage. Dams, for example, are designed to accommodate movement along their foundations and to resist earthquake forces on their embankments. Earthquake loads have been taken into consideration in the design of project structures such as pumping and power plants. The location of check structures

on the canal allows for hydraulic isolation of the fault-crossing repair. No assurance can be made that a significant seismic event would not cause damage to SWP structures and interrupt the water supply available from the SWP.

*Integrated Water Resources Plan.* MWD's "Integrated Water Resources Plan" (the "MWD IRP") was first adopted by the MWD Board in January 1996 as a long-term planning guideline for water resources and capital investments. The purpose of the MWD IRP was to develop a "preferred resource mix" to meet the water supply reliability objective at the retail level, under foreseeable hydrologic conditions. In 2004, MWD's Board adopted an updated MWD IRP that added a proposal for a "planning buffer" to develop an additional 500,000 acre-feet of water to address "uncertainty" in future water supply availability. In October 2010, MWD's Board adopted a second MWD IRP update that recommended an "Adaptive Management" approach, with a strategy to implement the core and 500,000 acre-feet of buffer supplies and a third category of water supply development called, "Foundational Actions." Because of the lack of nexus between MWD investments and its member agencies' willingness to pay, if implemented successfully, the 2010 IRP could result in MWD having stranded costs in connection with supply assets. In March 2015, MWD convened an IRP Committee to update its 2010 IRP. The MWD Board adopted the 2015 IRP in January 2016. The 2015 IRP largely kept the adaptive management strategy intact, which continued the approach to over develop supplies. The MWD Board indicated it will use 2016 to discuss strategies to implement the 2015 IRP.

*Additional MWD Water Supplies.* MWD has a number of water transfer and storage and exchange programs with state, federal, public and private water districts and individuals in order to augment its imported water supplies. MWD has entered into groundwater basin storage agreements with the Arvin Edison Water Storage District and Semitropic Water Storage District, an agreement with San Bernardino Valley Municipal Water District to coordinate the use of facilities and SWP supplies, and groundwater banking and exchange transfer agreements with the Kern Delta Water District, the Mojave Water Agency, CVWD and the Desert Water Agency. In the fall of 2008, DWR convened the State Drought Water Bank as a one-year program to help mitigate water shortages in 2009. MWD purchased 36,900 acre-feet (before carriage and conveyance losses) of water through the bank. In addition, for calendar year 2010, MWD participated with other State Water Contractors to purchase 88,137 acre-feet (before carriage and conveyance losses); MWD also entered into two transactions with Westlands Water District and San Luis Water District. Under the first transaction, MWD purchased 18,453 acre-feet; in the second, MWD accepted delivery of 110,692 acre-feet stored in San Luis Reservoir and returned up to two-thirds of that amount from MWD's SWP supply in 2011 for a net water yield of about 37,000 acre-feet. In March 2015, MWD Board approved the purchase of up to 100,000 acre-feet of transfer supplies from Sacramento Valley to augment its supplies. Due to limited transfer supplies, MWD was only able to obtain 21,000 acre-feet of transfer supplies from the SWP system. MWD also entered into an agreement with DWR, in December 2007, to purchase a portion of the water released by the Yuba County Water Agency ("YCWA"); MWD's agreement allows MWD to purchase at least 13,750 acre-feet to 35,000 acre-feet per year of water supplies in dry years through 2025. For calendar years 2008, 2009, 2010, 2013, 2014 and 2015, MWD purchased 26,430 acre-feet, 42,915 acre-feet, 67,068 acre-feet, 10,209 acre-feet, 10,600 acre-feet and 7,000 acre-feet of water, respectively, from YCWA under this program. YCWA did not offer water for sale in calendar years 2011 or 2012. In 2013, through DWR's Multi-Year Water Pool Demonstration Program, MWD purchased 30,000 acre-feet of SWP supplies.

*MWD Storage.* In addition to making its imported water supplies available for annual consumptive uses, MWD also purchases and stores excess imported water in wet years for use in dry years. MWD reports that its storage capacity is 5.93 million acre-feet, which includes reservoirs, conjunctive use and other groundwater storage programs within its service area, and groundwater and surface storage programs along the SWP and CRA. In July 2006, MWD had 2.11 million acre-feet of water stored in its various facilities and accounts, excluding emergency supplies. MWD also has approximately 626,000 acre-feet of additional water in its emergency storage that is reserved for use in the event of supply interruptions from earthquakes or similar emergencies. Since 2007, MWD has used water in storage to meet the dry-year water supply needs of its member agencies. From 2007 to 2009, MWD drew down about one million acre-feet of its stored water to meet regional demands. By the end of 2010, as a result of more favorable conditions on the SWP, aggressive water conservation at the retail level and higher MWD water rates, the demand for MWD's water had decreased significantly and its storage levels had increased considerably. By the end of 2012, dry-year storage increased to about 2.74 million acre-feet (emergency storage excluded). As statewide dry conditions continued, in 2013 and 2014, MWD withdrew 407,000 acre-feet and 1.16 million acre-feet, respectively, of water to meet demands, bringing its dry-year storage reserves levels to approximately 1.21 million acre-feet as of January 1, 2015. In April 2015, the MWD Board approved a WSAP

Level 3 allocation, which became effective on July 1, 2015. In making this decision, MWD assumed its member agencies would collectively perform at a Level 4 reduction level. In May 2015, the SWRCB adopted an emergency regulation requiring statewide urban water use be reduced by 25 percent in accordance with Governor Jerry Brown's Executive Order. The statewide conservation mandate significantly reduced MWD service area's retail demands, and in turn, MWD member agencies' demand on MWD water. As a result, MWD entered 2016 with 911,000 acre-feet of available dry-year storage supplies, more than what had been anticipated when the WSAP Level 3 allocation was imposed. With the improved hydrologic conditions, MWD anticipates it may end 2016 with between 1 and 1.5 million acre-feet of dry-year storage, depending on member agencies' demand for MWD water.

See **INFORMATION CONCERNING THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA.**

### **Current California Drought**

Water supply conditions have been mainly dry for the Water Authority's two primary supply sources over the past several years. However, as of March 1, 2016, snowpack in the Upper Colorado River Basin measured 95 percent of normal, with snow water content of 12.4 inches. The current forecast projects slightly below normal runoff for water year 2016, suggesting that the Colorado River watershed could be in its 16<sup>th</sup> year of drought. The ongoing drought has impacted storage levels in Lake Powell and Lake Mead. Although as of February 16, 2016 precipitation in the Upper Colorado River Basin was 102% of average and snowpack was at 105% of average for the date, at the end of March 2016, storage at Lake Powell was only 45% of capacity and storage at Lake Mead was only 38% of capacity. On the State Water Project, the initial SWP allocation for calendar year 2016 of was set at 10 percent. Weather conditions in the northern Sierra region have since shifted to a wetter pattern. Subsequently on February 24, 2016, DWR increased the SWP allocation to 30 percent. Continuation of this trend resulted in DWR increasing the SWP allocation to 45 and 60 percent on March 17, 2016 and April 21, 2016, respectively.

The Water Authority has taken incremental steps and continues to take action to respond to the statewide drought. On February 13, 2014, the Water Authority Board implemented its Water Shortage and Drought Response Plan ("WSDRP"), declaring the Voluntary Supply Management stage, and approved notification to its member agencies of a Regional Drought Response Level 1, Drought Watch condition, under its Model Drought Response Ordinance. The Water Authority launched a drought response campaign in April 2014, to encourage conservation and greater use of regional conservation programs. Water savings are important to help preserve storage reserves in case dry conditions continue. Also on February 13, 2014, the Water Authority Board voted to support the expediting of local and regional supply development and to advocate for the development of more storage statewide. With dry conditions continuing, Governor Brown issued another executive order on April 24, 2014 to further strengthen the state's ability to effectively manage water. On July 15, 2014, the SWRCB adopted an emergency regulation for statewide urban water conservation. On July 24, 2014, the Water Authority Board declared implementation of the Supply Enhancement stage, under the WSDRP, and approved notification to the Water Authority member agencies of a Regional Drought Response Level 2, Drought Alert condition, under its Model Drought Response Ordinance, which includes mandatory water use restrictions.

On April 1, 2015, with the state in its fourth year of drought, and the snowpack in the Northern Sierra Nevada at a historic low of 5 percent of average, Governor Brown issued an unprecedented executive order aimed at reducing urban water use statewide by 25 percent. On May 5, 2015, in accordance with the Governor's directive, the SWRCB adopted Resolution No. 2015-0032 to put in place an emergency regulation for statewide urban water conservation. The emergency regulation includes specific conservation standards that took effect June 1, 2015, and require urban water suppliers to reduce usage through February 2016, as compared to the amount used in 2013. The target reduction can vary between 4% and 36% statewide, and for member agencies in the Water Authority's service area, the range is 12% to 36%. Water Authority member agencies were required to reduce their potable urban demands by their specific percentage reduction during the months of June 2015 through February 2016 compared to the same months in 2013. The Water Authority is not subject to the conservation mandate, as it does not apply to suppliers that are functioning solely in a wholesale capacity. An urban water supplier may subtract the amount of water supplied for commercial agricultural use from its water production total if certain criteria are met.

Water agencies, including the Water Authority, called for an approach to the emergency regulation that provides greater recognition for investments in drought resistant water supplies. This was cited in the SWRCB's

Resolution No. 2015-0032, item 17, which also directed staff to work with stakeholders on a thoughtful process to devise options for extended and expanded emergency regulations should the drought continue into 2016. The SWRCB convened a workgroup in late 2015 to address issues that were identified during development of the Emergency Water Conservation Regulation, including the Water Authority's request for the conservation standards to reflect investments made in drought resistant supplies. Governor Brown issued an additional Executive Order on November 13, 2015 in anticipation of a potentially fifth consecutive dry year. In Executive Order B-36-15, the Governor directed the SWRCB that if the drought continues, to extend its May 2015 Emergency Regulation and to take into account the insights gained during the first 270 days in potential modifications to the existing regulation. On February 2, 2016 the SWRCB approved an extension of the Emergency Regulation for an additional 270 days, addressed water supplier comments to provide greater recognition for investments in drought resistant supplies and continued the exemption for commercial agriculture. With the modifications made to the regulation by the SWRCB, the member agencies of the Water Authority were able to reduce their conservation targets by up to 8% as a result of drought-resilient supplies from the Carlsbad Desalination Project. As further recognition of the importance of drought resistant supplies the SWRCB directed its staff to work with stakeholders to develop an even more drought resilient approach to the regulation that provides greater recognition of regional differences and the role of drought resistant supplies. SWRCB staff was instructed to return with further modifications to consider adopting in May 2016.

The MWD Board voted at its April 14, 2015 meeting to implement MWD's WSAP at a Level 3 Regional Shortage Level. WSAP Level 3 put in place a 15 percent reduction in regional deliveries and is in effect July 1, 2015 through June 30, 2016. Under the allocation, MWD provides the Water Authority an annual amount of water based on the allocation methodology contained in its WSAP. If the Water Authority exceeds its allocation by the end of the fiscal year 2016 allocation period, MWD will apply a penalty on water use in excess of the allocation limit.

In response to supply cutbacks from MWD in fiscal year 2016 and the SWRCB Emergency Regulation for statewide urban water conservation, the Water Authority Board, at its May 14, 2015 meeting:

1. Declared the Mandatory Supply Cutback Stage of the Water Authority's Water Shortage and Drought Response Plan, and approved member agency supply allocations for municipal and industrial ("M&I") and Transitional Special Agricultural Water Rate ("TSAWR") for fiscal year 2016. See **MEMBER AGENCY WATER USAGE – Agricultural Water Use**.
2. Set penalties for local agencies that exceed their M&I and TSAWR supply allocations.
3. Restricted the irrigation of ornamental landscapes and turf with potable water to no more than two days a week across the region to help agencies meet their reduction targets.

A supply and demand analysis for fiscal year 2016, taking into account the Water Authority's estimated available supplies, shows that investments made in the San Diego region for supply reliability projects and programs were able to mitigate the 15% shortfall from MWD. The Water Authority's 20-year diversification strategy was successful in reducing water shortages from MWD due to drought. The estimated regional supply shortfall for fiscal year 2016 is only 1%. Based on the reduced demand levels achieved by the member agencies during fiscal year 2016 in response to the SWRCB regulations, the Water Authority could potentially store available supplies locally to help mitigate continued drought conditions within the region.

As a result of the Water Authority's successful efforts to obtain a drought-resilient supply credit from the SWRCB combined with member agencies achieving or far exceeding their conservation standards, on March 24, 2016, the Water Authority Board approved Ordinance No. 2016-01 that:

1. Rescinded Ordinance No. 2015-02, an Ordinance allocating water pursuant to the Water Authority's Drought Management Plan, imposing additional requirements upon Water Authority member agencies relating to the use and conservation of water; and
2. Continued the current provision that address member agency municipal and industrial and Transitional Special Agricultural Water Rate supply allocations and penalty assessment for fiscal year ending June 30, 2016; and

3. Continued the Mandatory Supply Cutback Stage (Stage III) of the Water Authority's Water Shortage and Drought Response Plan; and
4. Rescinded the July 2014 notification of a Regional Drought response Level 2 Drought Alert condition, given the "custom" retail water use restrictions that are in place at the individual member agency level, recognizing the different agency conservation standards imposed by the SWRCB.

On May 9, 2016, Governor Brown issued Executive Order B-37-16, which extends the emergency water conservation regulation through the end of January 2017. The order also addresses the development and establishment of longer-term water use efficiency standards, including permanent monthly water use reporting and new permanent water use standards that would go beyond the 20 percent reduction in per capita urban water use required in 2009 State Water Legislation. The Executive Order also permanently bans wasteful practices such as hosing off sidewalks, driveways and other hardscapes, calls for long-term improvements in local drought preparation and directs the SWRCB to develop emergency water restrictions for 2017 if the drought persists. The Executive Order also directed the SWRCB to make adjustments to the emergency water conservation regulation in recognition of the differing water supply conditions across the state. On May 18, 2016, the SWRCB approved modification to the drought-related emergency regulations for urban water conservation per the governor's May 9 executive order. With the action, the SWRCB replaced state-mandated conservation targets with a supply-based approach that considers locally developed conservation standards based on each agency's specific circumstances and water supplies. The new regulation requires individual urban water agencies – or a region as a whole, if each of that region's urban water agencies agree – to self-certify their level of available water supplies based on three additional years and the level of conservation necessary, if any, to assure adequate supply assuming a third consecutive dry year. The SWRCB approved allowing wholesalers, such as the Water Authority, to certify supply sufficiency for their service areas if every retail agency in the service area agrees. If not, certification reverts to individual retailers.

On May 10, 2016, in response to improved water supply conditions, the MWD Board rescinded its Water Supply Allocation and declared a "Condition 2 – Water Supply Alert." The Water Supply Alert condition does not include water supply allocations but calls for continued conservation activities. On May 26, 2016, the Water Authority Board will consider rescission of its M&I water supply allocation and its TSAWR customer supply allocation.

The latest revision to the SWRCB emergency regulation, approved May 18, 2016, fully recognizes Water Authority ratepayer investments over the last 20 years to diversify water supply resources, and the regional commitment to conservation that has greatly improved supply reliability for the San Diego region. As a result, the San Diego region is better able to manage dry-year conditions than many other communities across the state. For example, the Water Authority's Colorado River transfers under the QSA increased to 180,123 acre-feet in fiscal year ended June 30, 2015, and the transfer schedule will ramp up to 280,200 acre-feet by 2021. The Carlsbad Project began commercial production in mid-December 2015, and is capable of producing up to 56,000 acre-feet of drought-proof supplies annually. In addition, strong conservation efforts in the San Diego region have resulted in a 24 percent decrease in per capita total water use between 2007 and 2014 prior to the imposition of emergency conservation targets by the SWRCB.

### **Future Water Supply**

The Water Authority's supply planning strategy was developed and continues to be implemented in cooperation with its member agencies. As part of its strategic supply planning process, the Water Authority produces several long-range planning documents. The Water Authority's current Urban Water Management Plan ("UWMP"), is a comprehensive document that includes long-term water demand projections for the San Diego region and a preferred mix of future supplies necessary to meet those demands through the year 2035. This preferred mix reflects the Water Authority Board policy to diversify supplies required to meet future water needs and increase supply reliability through local agency control. The 2010 UWMP was approved by the Water Authority Board in June 2011. Individual components of the projected water supply mix contained in the 2010 UWMP include: supplies from MWD, long-term water transfers from conserved IID agricultural water, water savings from the lining of the All-American Canal and Coachella Canal, seawater desalination, surface water, and continued development of recycled water and groundwater. Additionally, the Water Authority will continue to support water conservation as

an important part of its supply diversification strategy. The Water Authority's conservation efforts are intended to reduce demand for imported water, demonstrate a continued commitment to the conservation Best Management Practices, and assist member agencies in complying with the per-capita water use reduction required under the 2009 State Water Legislation. California State Law requires urban water suppliers to update their UWMPs every five years. The 2015 UWMP update is currently in development and is due to be submitted by July 1, 2016. The Water Authority has completed most of the work on the preparation of this document and released a public review draft of the 2015 UWMP on April 29, 2016. See **MEMBER AGENCY WATER USAGE - Per Capita Water Use**.

*Supply Diversification.* To ensure a reliable supply of water to meet growing water demands, the Water Authority and its member agencies are implementing long-term strategies designed to diversify the region's supply portfolio and reduce reliance on a single water supplier. These strategies are outlined in the 2010 UWMP and will continue to be the foundation of the 2015 update of the UWMP. These strategies can only be achieved through a collaborative partnership between the Water Authority and its member agencies.

As stated in the 2010 UWMP, development of local supplies plays a critical role in meeting future demands. The Water Authority and its member agencies are taking steps to develop and manage local surface water, groundwater, recycled water, potable reuse and local seawater desalination supplies that together are projected to account for roughly 20 percent of total supplies by the year 2035. The 2015 update of the UWMP will project local supplies through 2040 and will continue the trend of diversification. In addition to these efforts, continuation of the region's conservation measures will help to offset the need for more expensive water supplies by maximizing efficient use of existing water resources.

Seawater desalination is a key component of the Water Authority's supply diversification strategy. The Water Authority's seawater desalination efforts include the Carlsbad Project, the potential Camp Pendleton Seawater Desalination Project (the "Camp Pendleton Project") and the potential Rosarito Beach Desalination Plant (the "Rosarito Project").

*The Camp Pendleton Project.* In December 2009, the Water Authority, in collaboration with Marine Corps Base Camp Pendleton, completed the Feasibility Study for a potential 50 to 150 mgd (56,000 to 168,000 acre-feet per year) regional seawater desalination project on Camp Pendleton. With the concurrence of Camp Pendleton, the Feasibility Study evaluated two potential sites with adequate acreage at the southwest corner of the Base, near the mouth of the Santa Margarita River, suitable for a project of this magnitude, and recommended that more detailed planning studies and cost assessments be performed to develop planning-level information on infrastructure requirements, site access, and impacts to base operations.

Completed in mid-2013, subsequent planning-level studies evaluated the viability of potential open ocean and subsurface intake systems and their potential impacts to the marine environment, proposed tunnels that would connect offshore infrastructure to the desalination plant, issues related to siting and development of the desalination plant at each potential site, and possible pipeline alignments and pump station alternatives to deliver product water to the Water Authority's regional conveyance system. The studies also evaluated issues related to the integration of this potential new supply into the Water Authority system.

Study results were incorporated into the Water Authority's Final Regional Water Facilities Optimization and Master Plan Update ("Master Plan"), which was approved in March 2014. The Master Plan identifies the Proposed Camp Pendleton Desalination Project as one supply development option available to meet the expected increase in long-term supply needs consistent with forecasted population growth for the San Diego region. Further project development is recommended to follow an adaptive management approach where future project development decisions would be based on how planned local supply development proceeds and statewide water resource decisions unfold. In March 2015, as a means to further incremental planning on the potential project, the Water Authority Board approved a pilot-scale intake testing program that will compare and evaluate, side by side, both open-ocean and subsurface intake technologies. In September 2015, the Water Authority Board approved a new Memorandum of Understanding (the "MOU") with Marine Corps Base Camp Pendleton to cooperatively work together to permit and complete the piloting facilities and testing program. The MOU does not commit either party to implement a project or continue past the current phase of piloting and planning.

Incremental project development activities such as the intake testing program will help maintain a future Camp Pendleton project as a viable contingency for the region and maintain the region's flexibility to pursue multiple paths to reliability in the face of continued water supply uncertainty. If the Water Authority were to decide to implement the full-scale project, it is anticipated to be on-line after 2030, when additional supplies are anticipated to be needed.

*The Rosarito Project.* The Water Authority is participating with U.S. and Mexican agencies in a review of potential water management and water supply programs that could benefit Colorado River water users of both countries. As part of this effort, the evaluation and preliminary design of an initial 25 mgd (expandable to 50 mgd) seawater desalination plant that would be located at Rosarito Beach in Baja California, Mexico is being pursued. U.S. water agencies, including the Water Authority, MWD, Southern Nevada Water Authority ("SNWA"), and the Central Arizona Water Conservation District ("CAWCD") entered into a Funding Agreement and began a feasibility evaluation of the plant in 2010. U.S. agencies funded this work, with technical assistance from Mexican federal, state, and local water agencies. The Water Authority served as project manager for the first stage of the project.

The review is scheduled to be implemented in four phases, with a "go" or "no go" decision being made at the end of each phase. The first phase was completed in March 2010. The first phase confirmed that the site and the existing infrastructure were adequate to support up to a 50 mgd seawater desalination facility. The second phase of the review is ongoing and will confirm conceptual treatment process requirements, confirm plant size and physical layout, further assess permitting and regulatory issues, and define full-scale plant costs. Conveyance alignments from the desalination plant to the U.S. border were completed in 2012 and from this analysis it was determined that potential delivery points in Tijuana, Rosarito Beach, and two potential points in the U.S. were feasible. Mexico funded and completed work on the environmental analysis for the potential project in 2014. Also in 2014, MWD, SNWA and CAWCD notified the Water Authority of their intent to conclude participation in the Funding Agreement and instead work directly with Mexico on the concept of desalinated water exchanges on the Colorado River. Despite this change in the original study arrangement, all parties continue to meet and discuss options.

Currently, the Rosarito Beach Desalination Project is considered a conceptual-level project. If built, product water from the plant would be available to both U.S. and Mexican water users. For U.S. water users, the water could be delivered either directly to the San Diego region, using a cross-border pipeline, or possibly by exchange, with Mexican users taking delivery of the product water and leaving an equivalent amount of Colorado River water available for U.S. users.

*Member Agency Local Project Development.* The Water Authority member agencies are also pursuing options to further diversify the region's water resources through local supply development, which includes implementation of projects such as brackish groundwater recovery, potable reuse, seawater desalination and non-potable water recycling. With the goal of maximizing the use of recycled water, member agencies are pursuing the development of potable reuse projects. Potable reuse projects eliminate the need for construction of a separate recycled water distribution system and allow for the planned introduction of advanced purified water for either augmentation of groundwater basins or surface water reservoirs (indirect potable reuse), or direct introduction into a public water system immediately upstream of a water treatment plant (direct potable reuse). In February 2016, the City of San Diego released a Draft Program Environmental Impact Report for public review that describes a multi-phase indirect potable reuse project that would result in at least 83 mgd of potable reuse capacity by 2035 (the equivalent of one-third of the City's drinking water supply). An initial 30 mgd water purification facility is scheduled to be operational by 2021. The long-term goal, producing 83 mgd of purified water would be reached in 2035. Padre Dam Municipal Waste District ("Padre Dam MWD") opened its Advanced Water Purification Demonstration Facility in April 2015. The demonstration facility will use advanced water purification technologies to purify and test approximately 100,000 gallons of recycled water each day. In November 2015, Padre Dam MWD issued a Notice of Preparation for a Draft Program Environmental Impact Report for its water and wastewater 2015 Comprehensive Facilities Master Plan that will include an analysis of a three phase implementation of a potential 21 mgd potable reuse project. In February 2016, Padre Dam MWD's Board of Directors approved the East County Reuse Feasibility Study and entered into an approximately \$3.5 million contract to conduct additional environmental and engineering analysis to more fully define the project and move forward towards implementation of the 7 mgd first phase. If the project is a success and the project moves forward, it would provide up to 4,000 acre-feet per year of drinking water in its first phase with an ultimate 15,000 acre feet of reuse at completion. Other member agencies are also conducting feasibility studies or are considering future potable reuse projects. These include Padre Dam

MWD in conjunction with Helix WD, San Dieguito WD and Santa Fe ID in conjunction with San Elijo JPA, city of Oceanside, City of Escondido, Rincon del Diablo MWD, Ramona MWD, Olivenhain MWD, Camp Pendleton and Fallbrook PUD.

In a parallel effort to the bi-national agency proposed seawater desalination project discussed above, plans are underway to develop a seawater desalination facility in Rosarito Beach by a private company. This bi-national project would produce up to 100 mgd for potential distribution to the federal and/or state agencies serving the Rosarito and Tijuana areas, and to Otay Water District, a member agency of the Water Authority. Otay Water District would purchase approximately 15,100 acre-feet of the water produced by the facility by 2025.

Potential development of a City of San Diego indirect potable reuse project and the Otay Water District Rosarito seawater desalination project was discussed in the Water Authority’s 2010 UWMP, but because these projects were not advanced enough in the development process and based on member agency input, they were not included in the Water Authority’s 2010 UWMP projected water supply mix shown below. The projects were included in the scenario planning evaluation conducted as a part of the 2013 Regional Water Facilities Optimization and Master Plan Update. Currently, as the 2015 UWMP is being finalized, these projects and Padre Dam MWD’s potable reuse project continue to be in a planning state and have not yet been identified by those implementing agencies as verifiable supplies in the 2015 UWMP.

*Projected Water Supply.* The Water Authority and its member agencies will continue to pursue seawater cost competitive supply diversification opportunities. The next increment of cost-effective local supply is expected to be potable reuse. Through development of the 2010 UWMP, the Water Authority worked closely with its member agencies to identify a projected supply mix to reliably meet existing and future water demands within the region. To ensure the region has adequate supplies to meet demands, the mix of resources includes verifiable projects that are far enough in the development process to likely be implemented. Projects that are still in the feasibility or conceptual phases are highlighted in the UWMP, but not included in the projected resources mix. As an example, the Carlsbad Project was included in the projected resource mix, but not the Rosarito Project or City of San Diego potable reuse project. The current status of local project development and an updated resource mix will be reflected in the 2015 UWMP. The Water Authority and its member agencies’ projected water supply mix for 2020 and 2035 from the 2010 UWMP are shown in the following table.

**WATER AUTHORITY SERVICE AREA  
PROJECTED WATER SUPPLY MIX  
(NORMAL WEATHER YEAR)**

<b>2020</b>		<b>2035</b>	
Resource	Percentage Goal	Resource	Percentage Goal
MWD	30%	MWD	34%
IID Transfer	24%	IID Transfer	21%
Conservation	13%	Conservation	18%
Seawater Desalination	7%	Seawater Desalination	6%
Canal Lining Transfer	10%	Canal Lining Transfer	8%
Local Surface Water	6%	Local Surface Water	5%
Groundwater	4%	Groundwater	3%
Recycled Water	<u>6%</u>	Recycled Water	<u>5%</u>
	100%		100%

*Source:* Water Authority Board adopted 2010 Urban Water Management Plan

*Climate Change.* Evaluation of potential climate change impacts on water demand represents a prudent water resources planning exercise. However, definitive projections on the timing and magnitude of climate change–initiated variations to local temperature and precipitation patterns are still forthcoming. The body of work currently

available from national and international research contains a full spectrum of possible outcomes based on numerous greenhouse gas emission scenarios run through an assortment of General Circulation Models (“GCM”). In the absence of research consensus, the Water Authority has adopted a qualitative evaluation approach that uses a manageable number of six climate change scenarios to develop a range of potential demands.

Findings from the evaluation of the climate change scenarios indicate no dramatic shifts in near-term precipitation patterns for the San Diego area. Additionally, for reference year 2035, the end of the 2010 UWMP planning horizon, mixed results were observed in the variation of precipitation projections among the climate models. Three of the climate projections resulted in annual precipitation estimates lower than the historic average. Similarly, temperature modeling revealed no dramatic shifts in seasonal patterns, and mixed results prevailed between projected temperatures and historic averages for reference year 2035. The disagreement in short-term climate projections is not entirely unexpected given the protracted lead-time forecasted for significant build-up of greenhouse gases. Over longer timescales, the ensemble of climate change scenarios show higher temperatures estimated for the region – with five of the six climate change scenarios indicating warmer annual average temperature conditions for 2050 and 2099.

A range of climate change influenced water demands was then calculated by substituting the six climate change scenarios into the Water Authority’s long-range econometric demand forecast model (“CWA-MAIN”). For reference year 2035, all but one of the climate change scenarios resulted in total water use slightly higher than baseline normal weather demands. The average climate change impact on 2035 demand, across all three GCMs, ranged from a 0.63 to 1.80 percent increase. The relatively small increase in 2035 demand under all climate scenarios suggests that significant water demand impacts associated with the forecasted trend toward warmer and drier climate conditions may occur on a time-step beyond the 2010 UWMP planning horizon.

While climate change impacts will just start to be experienced within the 25-year planning horizon of the 2010 UWMP, its potential influences were considered in establishing strategies that provide water supply benefits within this planning horizon, while increasing the ability to manage potential climate change impacts in the future. Changes to the region’s climate are expected to be gradual and prolonged, providing water supply agencies the ability to adapt planning strategies to manage for the supply uncertainties. The Water Authority’s 2010 UWMP included a chapter on Scenario Planning, an adaptive management tool to assess future uncertainties on supply reliability, including climate change. The future climate change related effects on supply and demand and adaptation measures employed by the Water Authority and its member agencies will be captured in each five-year update of their respective UWMPs. Development of the 2015 UWMP is currently underway.

On March 27, 2014, the Water Authority Board approved the Water Authority’s first Climate Action Plan, a voluntary strategy for reducing the agency’s greenhouse gas emissions (carbon dioxide equivalent) linked to climate change. The plan demonstrates the Water Authority’s commitment to improving the energy efficiency of its operations and saving ratepayer money by limiting greenhouse gas emissions over which the Water Authority has direct control.

The greenhouse gas “footprint” of the Water Authority’s system is relatively small. The Climate Action Plan includes baseline emissions of 5,837 metric tons of carbon dioxide equivalent in 2009, and a target of 4,914 metric tons of carbon dioxide equivalent in 2020 to align with state goals for a 15 percent reduction in the baseline amount. Water Authority projections show that the agency will achieve the targeted reductions. In addition, future facilities will incorporate energy-efficient designs, and the Water Authority continues to investigate additional ways to mitigate greenhouse gas emissions through expansion of renewable energy sources such as hydropower and solar.

On April 25, 2013, San Diego Coastkeeper filed a lawsuit in San Diego Superior Court challenging the 2013 Master Plan and Climate Action Plan on environmental grounds. The 2013 Master Plan update and Climate Action Plan, along with the related environmental review documents, were approved in a process that involved approximately two dozen public workshops, meetings and hearings since September 2011. The San Diego Superior Court entered a judgment in the Water Authority’s favor denying the petition for writ of mandate. Notice of entry of judgment was given on August 27, 2015. The judgment was appealed and the appeal is pending.

*Water Quality.* As the largest single component of the Water Authority’s supply portfolio, the water quality of the Colorado River has a substantial impact on the region’s overall water quality. Over the last five years, the

Water Authority has received on average of roughly 77 percent of its imported supply from the Colorado River and the remaining 23 percent from the SWP. Colorado River supplies are relatively high in salts, in the form of total dissolved solids, which pose potential additional treatment costs. A variety of sources bring such dissolved salts into the river. However, the majority of salts run naturally off of soils and rocks. Extended drought conditions result in delivery of water from the Colorado River that has increased salinity. While SWP supplies have lower salt levels, water from the Bay-Delta can be high in organic compounds that react with chlorine to form various disinfection by-products, including trihalomethanes. Higher water treatment costs are incurred to eliminate these potentially harmful compounds. In order to control the total organic carbon and bromide concentrations in MWD's water supply, SWP water is blended with Colorado River water, which is lower in disinfection by-products and higher in salinity than SWP water. The blending results in a reduction in disinfection by-products and reduction in salinity. A reduction in water deliveries from the SWP and reduced local surface water supplies during extended drought periods results in local water quality that is more representative of the quality of water in the Colorado River. The introduction of lower salinity desalinated seawater from the Carlsbad Desalination Plant serves to reduce total dissolved solids of the Water Authority's treated water supplies through blending.

Federal and state regulatory agencies continually monitor and establish new water quality standards. The Federal Safe Drinking Water Act establishes drinking water quality standards, monitoring, public notification and enforcement requirements for public water systems. The U.S. Environmental Protection Agency, as the lead regulatory authority, promulgates national drinking water regulations and develops the mechanism for states to assume primary enforcement responsibilities. The SWCRB's Division of Drinking Water has lead regulatory authority over California water agencies under the Safe Drinking Water Act.

Two water quality issues of concern in Colorado River water are perchlorate and chromium-6. Perchlorate, used in solid rocket propellants, munitions and fireworks, has contaminated some drinking water wells and surface water sources throughout California. Perchlorate also has been detected in MWD's Colorado River water supplies. A chemical manufacturing facility near Lake Mead in Nevada is the primary source of the contamination. Remediation efforts began in 1998 and have been successful at meeting the cleanup objectives, significantly reducing the levels of perchlorate entering into the Colorado River. The maximum contaminant level for perchlorate is six parts per billion ("ppb") and concentrations on the Colorado River have been reduced to less than 1.1 ppb. The state recently adopted a public health goal of 1.0 ppb for perchlorate. Water supplies in the San Diego region are below this level.

Chromium-6 is found in trace amounts in MWD's source watershed. On July 27, 2011, the Office of Environmental Health Hazard Assessment established a public health goal for chromium-6 (hexavalent chromium) of 0.02 micrograms per liter ( $\mu\text{g/L}$ ). The SWCRB's Division of Drinking Water adopted a maximum contaminant level of 0.010  $\mu\text{g/L}$  for chromium 6 in 2014. The Water Authority has participated through MWD in its effort to monitor and influence the clean-up of chromium-6 in groundwater at Pacific Gas & Electric Company's natural gas compressor station in Topock, Arizona, near Needles, California. The historical waste practices at the Topock facility have resulted in a chromium-6 plume in the groundwater that has the potential to enter the Colorado River. The current corrective actions prevent chromium-6, at this site, from reaching the Colorado River. Testing of the water supply in the San Diego region does not detect the presence of chromium-6.

*Local Supply Development Coordination.* The 2013 San Diego Integrated Regional Water Management Plan (the "IRWM Plan") was developed by the Regional Water Management Group ("RWMG"), which is comprised of staff from the Water Authority, the City of San Diego and the County of San Diego. The IRWM Plan represents an unprecedented effort in the area of coordinated water management across a wide spectrum of public agencies and non-governmental organizations in the San Diego area. It reflects a comprehensive approach to water resource planning, and integrates ongoing local planning efforts to maximize water management benefits. The IRWM Plan provides a comprehensive overview of the water situation to the San Diego Region and establishes a vision, mission, goals and measurable objectives for IRWM planning activities. It also identifies programs and projects that best achieve the region's goals to optimize water supply reliability and protect and enhance water quality while providing stewardship of natural resources.

To date, the San Diego IRWM Region has been awarded \$90.6 million from DWR to support 44 public and non-profit high priority water projects in the region. Of this amount, \$60.6 million of the funding is supporting eight projects sponsored by the Water Authority and 23 by Water Authority member agencies. The grant-funded projects

are helping to accomplish the objectives in the IRWM Plan and the water supply goals established in the Water Authority's 2010 UWMP. The Region also received \$1 million in planning funds to support development of the 2013 IRWM Plan.

In 2008, the San Diego IRWM Region was awarded a \$25 million grant by the DWR to support implementation of 19 projects designed to improve the reliability of the San Diego Region's water supply, protect and enhance water quality, and manage natural resources. Funding for the projects resulted from voter passage of Proposition 50 in 2002. The Water Authority began distributing grant funds to the project proponents in 2009.

Further IRWM bond funding from the state became available when the voters approved Proposition 84 in 2006. Proposition 84 allocated \$83 million (\$91 million less \$8 million retained by DWR to cover program administration costs) to the San Diego Funding Area, which includes the San Diego, Upper Santa Margarita and South Orange County IRWM planning region. Under an agreement between the three planning regions, approximately \$65 million in Proposition 84 grant funds will be awarded to the San Diego Region.

The first portion of this Proposition 84 grant funding came to the San Diego Region in 2011 in the form of a \$1 million planning grant to support the IRWM Plan update. Also in 2011, the San Diego Region received a \$7.9 million implementation grant to support development of 11 projects designed to improve water supply reliability and water quality, manage stormwater runoff, protect watersheds in the region, and improve water supply management in rural disadvantaged communities. The Water Authority began distributing these funds in 2013.

In 2013, DWR awarded a \$10.3 million grant to the San Diego Region as part of the Proposition 84, Round 2 solicitation. The funds are supporting implementation of seven projects in the areas of recycled water, including potable reuse, residential and agricultural conservation, watershed protection, and water supply management in rural disadvantaged communities. The Water Authority began distributing these funds in 2014.

The San Diego Region received its third Proposition 84 award in 2014 as part of DWR's Drought Solicitation Grant Program. This \$15.1 million grant will support seven water supply projects in the areas of groundwater development, water recycling and water conservation. The Water Authority began to distribute funds in late 2015.

Applications for the final round of DWR's Proposition 84 grant program, with approximately \$220 million available for award statewide, were submitted in June 2015. In December 2015 DWR informed the San Diego IRWM region that it was selected for \$31 million in funding to support 13 projects in the areas of water supply, water quality and natural resources from this grant program. DWR anticipates finalizing the grant contract with the Water Authority, on behalf of the San Diego IRWM Program, in July 2016; funds should be distributed to the project sponsors beginning later in 2016.

The next increment of state grant funding for the San Diego IRWM Program will be provided by Proposition 1, approved by the voters in November 2014. This measure allocates \$510 million to DWR to support projects included in IRWM plans approved by DWR. The San Diego IRWM Program should receive approximately \$38.2 million from this measure. DWR expects to award the first IRWM grant funds from Proposition 1 in late 2016, as part of a program to foster involvement by disadvantaged communities in IRWM. The San Diego Region expects to receive about \$4 million in the award.

## **MEMBER AGENCY WATER USAGE**

### **Water Use by Member Agencies**

The term "water use" describes the quantity of water a member agency obtains from all sources to meet its consumers' needs. These sources presently include impounded surface water reservoirs, groundwater, desalinated groundwater, recycled water and supplies imported to the Water Authority's service area through MWD's transportation system.

It is the policy and responsibility of the Water Authority to provide all supplemental water required by its member agencies to meet their consumers' needs. The level of dependence varies widely across the Water Authority's 24 member agencies. Some member agencies are totally dependent on imported water supplies. Other

member agencies' dependence on Water Authority water supplies varies from about 90 percent to a complete roll-off of the imported system during above normal rainfall cycles. The member agencies are not contractually or otherwise required to order and pay for any set amounts of water from the Water Authority. The member agencies are required to pay certain charges irrespective of whether they order water in a given year.

Annual member agencies water use for fiscal years ended June 30, 2011 to June 30, 2015 and a class of service breakdown of imported agricultural, and municipal and industrial water use for fiscal year ended June 30, 2015 are listed in the following tables:

**WATER USE OF MEMBER AGENCIES – FISCAL YEARS ENDED JUNE 30, 2010 TO JUNE 30, 2015**

**(All Figures in Acre-Feet)**

	2011			2012			2013			2014			2015		
	Local Production <sup>1</sup>	Water Authority Supplies <sup>2</sup>	Total	Local Production <sup>1</sup>	Water Authority Supplies <sup>2</sup>	Total	Local Production <sup>1</sup>	Water Authority Supplies <sup>2</sup>	Total	Local Production <sup>1</sup>	Water Authority Supplies <sup>2</sup>	Total	Local Production <sup>1</sup>	Water Authority Supplies <sup>2</sup>	Total
Carlsbad M.W.D.	3,401	15,830	19,231	3,790	16,179	19,969	4,098	17,175	21,273	4,539	18,290	22,829	4,206	16,403	20,609
Del Mar, City of	63	1,088	1,151	86	1,083	1,169	84	1,147	1,231	111	1,085	1,196	135	961	1,097
Escondido, City of	10,049	13,307	23,356	6,033	17,331	23,364	2,477	22,096	24,573	2,124	23,399	25,523	1,203	21,062	22,265
Fallbrook P.U.D.	508	11,649	12,157	704	12,116	12,820	878	12,942	13,820	780	13,345	14,125	602	11,729	12,331
Helix W.D.	11,145	20,666	31,811	8,721	24,073	32,794	5,560	28,813	34,373	688	34,380	35,068	293	30,852	31,145
Lakeside W.D.	659	3,251	3,910	665	3,374	4,039	584	3,665	4,249	551	3,760	4,311	880	2,858	3,739
National City, City of	5,000	1,685	6,685	5,168	1,236	6,404	6,105	617	6,722	3,862	2,830	6,692	2,958	2,718	5,676
Oceanside, City of	4,635	21,559	26,194	3,496	23,774	27,270	4,703	24,140	28,843	4,875	24,763	29,638	3,367	23,082	26,449
Olivenhain M.W.D.	2,518	18,440	20,958	2,435	19,305	21,740	2,785	20,887	23,672	2,922	22,098	25,020	2,673	19,549	22,222
Otay W.D.	3,849	29,861	33,710	3,671	30,543	34,214	4,314	31,883	36,197	4,748	33,410	38,158	4,186	30,299	34,485
Padre Dam M.W.D.	709	11,459	12,168	715	11,457	12,172	918	11,858	12,776	965	12,017	12,982	886	10,437	11,322
Pendleton M.C.B. <sup>3</sup>	8,406	839	9,245	7,721	800	8,521	8,521	539	9,086	8,781	257	9,038	7,806	220	8,026
Poway, City of	578	10,603	11,181	466	11,139	11,605	507	12,072	12,579	450	12,588	13,038	466	10,660	11,127
Rainbow M.W.D.	0	18,608	18,608	0	20,466	20,466	0	22,514	22,514	0	22,980	22,980	0	20,173	20,173
Ramona M.W.D.	714	5,808	6,522	749	6,020	6,769	762	6,199	6,961	695	6,132	6,827	651	5,492	6,142
Rincon del Diablo M.W.D.	2,371	5,770	8,141	2,177	5,950	8,127	3,289	6,781	10,070	2,847	7,026	9,873	3,138	5,744	8,882
San Diego, City of <sup>4</sup>	27,842	161,551	189,393	28,408	164,838	193,246	22,371	180,076	202,447	38,623	171,253	209,876	7,181	184,493	191,674
San Dieguito W.D.	4,962	1,901	6,863	4,293	2,663	6,956	4,891	2,395	7,286	1,845	5,598	7,443	1,361	5,748	7,110
Santa Fe I.D.	5,373	4,102	9,475	5,116	5,578	10,694	4,830	5,928	10,758	1,332	10,840	12,172	1,334	9,865	11,199
South Bay I.D.	8,792	5,344	14,136	9,789	4,270	14,059	12,287	2,083	14,370	5,118	9,466	14,584	2,319	11,236	13,555
Vallecitos W.D.	0	15,412	15,412	0	16,083	16,083	0	17,402	17,402	0	17,889	17,889	0	15,297	15,297
Valley Center M.W.D.	426	25,674	26,100	388	27,723	28,111	382	29,238	29,620	391	29,606	29,997	387	25,598	25,985
Vista I.D. <sup>5</sup>	7,097	10,818	17,915	6,547	12,353	18,900	2,092	17,398	19,490	1,695	18,439	20,134	1,618	16,216	17,833
Yuima M.W.D. <sup>6</sup>	1,004	1,619	2,623	1,748	1,198	2,946	1,389	2,200	3,589	609	4,534	5,143	6,547	4,470	11,017
Totals <sup>7</sup>	110,101	416,844	526,945	102,886	439,552	542,438	93,853	480,048	573,901	88,551	505,985	594,536	54,199	485,162	539,361

<sup>1</sup> Includes surface, recycled and groundwater supplies; does not reflect conserved water.

<sup>2</sup> Water use in a given year may differ from Water Authority sales due to storage.

<sup>3</sup> Camp Pendleton Marine Corps Base. Water Authority supplies include Water Authority deliveries to a portion of its service area served by South Coast Water District.

<sup>4</sup> Excludes City of San Diego local surface water use outside of Water Authority service area.

<sup>5</sup> Excludes land outside of Water Authority service area.

<sup>6</sup> Starting in 2015, local production includes Yuima Municipal Water District supplemental groundwater use.

<sup>7</sup> Numbers may not total due to rounding.

Due to the aggregated level of data provided by its member agencies, the Water Authority tracks local and imported water use under two class of service categories: the agricultural class and municipal and industrial (“M&I”) class. Water tracked as agricultural is through the Water Authority’s Special Agricultural Water Rate (“SAWR”). All remaining non-agricultural consumptive use reported by Water Authority member agencies is deemed M&I water use.

Water use in the San Diego Region is closely linked to the local economy, population, and weather. In fiscal year 2007, annual water demands in the Water Authority’s service area reached an all-time high of 741,893 acre-feet. However due to a sustained national recession, MWD supply allocations, and member agencies’ implementation of mandatory water use restrictions, water demand in the Water Authority’s service area declined over the next four successive years - plunging 29 percent from 2007 levels to 526,945 acre-feet in fiscal year 2011. The magnitude of this demand drop-off was unprecedented in the Water Authority’s history and required heightened fiscal pragmatism and additional cost management strategies to deal with the reduction in consumption.

Since 2011, the San Diego Region experienced a steady increase in total water demand through 2014 due to a combination of improving economic conditions, modest population growth, and below-normal rainfall in the county. As dry conditions persisted statewide, drought awareness increased and local and statewide drought response measures were implemented, total demand decreased in fiscal year ended June 30, 2015. The SWRCB Emergency Regulation has further reduced total water demand. For the Emergency Regulation period of June 2015 – March 2016, regional potable water demand is down 21% compared to the same months in calendar year 2013. See **WATER AUTHORITY WATER SUPPLY – Current California Drought**.

**MEMBER AGENCY WATER USE  
OF WATER AUTHORITY SUPPLY  
FISCAL YEAR ENDED JUNE 30, 2015**

Member Agency	2015	
	Agricultural Use Acre-Feet <sup>1</sup>	M&I Use Acre-Feet
Carlsbad M.W.D.	—	16,403
Del Mar, City of	—	961
Escondido, City of	2,865	18,197
Fallbrook P.U.D.	3,853	7,876
Helix W.D.	—	30,852
Lakeside W.D.	—	2,858
National City, City of	—	2,718
Oceanside, City of	410	22,672
Olivenhain M.W.D.	114	19,435
Otay W.D.	—	30,299
Padre Dam M.W.D.	288	10,148
Pendleton M.C.B. <sup>2</sup>	—	220
Poway, City of	35	10,626
Rainbow M.W.D.	9,688	10,486
Ramona M.W.D.	1,337	4,155
Rincon del Diablo M.W.D.	38	5,707
San Diego, City of	153	184,340
San Dieguito W.D.	—	5,749
Santa Fe I.D.	—	9,865
South Bay I.D.	—	11,236
Vallecitos W.D.	1,078	14,220
Valley Center M.W.D.	17,461	8,137
Vista I.D.	65	16,150
Yuima M.W.D.	3,671	799
<b>Totals</b>	<b>41,055</b>	<b>444,107</b>

Note: Totals may not add due to rounding

<sup>1</sup> Includes only amounts certified through the IAWP and SAWR agricultural water use programs.

<sup>2</sup> Marine Corps Base Camp Pendleton.

## Per Capita Water Use

The table below sets forth the estimated daily per capita (“GPCD”) potable water use within the Water Authority’s service area for the fiscal years ended June 30, 1989 to June 30, 2015.

### WATER AUTHORITY SERVICE AREA DAILY PER CAPITA POTABLE WATER USE<sup>1</sup>

Fiscal Year	Local Potable Production (af) <sup>2</sup>	Water Authority Supplied (af)	Total Potable Use (af) <sup>3</sup>	Population <sup>4</sup>	Daily Per Capita Potable Use (gallons)
1989	46,341	574,780	621,121	2,346,208	236
1990	27,171	613,444	640,615	2,435,903	235
1991	26,032	552,441	578,473	2,485,692	208
1992	40,478	455,957	496,435	2,520,763	175
1993	91,685	449,486	541,171	2,572,002	188
1994	117,021	413,148	530,169	2,604,483	182
1995	109,427	409,509	518,936	2,622,948	177
1996	131,852	468,165	600,016	2,629,879	203
1997	125,908	478,700	604,608	2,640,861	204
1998	110,959	435,620	546,579	2,689,493	181
1999	132,980	466,884	599,864	2,733,035	196
2000	101,734	580,118	681,852	2,814,481	216
2001	69,250	564,140	633,390	2,813,278	201
2002	57,264	615,572	672,836	2,825,574	213
2003	49,593	586,849	636,442	2,843,697	200
2004	36,723	666,008	702,731	2,867,237	218
2005	59,200	573,048	632,248	2,977,337	190
2006	95,805	576,620	672,425	3,035,858	198
2007	59,648	661,309	720,957	3,051,729	211
2008	57,815	608,902	666,717	3,054,819	194
2009	61,788	555,789	617,577	3,102,625	178
2010	45,892	494,959	540,851	3,167,171	152
2011	87,039	416,844	503,883	3,205,550	140
2012	78,880	439,552	518,432	3,201,714	144
2013	66,465	480,048	546,513	3,190,789	153
2014	59,620	505,985	565,605	3,140,181	161
2015 <sup>5</sup>	27,714	485,165	512,876	3,146,771	146

<sup>1</sup> Water use data provided by member agencies.

<sup>2</sup> Excluding recycled water use.

<sup>3</sup> Totals may not foot due to rounding.

<sup>4</sup> Decreases in 2012-2014 population estimates due to member agency 2010 Census adjustments.

<sup>5</sup> Includes Yuima Municipal Utility District supplemental groundwater use.

The 2009 State Water Legislation seeks to achieve a 20 percent statewide reduction in urban per capita water use in California by December 31, 2020. The law requires each urban retail water supplier to develop urban water use targets to help meet the 20 percent goal by 2020, and an interim water reduction target by 2015. Although compliance with the legislative mandate rests with retail water agencies, the law requires that the Water Authority, as the wholesale supplier, support its retail member agencies’ efforts to comply with the 2009 State Water Legislation through a combination of regionally and locally administered active and passive water conservation measures, programs and policies, as well as the use of recycled water.

The table below shows estimated aggregated member agency per-capita potable targets under the 2009 State Water Legislation. These estimates were calculated using retail level per-capita targets provided by Water Authority member agencies and SANDAG population projections for each member agency.

**2009 STATE WATER LEGISLATION  
ESTIMATED AGGREGATED MEMBER AGENCY POTABLE PER-CAPITA TARGETS (GAL/DAY)**

	2015	2020
Aggregated Member Agency Potable Gallons Per-Capita Per Day Target	174	167

**Agricultural Water Use**

San Diego County has a well-established agricultural sector with 268,592 acres in production and an annual value for all commodities of \$1.82 billion in 2014, according to the County of San Diego’s 2014 Crop Statistics and Annual Report. Nursery crops contributed approximately \$1.18 billion of output during the year; fruits and nuts and vegetable production contributed an additional \$386 million.

Since 2009, the Water Authority has made available to agricultural customers its Transitional Special Agricultural Water Rate (“Transitional SAWR”). In exchange for receiving the Transitional SAWR rate, composed of a supply rate differential and storage charge exemption, agricultural customers forego the additional supply reliability benefit associated with the Water Authority’s supplies, which includes QSA supplies and Carlsbad Desalination Project supplies, and receive a higher cutback rate that matches the MWD reduction level. From a revenue standpoint, Transitional SAWR customers continue to purchase water from the Water Authority at higher volumes of water in non-cutback years. This has an overall downward rate pressure on other rate categories.

The Water Authority Board has approved extending the Transitional SAWR program three times since 2009. Most recently, in March 2015, the Board took action to approve a five year extension, which extended the program through December 31, 2020. This will ensure the benefits of the program are realized during the drought. The program’s cost and benefits will be evaluated again towards the end of the current extension.

Total program agricultural water consumption by Water Authority member agencies totaled approximately 41,000 acre-feet, or about 8 percent of total water use for fiscal year ended June 30, 2015.

**Water Reclamation, Reuse and Groundwater Recovery**

Since the late 1980s, the Water Authority has assisted its member agencies to plan, develop, and finance water recycling and groundwater recovery projects throughout the Water Authority’s service area. The Water Authority has also provided assistance to its member agencies to enhance and expand existing facilities. This support has been made through technical and regulatory assistance and financial aid for project planning and study phases traditionally funded by the individual local agencies. As of March 2016, through the Water Authority’s Local Water Supply Development Program, over \$41 million in total financial incentives has been awarded to member agency projects to encourage the production and beneficial reuse of recycled water. MWD also offers a variable recycling credit, based on project financial need, of up to \$250 per acre-foot. In its 2010 UWMP, the Water Authority, through its member agencies, identified almost 50,000 acre-feet per year of recycled water and over 28,000 acre-feet per year of groundwater supplies to be developed by 2035.

**WATER AUTHORITY WATER FACILITIES**

To meet the demands of its member agencies, the Water Authority requires water conveyance facilities, water storage facilities and water treatment facilities. Some of these facilities are owned and operated by the Water Authority and others are owned and operated by the State of California, by MWD, by member agencies or by private entities.

**Water Conveyance Facilities**

Water from the Colorado River is transported from Lake Havasu through MWD’s Colorado River Aqueduct. Supplies for the Water Authority are diverted from the Colorado River Aqueduct near the west portal of the San Jacinto Tunnel into the Casa Loma Siphon No. 2 and Canal. A few miles to the southwest, MWD’s San

Diego Canal takes water from the Casa Loma Canal and delivers it into Diamond Valley Lake and further south into Lake Skinner. Both storage reservoirs of MWD are located in Riverside County and both are able to supply water to San Diego County.

SWP water is delivered through DWR’s California Aqueduct to MWD at Lake Perris, the terminus of the 444-mile California Aqueduct. From there, it flows through the Lakeview Pipeline of MWD to the San Diego Canal where it is blended with Colorado River water.

While Diamond Valley Lake, with a maximum capacity of 810,000 acre-feet, is much larger, Lake Skinner is the primary storage facility for the Second San Diego Aqueduct, with a maximum capacity of 44,264 acre-feet. The maximum water elevation for storage is 1,479 feet above sea level. Water from Lake Skinner flows directly into Pipelines 3 and 5 while Pipelines 1, 2 and 4 receive treated water from the Skinner Filtration Plant.

The Water Authority takes delivery of imported water from MWD in the five pipelines within the two San Diego Aqueducts, approximately six miles south of the Riverside-San Diego County line. The following table provides information relating to the principal pipelines owned and operated by the Water Authority:

**PRINCIPAL WATER CONVEYANCE FACILITIES IN SERVICE**

<u>Pipeline</u>	<u>Length (miles)</u>	<u>Diameter (inches)</u>
<u>First San Diego Aqueduct</u>		
Pipeline 1 and Pipeline 2	68.1	72-48
La Mesa-Sweetwater	16.5	42-18
Moreno-Lakeside Pipeline	4.8	60-54
<u>Second San Diego Aqueduct</u>		
Pipeline 3	59.2	75-66
Pipeline 4	44.9	96-69
Pipeline 4B	9.9	108-96
Pipeline 4E	19.6	108-72
Pipeline 5	11.2	96
Pipeline 5E	21.8	108
Crossover Pipeline:		
San Marcos at Twin Oaks to Escondido at Hubbard Hill	7.6	66
Ramona Pipeline	7.9	57-36
Tri-Agencies Branch		
San Marcos to Oceanside	4.4	42-21
North County Distribution Pipeline	3.5	72
Valley Center Pipeline	4.1	66
Olivenhain Pipeline	2.6	78
Olivenhain Hodges Interconnect Pipeline	1.2	121
San Vicente Pipeline and Aqueduct Interconnect	12.7	102
Total	<u>300.0</u>	

Note: Maps in the front portion of this Official Statement provide the location of certain facilities referenced in the above table.

The two pipelines of the First San Diego Aqueduct share common tunnels and inverted siphons and are operated as a single unit. The La Mesa-Sweetwater Extension of the First San Diego Aqueduct extends from the First San Diego Aqueduct at Slaughterhouse Canyon near San Vicente Reservoir to Sweetwater Reservoir. The Moreno-Lakeside Pipeline also delivers water from the First and Second Aqueduct to the Helix Water District’s R.M. Levy Water Treatment Plant. San Vicente Reservoir, which is owned and operated by the City of San Diego, is the terminus of the First San Diego Aqueduct.

The three pipelines of the Second San Diego Aqueduct (Pipelines 3, 4 and 5) share a common right of way for most of their length. Pipeline 3 terminates at the Lower Otay Reservoir, Pipeline 4 terminates at the City of San

Diego's Alvarado Water Treatment Plant and Pipeline 5 terminates at Miramar Hill northwest of Lake Miramar in the City of San Diego. Pipeline 4B extends from north of the City of San Diego's Miramar Water Treatment Plant to the San Diego River. Pipeline 4E extends from the San Diego River to the Lower Otay Reservoir. The Tri-Agencies Pipeline delivers treated water to service areas of Carlsbad Municipal Water District, Vista Irrigation District, Vallecitos Water District and the City of Oceanside. The North County Distribution Pipeline extends west from the Second San Diego Aqueduct to serve areas of the City of Oceanside, Vista Irrigation District, Rainbow Municipal Water District, and Vallecitos Water District. Pipeline 5E extends south from the Water Authority's Twin Oak Valley Water Treatment Plant ("TOVWTP") in San Marcos to Rancho Penasquitos. The Ramona Pipeline extends east from the Second San Diego Aqueduct serving the Olivenhain Municipal Water District, the City of San Diego, and the Ramona Municipal Water District. The Valley Center Pipeline conveys treated water between the northern reaches of the First and Second San Diego Aqueducts. The Olivenhain Pipeline conveys untreated water between the Second San Diego Aqueduct and the Olivenhain Reservoir. The Olivenhain Hodges Interconnect Pipeline conveys untreated water between Olivenhain Reservoir and Lake Hodges. The San Vicente Pipeline and Aqueduct Interconnect connect the San Vicente Reservoir to the Second Aqueduct at the Rancho Penasquitos Hydroelectric Facility.

The Water Authority controls the operations of its water delivery system from a central operations center. The operations center uses a Supervisory Control and Data Acquisition ("SCADA") system to monitor and control the flows in each of the pipelines and to each member agency. The SCADA system, separate from the business system, with redundant equipment, checks each remote facility every 30 seconds to monitor status and send commands for changes in operations. The communications occur through fiber optics, a leased phone line system, and microwave radio to 92 facilities.

The Water Authority established an integrated asset management program in 2009, which seeks to ensure the proper maintenance, repair and replacement of Water Authority assets at the lowest possible cost to ratepayers. The asset management program consists of an asset registry, condition assessment, risk assessment, and repair/replacement schedules. A key component of the Asset Management Program is the on-going condition assessment efforts. These efforts include visual inspections, internal inspections, steel thickness measurements, Remote Field Eddy Current data (Prestressed Pipe wire break information), real-time Acoustic Fiber Optic data (Prestressed Pipe wire break information), Magnetic Flux Leakage data (Welded Steel Pipe corrosion information) and real-time cathodic protection data. Ultimately, the efforts generate recommendations for constructing, operating, repairing, or replacing assets. The recommendations are based on two main factors: the remaining asset life and the risk or consequence of failure. Custom software was written by in-house staff to systematically apply condition information (such as Pipeline Decay Indices and Facility Condition Score Metrics) to obtain the remaining asset life. With the remaining life estimated, the team determines the consequence and probability of failure to determine the business risk metric and criticality for each asset. The results are presented in a manner that assists staff in determining what upgrades should be made first and helps optimize program efforts for asset repair and replacements. Asset repair and replacement projects are defined and prioritized for presentation to an Asset Management Committee. The committee comprises managers from various groups and departments inside the Water Authority. It reviews projects before each budget cycle. It also considers available resources, economic factors, customer rate and delivery impacts, timing and other issues.

The quagga mussel, an aquatic invasive species, was first found in the lower Colorado River system in January 2007. The rapid propagation of this species, if unchecked, has the potential to disrupt operations at the Water Authority's delivery system and facilities. Since that time, the mussel has established its presence in the San Diego Region. The Water Authority, its member agencies, and other regional partners formed the San Diego Regional Quagga Mussel Working Group in 2007 to aid in information sharing. In June 2008, this group released the draft Regional Quagga Mussel Response and Control Plan as a guide to water agencies preparing an agency specific response and control plan. The Water Authority has also implemented its own system specific monitoring and control plan in 2011 to address issues related to the Water Authority's delivery system and facilities. The Water Authority is working closely with the DFW as well as other industry leaders to ensure continued process improvement.

## **Water Storage**

Water storage facilities assist in managing consistent water availability to meet demand notwithstanding fluctuations in available supply. Storage allows the Water Authority to store water in wet years for use in dry years. The San Diego Region has a current total reservoir storage capacity of over 746,000 acre-feet, which includes storage capacity the Water Authority owns in Olivenhain Reservoir, Lake Hodges, and San Vicente Reservoirs. The

San Vicente Dam Raise Project, part of the Water Authority's Emergency Storage Project (the "ESP"), was completed in 2014, and provides 152,000 acre-feet of the 746,000 acre-feet of total storage capacity.

Reservoirs. The Water Authority's total owned storage capacity within the region is approximately 197,000 acre-feet, and is made up of owned capacity in Olivenhain Reservoir, Lake Hodges, and San Vicente Reservoir.

The Olivenhain Reservoir, owned and operated by the Water Authority, was completed in 2003 as part of the first phase of the ESP. The Olivenhain Reservoir has a storage capacity of 24,300 acre-feet of water. In 2008, the Water Authority constructed an interconnect pipeline to connect Lake Hodges to the Olivenhain Reservoir, allowing for additional stored water transfer within the region. In 2012 the Water Authority completed construction of the Lake Hodges Pump Station and 40 megawatts ("MW") hydroelectric facilities.

Construction of a Water Authority project to raise the City of San Diego's San Vicente Dam began in 2009 and was completed in 2014. In accordance with the ESP agreements, the Water Authority gained 20,000 acre-feet of storage rights within the City of San Diego's Lake Hodges Reservoir and 152,000 acre-feet in San Vicente Reservoir upon the completion of the San Vicente Dam Raise Project. Absent the emergency regulations currently in place, and due to its long-term diversification efforts, the Water Authority would have been able to meet 99 percent of the projected demand in fiscal year 2016. However, because the emergency regulations are reducing demands below what was originally projected, the Water Authority is able to store water in San Vicente Reservoir. As of March 31, 2016, the Water Authority had approximately 82,000 acre-feet in its carryover storage account in San Vicente Reservoir and 33,700 acre feet in emergency storage account. The Water Authority's stored water is subject to evaporation, seepage and spill losses. When the ESP is completed (a pump station in North County remains to be constructed that is currently in planning), it will allow the Water Authority to convey water throughout San Diego County during an emergency or drought condition.

In 1929, the California Legislature enacted legislation providing for supervision over non-federal dams in the State. The statutes place the supervision of the safety of non-federal dams and reservoirs under the jurisdiction of the DWR's Division of Safety of Dams ("DSOD"). Dams under jurisdiction are artificial barriers, together with appurtenant work, including outlet towers, which are 25 feet or more in height or have an impounding capacity of 50 acre-feet or more. The DSOD reviews plans and specifications for the construction of new dams or for the enlargement, alteration, repair or removal of existing dams, and must grant written approval before the owner can proceed with construction. The DSOD routinely inspects operating dams to assure that they are adequately maintained. The DSOD also conducts investigations of selected dams and directs the owners to conduct additional investigations and detailed safety evaluations when necessary. DSOD may impose operating restrictions on dams and reservoirs that reduce storage capacity or otherwise adversely affect the operation of water facilities. The Water Authority is in compliance with DSOD regulations at the Olivenhain Dam and the San Vicente Dam raise project.

*Groundwater Storage.* As part of the QSA, the Water Authority became the recipient of groundwater conjunctive use funds appropriated through Senate Bill 1765 (1998), which originally were designated to MWD. Approximately \$35 million was made available to the Water Authority for use in its groundwater program. A demand and supply analysis utilizing data from the Water Authority's 2005 Urban Water Management Plan identified a maximum potential need for approximately up to 95,000 acre-feet of additional carryover storage beyond the 100,000 acre-feet of carryover storage in the Water Authority's Capital Improvement Program. This evaluation examined a three-year dry cycle scenario during which demands are high and imported supplies are constrained by preferential rights. Based on that scenario, the Water Authority distributed a Request for Proposal in November 2005 to partner with agencies overlying a groundwater basin for a conjunctive use project. The project would allow water to be delivered and stored during above normal hydrology and extracted from the basin and delivered to the Water Authority either by wheeling through various facilities, exchanges, or a reduction in demands on the Water Authority.

In June 2008, the Water Authority executed an agreement with Vidler Water Company, Inc. ("Vidler") for 30,000 acre-feet of storage and capacity rights in the Semitropic Water Bank in the southern part of the San Joaquin Valley in Kern County. The cost to purchase Vidler's Semitropic Program was approximately \$11.75 million. In August 2008, the Water Authority acquired 10,000 units (which equates to 40,000 acre-feet of storage together with rights to certain capacities) in the Semitropic-Rosamond Water Bank Authority ("Semitropic-Rosamond"). The cost to acquire storage and recovery rights in Semitropic-Rosamond was \$15 million. In 2008, the Water Authority purchased approximately 23,077 acre-feet of water from Butte Water District and Sutter Extension Water District at \$200/acre-foot (at a total cost of \$4.6 million) anticipating storing the water in the Groundwater Program as "initial fill." The Water Authority has been reimbursed \$30.48 million by the State for these acquisitions.

*Local Storage Cooperation.* The Water Authority has been working with its member agencies to optimize local storage operations. Working collaboratively, the Water Authority and its member agencies have optimized local facilities to move supplies into local storage. As of the end of April 2016, total surface water storage in the region was at approximately 43% percent of capacity, or just over 323,000 acre-feet. This reflects a net increase of approximately 80,000 acre-feet over the past year, attributable to water being stored in San Vicente Reservoir resulting from the completion of the dam raise. The completion of the San Vicente Dam Raise more than doubled the reservoir's capacity and added an additional 152,000 acre-feet of capacity. This new water storage will serve two purposes - approximately two-thirds of the additional storage will be dedicated to carryover storage and the other third will be reserved for emergencies.

## **Water Treatment Facilities**

The Water Authority purchases both treated and untreated water from MWD, treats water at the TOVWTP, purchases treated water from the Carlsbad Project and purchases treatment from member agencies with treatment facilities. Based on a two-year average of deliveries over the fiscal years ended June 30, 2014 and June 30, 2015, approximately 37 percent of the water sold by the Water Authority is treated water. MWD delivers treated water to the Water Authority's service area from its Skinner Filtration Plant, which is located at Lake Skinner and has a treatment capacity of 630 mgd. Treated water is delivered to the Water Authority through three pipelines, only one of which stretches the length of the county. From Lake Skinner in Riverside County, untreated water is currently conveyed south to the Water Authority in two pipelines. At a point near the City of San Marcos, the Crossover Pipeline extends to the east and connects to the two pipelines of the First San Diego Aqueduct that carry untreated water south to San Vicente Reservoir. From this point near San Marcos, another untreated water pipeline delivers water south for treatment at a number of water treatment plants owned and operated by several of the Water Authority's member agencies.

As early as 2001, the Skinner Filtration Plant began to operate above its rated capacity to meet the treated water demands of both Riverside and San Diego Counties during long, hot, and dry periods. During these same periods, the Water Authority's member agency water treatment plants operated near capacity to meet San Diego County demands as well. As a result, the Water Authority's Regional Water Facilities Master Plan recommended creation of additional regional treatment capacity. Upon approval of the Regional Water Facilities Master Plan in June 2004, the Water Authority began design and construction of the TOVWTP.

The Water Authority utilized the Design-Build-Operate ("DBO") procurement method for the TOVWTP. This method of procurement includes retaining a single entity to design, construct, and operate the TOVWTP. The contract provided that the selected DBO entity operate the plant for an initial period of 15 years, with an option to extend that term by an additional five years. The Water Authority awarded the DBO contract in September 2005 to CH2M HILL OMI and the TOVWTP came online in April 2008. The TOVWTP added 100 mgd of locally treated, high quality drinking water capacity to San Diego County.

The TOVWTP has been modified to store and convey the desalinated seawater from the Carlsbad Project. The original TOVWTP design and construction was planned to include storage and conveyance facilities to facilitate acceptance of desalinated seawater. The TOVWTP treated water storage and piping was sized to convey both TOVWTP treated water and Carlsbad Project desalinated water. This supply is integrated directly into the Water Authority's treated water system. By conveying the desalinated seawater to TOVWTP the Water Authority can distribute this water to approximately 90 percent of its member agencies. In addition, these modifications include the ability to boost the chloramine residual of the desalinated seawater after it travels from Carlsbad to the TOVWTP.

In addition to the TOVWTP, the Water Authority purchased 26 mgd of treatment capacity in 2002 at the Helix Water District's R.M. Levy Water Treatment Plant. In addition to having purchased capacity at the Levy Water Treatment Plant the Water Authority pays Helix for the variable operating costs associated with treating water. Water produced at the Levy plant for the Water Authority supplements treated water services in eastern San Diego County for three member agencies, Padre Dam MWD, Lakeside Water District and Otay Water District.

## **Seismic and Wildfire Considerations**

Water conveyance facilities are designed to withstand earthquakes with minimal damage. Earthquake loads have been taken into consideration in the design of project structures such as pumping plants and hydroelectric plants. All known faults are crossed by pipelines at very shallow depths to facilitate repair in case of damage from movement along a fault. To date, no Water Authority facilities have suffered any material earthquake damage. The

Water Authority's ESP was designed to allow continued water service to its member agencies at a 75 percent level of service or better in the event of a complete interruption of water deliveries from MWD, such as might result from a severe earthquake along a fault traversing pipelines connecting with MWD, for a period of up to two months while pipelines and facilities are being repaired or six months in the event that a limited amount of water was available from MWD. The TOVWTP and the Carlsbad Project provide additional local water treatment capability to the region during a seismic event.

Water conveyance facilities for the most part consist of pipelines and connections, flow control facilities, and pumping stations. The three hundred miles of water conveyance pipeline that are underground are not vulnerable to damage by wildfires. The above-ground facilities are designed to be tolerant to damage by wildfires as the facilities are constructed of poured concrete or slump block, and the rights of way near facilities are maintained clear of plant growth or landscaped with drought tolerant plants making them less vulnerable to damage by wildfires. The Water Authority's Emergency Operations Center ("EOC") located at the Escondido Operations Center in Escondido, California, is activated during wildfires or other emergency events. An alternate EOC can be activated at the San Diego Headquarters office or the TOVWTP should the primary EOC be compromised. While activated, the wildfires are monitored and operations and maintenance crews are dispatched to ensure that all above-ground facilities are safe and remain operational. The Water Authority is also represented at the County's Operational Area EOC to best manage water interests during a major event. The last major wildfire in San Diego occurred in May 2014 and caused only minor damage to the Water Authority's assets, facilities and projects.

The Water Authority has long maintained a focus on emergency preparedness and response. In 2007, the Water Authority updated its emergency management program by publishing an Integrated Contingency Plan, which complies with the National Incident Management System. The plan undergoes regular reviews and revisions to ensure accuracy and to maintain compliance with state and federal regulations. In order to prepare for a major emergency, the Water Authority regularly activates its EOC for planned event control, coordinates with member agencies on emergency preparedness issues, and participates in County of San Diego Operational Area exercises.

### **Safety and Security**

The Water Authority conducted two separate vulnerability analyses for its water delivery system in 2001 and 2003. The latter was required as part of the 2002 Bioterrorism Act. Since that time, the Water Authority has implemented security improvements throughout the system including improved security procedures, redundant communication systems, hardening facilities against physical attack, improving facility lighting, real time water quality monitoring, and adding video surveillance capabilities. The Water Authority considers additional security improvements as each new facility is designed or constructed, technology evolves, or new threats are identified. Physical inspection by field staff is also performed regularly to aid in protection of Water Authority facilities and rights of way. In addition, the Water Authority conducts periodic analyses of potential risks or vulnerabilities within the SCADA and business system computer networks. The Department of Homeland Security conducted a comprehensive evaluation of the Water Authority's SCADA system in 2013.

Although the Water Authority has undertaken many emergency preparedness and security improvements, a terrorist attack or significant natural disaster could materially impair system operations, water deliveries and revenues.

### **Insurance**

The Water Authority is a participant in the Special District Risk Management Authority pooled insurance program and obtains coverage for general liability, errors and omissions, employment practices liability, auto, property, boiler and machinery, and crime and fidelity coverage through the program. The Water Authority also maintains workers' compensation coverage. See **APPENDIX A – WATER AUTHORITY FINANCIAL STATEMENTS**.

### **Energy**

Over the last several years, in addition to identifying climate change adaptation strategies, the Water Authority has implemented mitigation strategies to reduce greenhouse gas emissions from its operations. Twenty-five vehicles have been removed from the Water Authority's fleet over the past nine years, and six vehicles have been replaced with hybrids. As vehicles are scheduled for replacement in the future, each will be evaluated for necessity and potential replacement with hybrid or other alternative fuel vehicles. Photovoltaic solar panels were installed at the Water Authority's three major facilities, the TOVWTP, the Kearny Mesa administrative headquarters

and the Escondido Operations Center. The three solar projects combined are expected to produce approximately 2.9 million kilowatt-hours annually and prevent the release of more than 31,000 metric tons of carbon dioxide equivalent over the 20-year term of the solar projects contract. In addition, based on current energy costs, the solar projects are projected to result in a savings of nearly \$1.7 million over the life of the contract. The Water Authority's 4.5 MW Rancho Penasquitos Hydroelectric Facility that began operation in 2006 provides clean renewable energy to the local grid through a ten-year Power Purchase and Sales Agreement with the San Diego Gas & Electric Company ("SDG&E"), while providing a revenue stream for Water Authority operations. In September 2011, the Water Authority placed the first of two 20 MW turbines of the Lake Hodges Pumped Storage Facility into operation. The second 20 MW turbine was placed into operation in August of 2012 and is providing energy to the local grid in accordance with an existing 25 year power purchase and sales agreement with SDG&E. On February 26, 2015, the Water Authority Board approved professional services for continued analysis of a potential pumped storage facility at the San Vicente Reservoir. This project is a partnership between the Water Authority and City of San Diego and could be sized as large as 500 MW. Studies are underway to determine the optimal business model(s) for implementing this project and are expected to be completed by December 2016.

In addition, the Water Authority continues to pursue energy efficiency options in all areas of its operations, which includes new opportunities such as in-line hydroelectric generation and emerging energy technologies such as floating solar and battery storage.

### **THE CAPITAL IMPROVEMENT PROGRAM**

The Water Authority's Capital Improvement Program (the "CIP") is designed to meet the mission of the Water Authority to provide a safe and reliable supply of water to its member agencies serving the San Diego Region. A map in the front portion of this Official Statement provides the location of major components of the CIP.

In August 1989, the Board approved "The Water Distribution Plan, A Capital Improvement Program through the Year 2010." The resolution the Board adopted stated in part that "in order to meet the existing and future needs of its member agencies and the over three million people whom they serve, it is necessary that existing pipeline capacities and filtration facilities be significantly improved." The Water Distribution Plan contained ten projects designed to meet the objectives of:

- increasing the capacity of the aqueduct system;
- increasing the yield from existing water filtration plants;
- obtaining additional water supplies from MWD; and
- increasing the reliability and flexibility of the aqueduct system.

In annual reports to the Board since June 1991, the Water Authority has made modifications to the original list of projects included in the Water Distribution Plan. Projects included in the CIP are approved by the Water Authority Board and help advance member agency investments in treatment plant capacity, diversification and system reliability. New projects have been added as needs have been identified for a service area of more than three million inhabitants. Through June 30, 2015, the value of the Water Authority's capital assets is \$3.2 billion. The present CIP budget is \$2.8 billion for 39 projects that are in various stages of planning, design, and construction. Of such amount, approximately \$1.2 billion has been expended on various projects, leaving an unspent balance in the CIP budget of approximately \$1.6 billion. The Water Authority expects to spend approximately \$393.1 million over the next five years on capital improvement projects. Approximately one-third of that amount, \$136.8 million, is expected to be spent in the period for fiscal years ending June 30, 2016 and June 30, 2017. During these Fiscal Years the focus of the Water Authority's CIP will be on Asset Management, Mitigation Management, and Master Planning Projects.

**SAN DIEGO COUNTY WATER AUTHORITY  
CAPITAL IMPROVEMENT PROGRAM BUDGET**  
(dollars in millions)

<b>Project Category</b>	<b>FY2016</b>	<b>FY2017</b>	<b>FY2018</b>	<b>FY2019</b>	<b>FY2020</b>	<b>Total</b>
Asset Management	\$20.907	\$20.522	\$56.563	\$36.138	\$32.562	\$166.692
Emergency Storage Program	18.777	24.749	4.392	7.080	2.398	57.396
Master Planning	6.281	4.320	5.581	10.496	9.582	36.260
New Facilities	21.413	12.187	17.466	26.503	38.387	115.956
Other	5.261	2.405	5.908	1.370	1.898	16.842
<b>Total<sup>1</sup></b>	<b>\$72.641</b>	<b>\$64.184</b>	<b>\$89.908</b>	<b>\$81.588</b>	<b>\$84.827</b>	<b>\$393.146</b>

<sup>1</sup> Totals may not foot due to rounding.

The Water Authority plans to use a combination of funds to pay for the CIP, including proceeds derived from the sale of long-term fixed rate debt, variable rate debt, and cash generated from Water Authority operations. Overall, the Water Authority plans to fund approximately 30 percent of its \$2.8 billion CIP with cash and the balance from a combination of long-term fixed rate debt, short-term debt and variable rate debt. The financial projections included in this Official Statement reflect a long-term adherence to the overall funding ratio, rather than an attempt to maintain this ratio of funding in individual years. See **PROJECTED OPERATING RESULTS**.

There is ongoing litigation against the Water Authority over two completed CIP construction projects: the raising of the San Vicente Dam, and the extension of the San Vicente pipeline (lead cases being San Diego Superior Court Case Numbers 37-2014-00026740-CU-BC-CTL JCCP 4832, and 37-2011-00092666-CU-BC-CTL). Both sets of cases pertain to claimed additional construction costs from contractors and collectively total approximately \$100 million in alleged damages. The Water Authority disputes the claims. The Water Authority does not believe any litigation outcome would have a material effect on the financial position, results of operation or liquidity of the Water Authority.

**Projects in the Capital Improvement Program**

The current CIP contains 39 projects. The projects are a mix of water transportation, storage, treatment, flow control facilities, and pipeline relining and replacement projects.

- Fiscal Year 2007 marked the peak of CIP expenditures at \$290 million. Since that time, the majority of the Water Authority's large projects have either been completed or are in final stages of construction. Completed projects include the ESP San Vicente Pipeline and Aqueduct Interconnect; the ESP Lake Hodges Pump Station and Inlet/Outlet and Olivenhain-Hodges Pumped Storage; and the TOVWTP.
- In November 2012, the Water Authority Board approved the implementation and financing of the Carlsbad Desalination Project. To integrate desalinated water into the regional water delivery system, the Water Authority made several upgrades to its existing conveyance system as well as modifications at the TOVWTP. Pipeline 3, between San Marcos and the TOVWTP was relined to accommodate increased water pressures created by pumping desalinated water uphill to the treatment plant. The relining of Pipeline 3 has also extended its useful life by approximately 75 years. Modifications at the TOVWTP, which were designed and constructed by the plant's contract operator CH2M Hill are now complete. These modifications were required so that desalinated water could blend with existing drinking water supplies. Lastly, the Water Authority altered its San Marcos Vent to allow water to flow between Pipelines 3 and 4 to facilitate the construction of the desalination infrastructure while continuing to provide service to the Water Authority's member agencies. The desalinated water from the Carlsbad Desalination Project is conveyed to the Water Authority's Second Aqueduct in the City of San Marcos by a 54 inch diameter ten

mile long pipeline. This pipeline was constructed by Poseidon pursuant to a Design-Build contract with the Water Authority and construction has been completed.

- The Water Authority and City of San Diego are partners on the San Vicente Pumped Storage Study, which is in the planning phase. The proposed project would provide up to 500 MW of “on call” hydroelectric energy for the region. It is comprised of the existing expanded San Vicente Reservoir, a proposed upper reservoir, conveyance tunnels/shafts, powerhouse, and electric transmission lines. In February 2014, an economic and financial study was completed to assess alternatives for the engineering configuration and the economic and financial viability of the project. In July 2015, the Preliminary Application Document/Notice of Intent was submitted to Federal Energy Regulatory Commission (“FERC”), which initiated the FERC licensing process. Work is underway in conducting a deeper economic and marketability analysis and analyzing potential business models for implementation of the project should it move forward. This next phase of work is scheduled to be complete by December 2016.
- The largest single aggregation of projects in the current CIP is the \$846 million Emergency Storage Project (“ESP”). The ESP is a system of dams and reservoirs, interconnected pipelines, and pumping stations designed to make water available to the Water Authority service area in the event of an interruption in imported water deliveries. The majority of the ESP has been completed, with the San Vicente Dam Raise suite of projects as the largest remaining to be completed. The remaining projects include final close out for mitigation management, revegetation and planting, and final modifications. This work is expected to be completed in winter 2017.
- A substantial amount of future facilities work will be in the Water Authority’s Asset Management Program. The Water Authority’s Asset Management Program includes all activities required to derive the most value from an asset through its life cycle. The primary goal of the program is for the planning, design, construction, operation, maintenance, repairing or replacing, repurposing, or the surplus of assets at the optimum time to ensure water delivery system reliability at the lowest cost and with the least impact to member agencies. To ensure this, Water Authority staff developed, and the Water Authority Board approved, the Asset Management Plan in January 2009 and the Asset Management Program Funding Policy in January 2010. One of the largest components of the Asset Management Program is the relining and replacement of aging pipelines. Expenditures in support of relining and replacement activities are forecast to average \$13 million per year over the next ten years.
- The balance of projects over the next 20 years beyond the ESP and the Asset Management Program is forecast to be in the construction of additional pipelines and flow control facilities, and the execution of facility improvements and rehabilitation projects. The roadmap for future capital infrastructure was determined by the Facilities Master Plan Update, approved by the Board in March 2014.

### **Cost Management Strategy**

As construction costs began to spiral upward in the 2005 time frame, the Water Authority adopted a variety of strategies to deal with the problem. Internally, the Water Authority examined the basis of its cost estimating process and hired an economist to develop a model that would allow the Water Authority to forecast future project costs more accurately based on the unique mix of projects, materials, and skills required by the CIP. This action was combined with a look at the portfolio and timing of the CIP projects to ensure the best balance between reliability of water supply and costs.

At the same time, the Water Authority accelerated its efforts to pursue CIP best management practices. In 2004, the Water Authority joined MWD in a regional benchmarking effort involving a dozen water agencies in the Western United States. The purpose of the regional organization was to develop key capital improvement program performance measures and benchmarks. This has yielded a body of knowledge on best capital improvement program management practices that has been incorporated into the Water Authority’s CIP management practices and the formalization of the Water Authority’s CIP Best Management Practices document. Within the San Diego area the Water Authority is a member of a regional procurement committee consisting of large public sector organizations with substantial capital improvement programs. The purpose of this multi-agency group is to create a more competitive construction environment in San Diego County by creating uniform contracting and procurement practices, simplifying contracting processes, and coordinating the timing of agency facility construction contracts, making more bidders available for the same types of projects. This has led to several cost savings strategies that are focused on making the regional construction market more competitive.

The Water Authority works with the regional construction community to enhance relationships and improve bid outcomes. The Water Authority has involved itself in a variety of industry forums as speakers on topics of interest, building relationships with contractors through personal contacts, and direct marketing techniques. In recent years, the Water Authority has experienced contractor bids below forecast costs.

## **FINANCIAL OPERATIONS**

The Water Authority's principal source of revenue is net revenues from the sale of water by the Water Authority to its member agencies. The Water Authority's rates and charges to member agencies for delivered water are set to equal the cost of water to the Water Authority plus additional components (e.g., debt service costs, QSA commitments). The Water Authority also levies Water Standby Availability Charges, capacity charges and Infrastructure Access Charges ("IAC") and receives hydroelectric power sales revenues, property tax revenues and Build America Bonds interest subsidy payments. The Water Authority's ability to generate revenue may be limited by certain provisions of the State Constitution. See **CONSTITUTIONAL LIMITATIONS**.

### **General Manager's Budget for Fiscal Year 2016 and 2017**

The General Manager's Budget for fiscal year 2016 and 2017 was adopted on June 25, 2015 by the Water Authority Board. The adopted budget is \$1.5 billion with an increase of \$34.9 million or 2 percent from the previous two-year budget. Over 90 percent of the adopted budget is spending associated with either the purchase and treatment of water, or the building and financing of infrastructure.

The biggest driver of the Water Authority's total budget is the purchase and treatment of water. The adopted budget for water purchases and treatment, which includes QSA mitigation payments and stored water purchases, increased by \$108.1 million, or 12.7 percent. This increase assumes the addition of desalinated water, lower water sales volume, flat QSA water supply volumes, the pass-through of increases in MWD's rates and charges, and scheduled increases in the QSA water prices. Offsetting the increase of water purchases and treatment is the decline of the CIP by 34 percent, which highlights significant projects nearing or reaching completion over the budget period.

Beyond the purchase of water and investment in capital assets, the adopted operating departments' budget, of approximately 6 percent of the total Water Authority budget, is \$94.1 million representing a decrease of \$4.4 million, or 4.5 percent, from the prior two-year budget. This was accomplished by reduced legal expenses related to the Water Authority's QSA water supply contracts, reclassifying some positions and eliminating others. Ongoing reviews of the agency's personnel needs in light of the shrinking CIP have led to prudent personnel cost reductions. Since Fiscal Year 2015, the Water Authority's full-time equivalent employees have decreased 6.25 positions from 254.65 to 248.40 as a result of these strategic cuts.

### **Water Authority Water Rates and Charges**

Water rates are established by the Board and are not subject to regulation by the California Public Utilities Commission or by any other local, state or federal agency. The Water Authority bills member agencies for water deliveries by the tenth business day of every month for water purchased during the prior month. Payments are due from the member agencies by the last business day of the month and are delinquent if not paid by the tenth business day of the following month.

In June 2015, a comprehensive rate and charge cost of service study was completed by an independent rate consultant. The scope of the study included an evaluation of the cost allocation methodologies and the calculation of all Water Authority rates and charges. After comparing the cost allocation methodologies and rate calculation methodologies to Board policies and statutory requirements, the consultant concluded that the Water Authority's rates and charges were in full compliance with legal and policy requirements.

Under the General Resolution, the Water Authority is required to fix rates which are reasonably fair and nondiscriminatory and which will be at least sufficient for the payment of all amounts payable from Net Water Revenues in each fiscal year and at least equal to 120 percent of Debt Service on all Bonds and Contracts. Effective January 1, 2003, the Water Authority Board implemented a rate structure designed to more effectively allocate the cost of service to its customers and to increase the proportion of revenues collected by fixed charges. Water rate categories include fixed Storage and Customer Service Charges, variable Transportation, Melded M&I Treatment and Melded M&I Supply Rates. In 2015, the Board established the new Supply Reliability Charge effective January

1, 2016. The Customer Service, Storage, and new Supply Reliability Charges are fixed charges that enable the Water Authority to mitigate revenue volatility due to variation in water sales. Agricultural customers pay the Transportation Rate and the Customer Service Charge while M&I customers pay the Transportation Rate, the Customer Service Charge, Supply Reliability and the Storage Charge, which funds the ESP. Agricultural water users have elected to receive a reduced level of service, in return for excluding the cost of the ESP from their water rate and to pay MWD's water rates instead of the Water Authority's melded supply rate. In 2013, MWD completed its phase-out of its Interim Agricultural Water Program ("IAWP"). In response to MWD's phase-out of the IAWP, the Water Authority Board adopted the Transitional SAWR for agricultural customers exiting the IAWP.

Rates effective January 1, 2016 through December 31, 2016 are as follows:

Customer Service Charge: The Customer Service Charge is set to recover costs that are necessary to support the functioning of the Water Authority, to develop policies and to implement programs that benefit the region as a whole. The Customer Service Charge is allocated among the member agencies on the basis of each agency's share of the three-year rolling average of all deliveries (excludes member agency wheeled water). The aggregate Customer Service Charge is currently \$26,400,000.

Storage Charge: The Storage Charge is set to recover costs associated with the ESP. The Storage Charge is allocated among the member agencies on the basis of each agency's share of the three-year rolling average of all non-agricultural deliveries (including all users, member agencies, and third-party wheeling throughput). The aggregate Storage Charge is currently \$63,200,000.

Supply Reliability Charge: The Supply Reliability Charge is a new fixed charge set to recover a portion of the supply costs of both desalinated and IID transfer waters. The Supply Reliability Charge is allocated among the member agencies on the basis of each agency's share of the five-year rolling average of all non-agricultural deliveries. The aggregate Supply Reliability Charge is currently \$26,000,000.

Transportation Rate: The Transportation Rate is a uniform rate set to recover capital, operating and maintenance costs of the Water Authority's aqueduct system including all facilities used to physically transport the water to member agency meters and is charged to each acre-foot of water as delivered by the Water Authority through Water Authority facilities. All users of Water Authority pipeline facilities pay the Transportation Rate. The Transportation Rate is currently \$105 per acre-foot.

Melded Untreated M&I Supply Rate: The Water Authority has a melded supply rate which recovers the cost of water supply incurred by the Water Authority. These costs include the purchase of water from MWD, IID, costs of the Canal Lining Projects, costs of MWD wheeling for non-MWD water supplies, and certain other costs associated with the QSA. The Melded Untreated M&I Supply Rate is currently \$780 per acre-foot.

Melded M&I Treatment Rate: The Water Authority has a melded treatment rate, which recovers the costs of providing treated water. The melded treatment rate includes costs associated with MWD, Helix, and Olivenhain treatment facilities, as well as the costs associated with the Water Authority's treatment plant's operations. The Melded M&I Treatment Rate is currently \$280 per acre-foot.

Transitional Special Agricultural Water Rate: The untreated Transitional SAWR rate is currently \$594 per acre-foot. The treated Transitional SAWR rate is currently \$874 per acre-foot. The Transitional SAWR program is set to end on December 31, 2020. The Board will evaluate the program in 2020 to determine the future of the program.

### **Other Water Authority Charges**

Other Water Authority rates and charges include the IAC, the Water Standby Availability Charge, the System Capacity Charge and the Treatment Capacity Charge. These charges are defined as follows:

Infrastructure Access Charge: In June 1998, the IAC was adopted as an additional source of fixed revenue to improve coverage of the Water Authority's projected fixed expenditures. The IAC is charged to each member agency based on the number and size of retail water meters within the member agency's service area. On January 1, 1999, the Water Authority began charging its member agencies an IAC based upon the total household water meter equivalents within each member agency service area as of December 31<sup>st</sup> of the previous year. The intent of the IAC is to provide the Water Authority with the balance of "fixed" revenues required to generate a minimum 25 percent ratio of fixed revenues to fixed expenditures after taking into account the Water Authority's existing fixed revenues

produced by the Water Standby Availability Charge and property taxes and excluding revenues from the fixed Customer Service Charge and Storage Charge from the calculation. The Infrastructure Access Charge effective January 1, 2016 is \$2.76 per meter equivalent per month.

Water Standby Availability Charge: The Water Authority obtained legislative authorization in 1988 to levy and collect annual Water Standby Availability Charges of up to \$10 per acre (and on each parcel less than an acre). The Water Authority implemented these \$10 Water Standby Availability Charges in the fiscal year beginning July 1, 1989. It is the policy of the Board that revenues from this source will be restricted to payment of construction expenditures under the CIP and to debt service. The Water Standby Availability Charge is deemed an assessment under Article XIII D of the California Constitution. See **CONSTITUTIONAL LIMITATIONS - Article XIII C and XIII D**. Since November 6, 1996, the Water Authority has levied the Water Standby Availability Charge at the maximum permitted level.

System Capacity Charge: In May 1990, the Water Authority Board adopted a System Capacity Charge on all new or larger retail water meters installed. The charge is designed to recover a proportionate share of the capital costs associated with providing services to new connections in the Water Authority's service area. In May 2005, the Water Authority Board approved a change in the System Capacity Charge calculation methodology, which balances the extra capacity present in the system financed by existing customers with the benefits of use by future customers. The calendar year System Capacity Charge is currently \$4,840 per meter equivalent.

Treatment Capacity Charge: In May 2005, the Water Authority Board also approved the creation of a Treatment Capacity Charge to help fund the Water Authority's regional water treatment facility. The charge recovers a portion of the capital costs from the future users of the facility. Like the System Capacity Charge, the fee is based upon the size of the meter installed. The calendar year Treatment Capacity Charge is currently \$123 per meter equivalent.

Revenues from System Capacity Charges and Treatment Capacity Charges are related directly to development activity in the Water Authority service area. Reductions in building activity may result in the receipt by the Water Authority of significantly lower System Capacity Charge and Treatment Capacity Charge revenues. See **APPENDIX B – ECONOMY OF SAN DIEGO COUNTY – Building Activity**.

### **Bankruptcy or Financial Failure of a Member Agency**

The financial failure or bankruptcy of a member agency could adversely affect the ability of such member agency to honor its obligations to the Water Authority (including its obligation to pay the purchase price of water delivered by the Water Authority to such member agency). The Water Authority is not aware of the existing or impending financial failure or bankruptcy of any member agency, but there can be no assurance that a financial failure or bankruptcy of a member agency will not occur. If a member agency were to become bankrupt, the Water Authority's right to receive payment for water delivered prior to bankruptcy but not invoiced or invoiced but not paid, for example, may be limited to the rights of an unsecured creditor of the bankrupt entity. Further, there can be no assurance that the Water Authority will be physically able or legally permitted to cease or interrupt deliveries of water to a non-paying member agency. The Water Authority believes that any reduction in Water Revenues as a result of the inability to collect payment for water delivered to a bankrupt member agency or as a result of any temporary interruption or reduction of water deliveries will not be material. The Water Authority further believes that, following such bankruptcy, the amount of water delivered for the service area currently served by such member agency will not be reduced and that the Water Authority will be able to obtain payment for such water.

### **Other Water Authority Sources of Funds**

The Water Authority receives hydroelectric power sales revenues, property tax revenues and subsidy payments from the United States Treasury relating to Build America Bonds.

*Hydroelectric Power Sales Revenues.* The Water Authority derives small amounts of operating revenue from hydroelectric sales and from miscellaneous fees and charges. The Water Authority currently has a Power Purchase and Sales Agreement with SDG&E from its Rancho Penasquitos Hydroelectric Facility.

*Property Tax Revenues.* The Water Authority receives a portion of the one percent ad valorem property tax levied and collected by the County of San Diego pursuant to Article XIII A of the California Constitution. Member agencies of the Water Authority may elect to pay in-lieu charges instead of the tax levy. The Water Authority's share of ad valorem tax revenues allocated by the County that is not used to pay voter-approved indebtedness is

available to pay Maintenance and Operation Costs. There is currently no voter-approved indebtedness outstanding. The Water Authority is expressly empowered under the Act to levy taxes on all taxable property within its boundaries for the purpose of paying its voter-approved indebtedness and, subject to certain limitations in the Act, the California Revenue and Taxation Code and the California Constitution, for other Water Authority purposes. See **CONSTITUTIONAL LIMITATIONS**.

Proposition 1A, enacted by California voters in 2004 as an amendment to the State Constitution, is intended to, among other things, stabilize local government revenue sources by restricting the State's control over local property taxes. Proposition 1A allows the State to divert up to eight percent of local property tax revenues for State purposes only if: (i) the Governor declares such action to be necessary due to a State fiscal emergency; (ii) two-thirds of both houses of the Legislature approve the action; (iii) the amount diverted is required by statute to be repaid within three years; (iv) the State does not owe any repayment to local agencies for past property tax or Vehicle License Fee diversions to local agencies; and (v) such property tax diversions do not occur in more than two of any ten consecutive fiscal years.

*Build America Bond Interest Subsidy Payments.* The Water Authority is entitled to receive Interest Subsidy Payments in connection with the payment by the Water Authority of interest on the 2010B Bonds. The Water Authority is unable to predict whether any Interest Subsidy Payments to be received by the Water Authority will at any point be suspended, reduced or terminated. The Federal Government's sequestration has impacted the subsidy received to offset the debt service on the BABs. For this Federal fiscal year ending September 30, 2016, provided there are no changes to the federal budget status, the Water Authority expects to receive a total of \$10,534,357 which is, \$768,602 (6.8 percent) less than the subsidy payments originally projected for such fiscal year.

### **Cost of MWD Water**

The water rates charged by MWD are the principal cost to the Water Authority of MWD water. However, the Water Authority is also obligated to pay MWD's Readiness-to-Serve ("RTS") Charge and Capacity Charge, which are described below. The Water Authority recovers its share of RTS and Capacity Charge costs through a direct pass-through of the charges to the Water Authority's member agencies. Full service water sales are subject to the applicable Supply Rate, Delta Supply Surcharge, System Access Rate, System Power Rate, Water Stewardship Rate and Treatment Surcharge, when needed, which are discussed below. Effective January 1, 2016, the combined rate is \$594 per acre-foot for untreated Tier 1 deliveries and \$942 per acre-foot for treated Tier 1 deliveries. MWD adopted its rates and charges for calendar years 2017 and 2018 on April 12, 2016. MWD's IAWP and Replenishment Program were discontinued on December 31, 2012.

MWD's water rates are established by majority weighted vote of the MWD Board and are not subject to regulation by the California Public Utilities Commission or by any other local, state or federal agency. Rates must be lawful and, subject to certain provisions of the MWD Act, be uniform for any class of service, and no water may be provided free of charge. Under the MWD Act, MWD is required, so far as is practicable, to fix such rate or rates for water as will result in revenue which will pay the operating expenses of MWD, provide for repairs and maintenance, provide for payment of the purchase price or other charges for property or services or other rights acquired by MWD and provide for the payment of the interest and principal of the bonded debt of MWD, subject to the applicable provisions of the MWD Act authorizing the issuance and retirement of such bonds.

The MWD rate structure allocates MWD's water costs into separate rates and charges intended to reflect the different services (Supply System Power Rate, Treatment Surcharge, System Access Rate, Water Stewardship Rate, RTS and Capacity Charge) provided by MWD.

The following adopted MWD rates and charges became effective January 1, 2016 and will remain in effect until December 31, 2016:

Tier 1 and Tier 2 Water Supply Rates: The Tier 1 and Tier 2 Water Supply Rates are designed to recover MWD's water supply costs. The Tier 2 Water Supply Rate is designed to reflect MWD's costs of acquiring new supplies. MWD member agencies will be charged the Tier 1 or Tier 2 Water Supply Rate for water purchases. Effective January 1, 2016, the Tier 1 Water Supply Rate is \$156 per acre-foot and the Tier 2 Water Supply Rate is \$290 per acre-foot.

Delta Supply Surcharge: The Delta Supply Charge, which began in 2010, was created to reflect the impact of Delta pumping restrictions on MWD's finances. This charge was suspended after 2012.

System Access Rate: The System Access Rate is intended to recover a portion of the costs associated with the conveyance and distribution system, including capital, operating and maintenance costs. All users (including member agencies and third-party wheeling entities) of the MWD system will pay the System Access Rate. Effective January 1, 2016, the System Access Rate is \$259 per acre-foot.

Water Stewardship Rate: The Water Stewardship Rate will be charged on a dollar per acre-foot basis to collect revenues to support MWD's financial commitment to conservation, water recycling, groundwater recovery and other water management programs approved by MWD. The Water Stewardship Rate will be charged for every acre-foot of water conveyed by MWD. Effective January 1, 2016, the Water Stewardship Rate is \$41 per acre-foot.

System Power Rate: The System Power Rate will be charged on a dollar per acre-foot basis to recover the cost of power necessary to pump water from the SWP and Colorado River through the conveyance and distribution system for MWD's member agencies. The System Power Rate will be charged for all MWD supplies. Entities wheeling water will continue to pay the actual cost of power to convey water on the SWP, the Colorado River Aqueduct or the MWD distribution system, whichever is applicable. Effective January 1, 2016, the System Power Rate is \$138 per acre-foot.

Treatment Surcharge: MWD will continue to charge a Treatment Surcharge on a dollar per acre-foot basis on treated deliveries. The Treatment Surcharge is set to recover the cost of providing treated water service, including capital and operating costs. Effective January 1, 2016, the Treatment Surcharge is \$348 per acre-foot.

*MWD Fixed Charges.* In addition to the rates and charges discussed above, MWD also levies fixed charges on its member agencies. The Water Authority treats these charges as direct pass-through costs and allocates them to member agencies based upon water deliveries.

Capacity Charge: The Capacity Charge is a fixed charge levied on the maximum per day demand placed with the system by the member agency. Effective January 1, 2016, the Capacity Charge is \$10,900 per cubic foot per second of maximum daily flow requested. The Water Authority Board has directed that the Capacity Charge will be recovered proportionately based on a five-year rolling average of member agency flows during coincidental peak weeks. For the calendar year 2016 the charge is \$12,406,380.

Readiness-to-Serve Charge: MWD's RTS charge is designed to recover the principal and interest payments on non-tax supported debt service issued to fund capital improvements necessary to meet continuing reliability and water quality needs associated with current demands. For the fiscal year ending June 30, 2016, the Water Authority's RTS charge is expected to generate \$34,766,044.

MWD member agencies have the option to utilize MWD's existing standby charge as a means to collect their RTS charge. Standby charge collections are credited against the member agencies' RTS charges. The Water Authority has elected to collect a portion of its RTS charge through standby charges. The standby charge levied within the Water Authority's service area to finance the Water Authority's RTS obligation is presently \$11.51 per parcel. These charges are expected to generate \$12,620,131 in the fiscal year ending June 30, 2016. Standby charges are classified as assessments by the terms of Article XIID of the California Constitution. See **CONSTITUTIONAL LIMITATIONS**.

The net RTS charge to the Water Authority for the fiscal year ending June 30, 2016 is \$22,145,912, which includes MWD's administrative fees, and is being passed through to the Water Authority's member agencies. The net RTS charge is allocated among MWD member agencies on the basis of each agency's ten-year rolling average of firm demands (including water transfers and exchanges conveyed through system capacity). This allocation is revised each year.

*Other MWD Levies and Impositions.* MWD also levies ad valorem taxes on property within the Water Authority's service area, which MWD collects directly from San Diego County.

*MWD Water Rate Challenge.* The Water Authority filed *San Diego County Water Authority v Metropolitan Water District of Southern California, et al.* on June 11, 2010 challenging MWD's 2011 and 2012 rates. Because the case was still pending and MWD continued to adopt new rates based on the same cost of service methodology, the Water Authority filed additional lawsuits against MWD in 2012 and 2014 challenging MWD's 2013 and 2014 rates, and 2015 and 2016 rates, respectively. The core legal issues and facts in these two cases are similar. Each lawsuit asserts that MWD's rates assign water supply costs to transportation in violation of State law and the State constitution. All three cases allege that MWD has breached its contract by setting its water rates to discriminate

against the Water Authority by artificially inflating the price charged for wheeling (transporting) water independently obtained by the Water Authority through MWD's pipes by an improper allocation of certain supply related costs, including the majority of SWP costs and MWD's costs for conservation and local resource projects to the wheeling rate it charges the Water Authority.

The Water Authority's lawsuits also challenge MWD's termination and withholding of further funding agreements with the Water Authority for local water supply development projects and conservation programs as a result of its rate challenge; MWD's local supply development and conservation subsidies are funded through its Water Stewardship Rate. MWD collects tens of million dollars annually from the Water Authority through the Water Stewardship Rate.

In another cause of action, the Water Authority asserts that MWD incorrectly excluded the transportation revenues it collects from the Water Authority in its calculation of the Water Authority's preferential right to MWD water supplies, further discriminating against the Water Authority.

The 2010 and 2012 lawsuits were tried in the San Francisco Superior Court. The cases are being heard in two phases, with all claims against MWD's rates heard in the first phase, followed by the breach of contract and preferential rights claims in the second phase. By stipulation of the parties, the 2014 case (challenging MWD's 2015 and 2016 rates) has been stayed in San Francisco Superior Court pending the outcome of the 2010 and 2012 cases.

On April 24, 2014, San Francisco Superior Court Judge Curtis E.A. Karnow issued his phase one decision and ruled that in setting rates for 2011, 2012, 2013 and 2014, MWD violated cost of service requirements of California law, including the wheeling statute, common law and, for the 2013 and 2014 rates, the California Constitution (Proposition 26, now Article XIII C) by assigning water supply costs to transportation. The court invalidated the System Access Rate, System Power Rate, Water Stewardship Rate, and MWD's wheeling rate for 2011, 2012, 2013, and 2014. The court also held that the Water Authority had not met its prima facie burden of establishing that MWD's failure to account for standby costs of dry-year peaking renders MWD's Transportation Rates unconstitutional and unlawful. On August 28, 2015, Judge Karnow issued a final ruling for phase two. The ruling awards \$188.3 million plus interest to the Water Authority for illegal water rates MWD charged from 2011 through 2014. Judge Karnow also ruled that MWD under-calculated the Water Authority's right to MWD water supplies. As part of the Water Authority's Exchange Agreement with MWD wherein MWD agreed to transport the Water Authority's independently obtained supplies through MWD's facilities, MWD is contractually required to set aside the disputed amount of the Water Authority's payments to MWD in a separate interest bearing account during the pendency of the litigation. On November 19, 2015, Judge Karnow issued his final judgment that affirmed his two prior rulings in the Water Authority's favor. The final judgment concludes the trial court phase of the lawsuits that were filed in 2010 and 2012. The trial court's decision is being appealed. The case that was filed in 2014 is stayed. Immediately after MWD enacted its 2017-2018 rates in April 2016, the Water Authority again filed suit in Los Angeles County Superior Court challenging MWD's rates, which case is pending.

### **Cost of IID Water**

The rate charged for untreated IID water for calendar year 2016 is \$1,069 per acre-foot inclusive of the MWD wheeling charge. The cost of the IID water consists of (1) the price paid to IID, and (2) the MWD charge for exchanging the transfer water at Lake Havasu for a like amount delivered to the Water Authority in its service area. On December 21, 2009 the Water Authority and IID settled a dispute over the price per acre-foot for conserved water and executed a Fifth Amendment to the Water Transfer Agreement (the "Fifth Amendment"). Pursuant to the Fifth Amendment, for calendar years 2016 through 2034, the price per acre-foot for IID water (exclusive of MWD transportation charge) will be based on the annual increase in the Gross Domestic Product Implicit Price Deflator as published by the Bureau of Economic Analysis of the United States Department of Commerce in the Survey of Current Business applied to the prior year price per acre-foot. In 2016 the price paid to IID increased from \$624 per acre-foot to \$631 per acre-foot in accordance with the formula in the Fifth Amendment. Also pursuant to the Fifth Amendment, the Water Authority paid IID \$6,000,000 on December 31, 2009 and \$50,000,000 on October 1, 2010. If a transfer stoppage occurs as a result of QSA litigation after the fifty million dollar payment is made, IID shall pay to the Water Authority the following amount, as identified on the table set forth below.

Transfer Stoppage Date	Amount of IID Repayment
2016	\$9,000,000
2017	6,000,000
2018-2020	5,000,000

See **WATER AUTHORITY WATER SUPPLY – Quantification Settlement Agreement - Quantification Settlement Agreement Related Litigation**. Beginning in 2035, either the Water Authority or IID can, if certain criteria are met, elect a market rate price through a formula described in the Water Transfer Agreement. The 2014 adopted cost for MWD’s exchange of water, or the wheeling rate, is \$438 per acre-foot from January 1 through December 31, 2016. Future wheeling rates shall be equal to the charge set by MWD pursuant to applicable law and regulation generally applicable to the conveyance of water by MWD on behalf of its member agencies. See **Cost of MWD Water**.

See **INFORMATION CONCERNING THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA**.

#### **Cost of Water Conserved from Canal Lining Projects**

The Water Authority does not pay a supply cost for water received from the AACLP and CCLP; however, an estimated \$15 per acre-foot is necessary for operations and maintenance expenses at the canals. Any construction cost that exceeds State funding will be recovered in the Melded M&I Supply Rate. The total project cost of the CCLP was \$129 million of which \$87 million was available from the State General Fund and Proposition 50 funds. The total project cost for the AACLP was \$319 million of which \$170 million was available from the State General Fund, Proposition 50 funds, and Proposition 87 funds. The Water Authority financed the costs that exceeded State funding on both canal lining projects. The Water Authority will pay MWD the same wheeling rate for this water as it will pay for the IID transfer water. See **WATER AUTHORITY WATER SUPPLY - Quantification Settlement Agreement**.

#### **Cost of Seawater Desalination Water from Carlsbad Project**

The Carlsbad Project’s Desalination Water Purchase Agreement establishes a contract price for water delivered and establishes both conditions precedent for contract price changes and limits on the cumulative change in contract price over the contract term. The per-acre-foot charge for water made available from the Carlsbad Project produces an amount sufficient to pay debt service on the Series 2012 Plant Bonds, an equity return and variable and fixed operating costs, including certain costs relating to consumable inputs, such as energy and chemicals, and labor at the Carlsbad Project. While there are efficiency requirements in the Desalination Water Purchase Agreement governing the Carlsbad Project’s energy consumption, Poseidon will ultimately pass-through the energy costs to the Water Authority. Other costs associated with the project, including replacement chemicals and labor, are indexed to inflation.

The unit cost of desalinated water from the Carlsbad Project, inclusive of debt service on the Desalination Bonds and the Pipeline Bonds, is estimated to be \$2,307 and \$2,355 per acre-foot in fiscal years ending June 30, 2016 and June 30, 2017, respectively, for production at a 48,000 acre-feet per year level. The Carlsbad Project came online in December 2015. For the first full year of desalinated water deliveries in 2016, typical monthly costs will be about \$5 per household, at the low end of the Water Authority’s 2012 forecast. Product water delivered to the Water Authority from the Carlsbad Project beyond the 48,000 acre-feet annual commitment, up to 56,000 acre-feet at the request of the Water Authority will be supplied, subject to availability, at rates equal to the variable costs of producing such water, including charges for electricity. See **Financial Commitments Related to the Carlsbad Project** and **WATER AUTHORITY WATER SUPPLY – The Claude “Bud” Lewis Carlsbad Desalination Plant**.

#### **Fixed Rate Debt**

The Water Authority has no voter-authorized general obligation water bonds and there are no authorized but unissued general obligation bonds of the Water Authority.

Upon issuance of the 2016AB Bonds, obligations comprised of 1998A Certificates, 2005A Certificates, 2008A Certificates, 2010A Bonds, 2010B Bonds, 2011A Bonds, 2011B Bonds 2013A Bonds and 2015A Bonds in

aggregate principal amounts of \$11,685,000, \$43,495,000, \$48,965,000, \$17,590,000, \$526,135,000, \$111,555,000, \$94,540,000, \$299,105,000 and \$184,795,000 respectively, will be outstanding. The 2016AB Bonds are Bonds payable from Net Water Revenues on a parity with this outstanding fixed rate debt. The Water Authority expects to issue the 2016S-1 Bonds in June 2016 in the aggregate principal amount of \$87,685,000 as fixed-rate Subordinate Obligations in order to refund certain Commercial Paper Notes. See **PLAN OF REFUNDING**.

### Variable Rate Debt

The Water Authority's only form of variable rate debt outstanding consists of commercial paper notes. Upon completion of the termination described under **Plan of Refunding**, Commercial Paper Notes in an aggregate principal amount of \$345,000,000 will be outstanding. The Commercial Paper Notes and certain payments to the banks providing liquidity support for the Commercial Paper Notes are Subordinate Obligations. The Water Authority currently projects to commence the reduction of the amount of outstanding commercial paper in 2020.

The Water Authority has no interest rate exposure relating to auction rate securities. The Water Authority has not entered into any interest rate swap agreements or similar hedging arrangements with respect to its outstanding debt obligations, nor is it permitted to do so under its current debt management policy.

Upon completion of the transactions described under **Plan of Refunding**, the outstanding series of Commercial Paper Notes for which a line of credit has been obtained, the provider of each line of credit supporting such series, the facility expiration date, and the principal component supported by each facility will be as follows.

Series	Line of Credit Provider	Facility Expiration Date	Principal Amount of Notes Supported
8	The Bank of Tokyo – Mitsubishi UFJ, Ltd, acting through its New York Branch	June 27, 2017	\$110,000,000
9	Bank of America, N.A.	July 16, 2018	135,000,000
Total			\$245,000,000

The lines of credit are each subject to termination or suspension upon the occurrence of certain events, including failure by the Water Authority to make certain payments, the occurrence of certain bankruptcy or insolvency related events or the reduction below specified levels or the withdrawal or the suspension (other than for non-credit related reasons) of ratings on certain obligations of the Water Authority payable from Water Revenues. In addition amounts drawn under a line of credit would likely bear interest at rates higher than the interest rates borne by the Commercial Paper Notes and amortization would be required.

The Water Authority also has an extendable commercial paper program for which there is no line of credit support. Upon completion of the transaction described under **Plan of Refunding**, ECP Notes in the aggregate principal amount of \$100,000,000 will be outstanding.

### Financial Commitments Related to the Carlsbad Project

The Carlsbad Project has been financed in part with proceeds of the Desalination Bonds issued by the CPCFA on December 24, 2012. The proceeds of the Series 2012 Plant Bonds, issued in an aggregate principal amount of \$530,345,000, were loaned to Poseidon pursuant to a Loan Agreement, dated December 24, 2012 (the "Desalination Plant Loan Agreement"), between the CPCFA and Poseidon, for the purpose of financing the cost of acquiring, constructing, installing, improving and equipping of the desalination plant and certain related and ancillary facilities. The proceeds of the Series 2012 Pipeline Bonds, issued in an aggregate principal amount of \$203,215,000, were loaned to the San Diego County Water Authority Financing Agency pursuant to a Pipeline Loan Agreement, dated December 24, 2012 (the "Desalination Pipeline Loan Agreement"), between the CPCFA and the San Diego County Water Authority Financing Agency, for the purpose of financing the cost of developing, designing, engineering, acquiring and constructing the Desalination Pipeline. CPCFA pledged and assigned its rights to receive loan repayments from Poseidon under the Desalination Plant Loan Agreement to the trustee for the Series 2012 Plant Bonds for the benefit of the holders thereof, and has pledged and assigned its rights to receive loan repayments under the Desalination Pipeline Loan Agreement to the trustee for the Series 2012 Pipeline Bonds for the benefit of the holders thereof; and the respective series of Desalination Bonds will be paid from and secured by

such loan repayments. During the period prior to the commencement of commercial operation of the Carlsbad Project, however, Poseidon is responsible for completion of construction of the Carlsbad Project and for any payment obligations with respect to the Desalination Bonds arising from delay in construction or default by Poseidon on its construction or payment obligations.

In connection with the Carlsbad Project, the Water Authority entered into the Desalination Water Purchase Agreement with Poseidon. Payments to be made by the Water Authority under Desalination Water Purchase Agreement with Poseidon are contingent upon ongoing deliveries of product water of the quality and in the quantities specified in the Desalination Water Purchase Agreement. Following the commencement of commercial operation of the Carlsbad Project, the Desalination Water Purchase Agreement obligates the Water Authority to purchase from Poseidon, and obligates Poseidon to sell to the Water Authority, all of the product water produced by the Carlsbad Project meeting the Water Authority's quality standards. The Water Authority has agreed to purchase from the Carlsbad Project annually a minimum of 48,000 acre-feet of product water meeting such standards, subject to availability of qualifying water from the Carlsbad Project. Two Water Authority member agencies, Vallecitos Water District and Carlsbad Municipal Water District, will purchase a combined total of 6,000 acre-feet of the 48,000 acre-feet of product water from the Water Authority as their own local supply under separate contracts with the Water Authority.

Upon request of the Water Authority, Poseidon must supply to the Water Authority up to an additional 8,000 acre-feet of water, totaling 56,000 acre-feet of water annually from the Carlsbad Project, an amount accounting for roughly one-third of all water generated within the Water Authority service area. Assuming Poseidon makes available product water from the Carlsbad Project of the quality and in the annual quantities contemplated under the Desalination Water Purchase Agreement, the Water Authority's payments for product water under the Desalination Water Purchase Agreement will be in amounts sufficient to pay debt service on the Series 2012 Plant Bonds, fixed and variable operating costs of the desalination plant, and a negotiated return on equity to Poseidon's investors.

In connection with the Carlsbad Project and the construction of the Desalination Pipeline, the Water Authority entered into the Desalination Installment Sale Agreement with the San Diego County Water Authority Financing Agency pursuant to which the Water Authority agreed to make the Desalination Installment Payments to the San Diego County Water Authority Financing Agency for the construction and purchase of the Desalination Pipeline, and the Water Authority has agreed to act as the agent for the San Diego County Water Authority Financing Agency with respect to the construction of the Desalination Pipeline. In addition, the Water Authority entered into the Desalination Pipeline DBA with Poseidon pursuant to which Poseidon is obligated to undertake the design and construction of the Desalination Pipeline. Poseidon, in turn, entered into a Product Water Delivery System Engineering, Procurement and Construction Contract with Kiewit Shea Desalination, a joint venture of Kiewit Infrastructure West Co. and J.F. Shea Construction Company, providing for the construction of the Desalination Pipeline.

Loan repayments to be made by the San Diego County Water Authority Financing Agency to CPCFA pursuant to the Desalination Pipeline Loan Agreement are payable solely from the proceeds of Desalination Installment Payments the San Diego County Water Authority Financing Agency receives from the Water Authority. Commencing upon the commercial operation of the Carlsbad Project, the Water Authority is obligated to pay Desalination Installment Payments in an amount equal to principal and interest on the Series 2012 Pipeline Bonds coming due, together with amounts necessary to satisfy reserve requirements relating to the Series 2012 Pipeline Bonds and certain fees and expenses of the trustee for such bonds. The Water Authority's obligation to make such Desalination Installment Payments will, however, be reduced by certain amounts already on deposit with the trustee for payment of the Series 2012 Pipeline Bonds and by certain amounts payable by Poseidon under the Desalination Water Purchase Agreement and the Desalination Pipeline DBA relating to Poseidon's failure to perform specified obligations under those agreements resulting in construction delays or product water delivery failures, whether or not Poseidon actually pays such amounts.

Scheduled annual debt service payments on the Series 2012 Plant Bonds and the Series 2012 Pipeline Bonds range from approximately \$26.5 million and \$10 million, respectively, in fiscal year ending June 30, 2017 (the first full fiscal year following commencement of commercial operations) to a high of approximately \$53.1 million and \$20.5 million, respectively, in the fiscal year ending June 30, 2046. Total costs payable by the Water Authority for 48,000 acre-feet of product water during the fiscal year ending June 30, 2017, including debt service on the Desalination Bonds and certain operating and maintenance expenses of the Carlsbad Project (subject to the availability of product water meeting the Water Authority's quality standards pursuant to the terms of the

Desalination Water Purchase Agreement), are projected to be approximately \$113.6 million. Of this amount, \$14.2 million will be paid by member agencies contracting for desalinated water, leaving \$99.4 million to be paid by the Water Authority. Completion of the desalination plant occurred in December 2015. Purchases of water pursuant to the Desalination Water Purchase Agreement will constitute Operation and Maintenance Costs, while installment payments to be made pursuant to the Desalination Installment Sale Agreement are obligations payable from amounts constituting Net Water Revenues on deposit in the General Reserve Fund established under the General Resolution, subordinate to the pledge of Net Water Revenues for the payment of Bonds, Contracts, Reimbursement Obligations and Subordinate Obligations. See **SECURITY AND SOURCES OF PAYMENT**.

After 30 years of plant operation, the Water Authority has the option, but not the obligation, to purchase the plant for \$1. The Water Authority also has the right to buy the facility after 10 years for a negotiated amount, though it is not required to do so.

### **Future Financial Commitments Related to the QSA**

The following future financial commitments of the Water Authority related to the QSA are all payable from Net Water Revenues on a subordinate basis to debt service on the Subordinate Obligations.

*Socioeconomic Mitigation Payments.* On May 8, 2007 the Water Authority and IID executed an agreement that settled all disputes related to the payment by the Water Authority for potential third-party socioeconomic impacts from the water transfer. The value of the settlement was \$50 million, of which the Water Authority agreed to pay \$40 million. The Water Authority has already paid \$31.18 million into a fund for potential socioeconomic impacts and the remaining \$8.82 million will be paid in equal annual installments of \$2.94 million between 2015 and 2017. IID and the Water Authority recognize that in exchange for the commitments in the settlement agreement between the two parties, IID will remain solely responsible for any additional socioeconomic mitigation funding necessary to mitigate the impacts of the IID fallowing program for transfer of conserved water to the Water Authority and to mitigate impacts on the Salton Sea in connection with the water transfer should the SWRCB, the California Legislature, or any court order additional funding for such purpose.

*Water Authority Prepayment for Water.* Pursuant to the Revised Fourth Amendment to the Conserved Water Transfer Agreement between IID and the Water Authority, in December 2007 the Water Authority made a payment of \$10 million to IID for future deliveries of water. Beginning in 2018 through the end of 2033, if not repaid sooner, IID will credit the Water Authority's monthly invoice \$55,555.56 plus interest accrued after 2018.

*QSA JPA Environmental Mitigation Payments.* Pursuant to the QSA Funding Agreement, the Water Authority is scheduled to make annual payments through 2025 in support of the environmental mitigation requirements related to the QSA. See **WATER AUTHORITY WATER SUPPLY – Quantification Settlement Agreement**.

### **Financial Management Policies**

In August 2006, the Board adopted two enhancements to the Water Authority's financial management policies. These policy enhancements were phased-in over a three year period. The adopted enhancements include setting a 1.50x coverage target for senior lien debt service (1.00x coverage excluding capacity charges) and setting a new target and maximum fund balance for the Rate Stabilization Fund.

The new target for debt service coverage is designed to both enhance the Water Authority's credit ratings and increase the cash funding of the CIP. As a result of the increased cash funding of the CIP, the Water Authority anticipates cash will be used to fund approximately 30 percent of CIP expenditures.

The Rate Stabilization Fund is designed to mitigate the negative financial impacts of decreased water sales resulting from wet weather, supply restrictions and conservation. The enhanced Rate Stabilization Fund target balance is equal to the negative financial impact of 2.5 years of wet weather and the maximum fund balance is set equal to the negative financial impact of 3.5 years of wet weather. The Rate Stabilization Fund is also available to be used to mitigate the impact of extraordinary conservation efforts. As of June 30, 2015, the Water Authority had approximately \$115.4 million on deposit in the Rate Stabilization Fund and had a target Rate Stabilization Fund balance of approximately \$79.1 million and a maximum level of \$119.1 million. While the Water Authority is not obligated to maintain any funds in the Rate Stabilization Fund, achieving the target level is a significant financial management milestone for the Water Authority and was accomplished earlier than expected.

## Cash and Investments

The Water Authority's cash and investments are segregated by restricted and unrestricted amounts. Restricted cash and investments include the Pay-as-You-Go, Bond and Debt Service Reserve funds. At June 30, 2015, the breakdown between restricted and unrestricted amounts is as follows:

Current assets:	
Cash and investments	\$111,130,235
Restricted cash and investments	<u>170,873,233</u>
Total current assets	\$282,003,468
Noncurrent assets:	
Cash and investments	\$115,405,373
Restricted cash and investments	<u>70,039,820</u>
Total noncurrent assets	<u>185,445,193</u>
Total cash and investments	<u>\$467,448,661</u>

See **APPENDIX A – WATER AUTHORITY FINANCIAL STATEMENTS.**

## Investment Policy

The investment policies and practices of the Board and the Treasurer of the Water Authority are based upon limitations placed on it by governing legislative bodies. These policies have three primary goals:

1. To assure compliance with all Federal, State and local laws governing the investment of monies under the control of the Treasurer.
2. To protect the principal monies entrusted to the Water Authority.
3. To generate the maximum amount of investment income within the parameters of the Water Authority's Annual Statement of Investment Policy.

The primary objectives of the Water Authority's investment policy are:

- Safety
- Liquidity
- Yield (after the basic requirements of safety and liquidity have been met)
- Public trust (participants in the investment process are custodians of the public trust)

The Water Authority Board reviews and amends the Water Authority's investment policy from time-to-time.

## HISTORICAL OPERATING RESULTS

### Water Authority Revenues

*Water Sales Revenues.* The following table provides the total water sales by the Water Authority during the fiscal years ended June 30, 2011 through June 30, 2015 that resulted in the water sales revenue in the "Gross Receipts from Water Authority Water Sales" table.

## HISTORICAL WATER AUTHORITY WATER SALES

Fiscal Years Ended June 30	Water Authority Water Sales (acre-feet) <sup>1</sup>
2011	419,155
2012	442,642
2013	482,013
2014	522,453
2015	494,957

<sup>1</sup> Water sales does not include under 1,000 acre-feet per year of contract water sales.

The following table provides a summary of the Water Authority's gross receipts from water deliveries to member agencies for the fiscal years ended June 30, 2011 through June 30, 2015.

### GROSS RECEIPTS FROM WATER AUTHORITY WATER SALES<sup>1</sup> Fiscal Years Ended June 30 (In Thousands)

<u>MEMBER AGENCY</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
Carlsbad M.W.D.	\$ 16,729	\$ 18,771	\$ 21,736	\$23,942	\$23,192
Del Mar, City of	907	1,008	1,157	1,198	1,140
Escondido, City of	11,058	16,451	21,630	23,524	22,427
Fallbrook P.U.D.	11,125	12,323	13,981	15,971	15,480
Helix W.D.	17,918	23,684	29,583	35,292	33,721
Lakeside W.D.	3,397	3,843	4,493	4,948	4,124
Oceanside, City of	19,669	23,718	26,392	29,460	28,676
Olivenhain M.W.D.	14,677	17,089	22,539	22,755	22,376
Otay W.D.	31,332	35,212	39,944	44,692	42,890
Padre Dam M.W.D.	11,951	13,236	14,863	16,156	14,944
Pendleton Military Reservation	57	67	64	72	76
Poway, City of	9,177	10,378	12,112	13,851	12,295
Rainbow M.W.D.	17,430	21,335	24,723	28,093	25,622
Ramona M.W.D.	5,668	6,932	7,866	8,391	7,672
Rincon del Diablo M.W.D.	6,003	6,794	8,477	9,132	8,046
San Diego, City of	144,473	162,875	189,884	205,769	217,734
San Dieguito W.D.	1,992	2,803	2,642	5,308	5,628
Santa Fe I.D.	4,258	5,937	6,436	10,691	10,173
Sweetwater Authority <sup>2</sup>	7,309	6,085	4,308	13,400	14,117
Vallecitos W.D.	16,001	18,391	21,435	23,598	21,640
Valley Center M.W.D.	24,542	28,700	32,765	35,839	32,816
Vista I.D.	10,764	13,705	18,344	20,243	18,100
Yuima M.W.D.	1,443	1,186	2,273	4,964	5,075
Total <sup>3</sup>	<u>\$ 387,880</u>	<u>\$ 450,523</u>	<u>\$527,647</u>	<u>\$ 597,289</u>	<u>\$ 587,964</u>

<sup>1</sup> Gross sales represent total water sales invoiced less adjustments for certain items such as agricultural and reclaimed water, treatment credits, and infrastructure access charges.

<sup>2</sup> Represents sales to the City of National City and South Bay I.D. for which Sweetwater Authority acts as purchasing agent.

<sup>3</sup> In addition to the total water sales revenue shown, in some years the Water Authority has also received a minor amount of revenues from adjacent water districts that provide water to customers within the Water Authority's service area under operating agreements. These revenues are not included in this chart.

*Water Standby Availability Charges.* Total revenues from Water Standby Availability Charges for fiscal years ended June 30, 2014 and June 30, 2015 were \$11,137,248 and \$11,106,743 respectively.

*System Capacity Charges.* In 1989, the Act was amended to give the Water Authority the power to fix and impose capacity charges upon each member agency within the Water Authority or upon the ultimate users of water delivered by the Water Authority to the member agency. It is the policy of the Board that revenues from this source will be restricted to pay construction expenditures under the CIP and to pay debt service. The current capacity charge is \$4,840 per connection under one inch. A factor, depending on the size of the larger meter, is applied to such base charge to determine the cost of each larger meter. Total revenues from System Capacity Charges collected for fiscal years ended June 30, 2014 and June 30, 2015 were \$13,381,714, and \$22,042,877, respectively.

*Treatment Capacity Charges.* In May 2005, the Board also approved the creation of a Treatment Capacity Charge to help fund the Water Authority's regional water treatment facility. The charge recovers a portion of the capital costs from the future users of the facility. Total revenues from treatment capacity charges collected for fiscal years ended June 30, 2014 and June 30, 2015 were \$433,480 and \$516,967, respectively.

*Infrastructure Access Charges.* The IAC charges collected for fiscal years ended June 30, 2014 and June 30, 2015 were \$29,205,684 and \$29,895,726, respectively.

*Non-Operating Revenues.* Total revenues from hydroelectric sales for the fiscal years ended June 30, 2014 and June 30, 2015 were \$3,860,169 and \$3,686,804, respectively. Other non-operating revenues from fiscal years ended June 30, 2014 and June 30, 2015 totaled \$3,808,736 and \$3,517,925, respectively.

*Property Tax Revenues.* Ad valorem tax revenues allocated to the Water Authority by the County, net of payments to the State's Educational Revenue Augmentation Fund and refunds for the fiscal years ended June 30, 2014 and June 30, 2015 totaled \$9,387,129 and \$9,577,280, respectively. In-lieu revenue for the fiscal years ended June 30, 2014 and June 30, 2015 totaled \$1,754,973 and \$1,898,327, respectively.

## **Operating Expenses and Depreciation and Amortization**

The primary component of the Water Authority's operating expenses consists of the cost of water sales. The cost of water sales primarily consists of water purchases from MWD and IID. For the fiscal years ended June 30, 2014 and June 30, 2015, the cost of water sales was \$422,699,658 and \$411,037,897, respectively. The balance of operating expenses consists of operations and maintenance, planning and general and administrative costs. For the fiscal years ended June 30, 2014 and June 30, 2015, these costs totaled \$39,303,000 and \$44,897,403, respectively. Depreciation and amortization charges for the years ended June 30, 2014 and June 30, 2015 totaled \$56,589,618 and \$57,751,284 respectively.

## **Summary of Historical Operating Results**

The following table summarizes the Water Authority's operating revenues, operating expenses and net revenues for the five fiscal years ended June 30, 2011 through June 30, 2015. Depreciation and amortization expenses are neither operating expenses nor debt service and are not reflected in the table. The operating revenues, operating expenses and net water revenues in each of said fiscal years shown are derived from the Financial Statements of the Water Authority. The Financial Statements of the Water Authority for the years ended June 30, 2015 and the report thereon of Macias, Gini & O'Connell, LLP, Independent Auditors, are included as Appendix A to this Official Statement. The following table should be read in conjunction with such Financial Statements. Macias, Gini & O'Connell, LLP have not reviewed the following table.

Over the past five years, the Water Authority, like many California water agencies, has experienced a dramatic decrease in the volume of water sales due to a number of factors including mandatory supply reductions, weather and conservation. The Water Authority's quick response to changing conditions with both rate and charge increases and budget cuts, combined with the Water Authority's water rate and change structure (including a significant level of fixed revenues) enabled the Water Authority to keep on track with respect to the achievement of key financial policy objectives. After the \$22.0 million and \$28.5 million deposits into the Rate Stabilization Fund ("RSF") in fiscal years ended June 30, 2014 and June 30, 2015, net revenues achieved the Board's policy coverage goal of 1.50x. The main drivers for increased revenues are due to reduced water sales due to long-term impacts of State water regulations, MWD calendar year 2017 rate and charge increases and meeting the rate and charge goals and objectives outlined by Board policies.

Debt Service Coverage for Bonds and Contracts has been calculated in accordance with the provisions of the General Resolution, which excludes deposits to the RSF from Water Revenues and includes withdrawals from the RSF as Water Revenues. In fiscal year ended June 30, 2011 no transfer was made from the RSF. The Debt

Service Coverage ratios for fiscal year ended June 30, 2010 was 1.50x. The coverage level in fiscal year ended June 30, 2011 and June 30, 2012 show a dip in coverage, primarily due to the Water Authority's efforts to mitigate the impact of rate and charge increases due to reduced sales. In fiscal years ended June 30, 2013, June 30, 2014 and June 30, 2015, the coverage levels returned to the Board's 1.50x policy levels. Deposits to the RSF were made in fiscal years ended June 30, 2012 through June 30, 2015.

**HISTORICAL OPERATING RESULTS\***  
(In Thousand Dollars)  
(Fiscal Years Ended June 30)

	2011	2012	2013	2014	2015
Operating Revenue					
Water Sales <sup>1</sup>	\$382,922	\$443,348	\$523,456	\$593,695	\$584,173
Water Standby Availability Charge	11,255	11,241	11,147	11,137	11,107
Capacity Charges	10,321	11,099	17,710	13,815	22,560
Infrastructure Access Charges <sup>2</sup>	24,508	27,700	28,675	29,206	29,896
Total Operating Revenue	<b>429,006</b>	<b>493,388</b>	<b>580,988</b>	<b>647,853</b>	<b>647,736</b>
Plus Withdrawals from or Minus Deposits to the Rate Stabilization Fund	—	(7,250)	(12,500)	(22,000)	(28,500)
BABs Interest Rate Subsidy <sup>3</sup>	11,303	11,303	11,303	10,269	10,476
Non-Operating Revenue <sup>4</sup>	6,091	5,419	5,058	7,670	7,205
Total Revenues <sup>5</sup>	<b>446,400</b>	<b>502,860</b>	<b>584,849</b>	<b>643,792</b>	<b>636,917</b>
Operating Expenses <sup>6</sup>					
Costs of Sales	275,099	312,447	371,258	422,700	411,038
Other Maintenance & Operations Costs <sup>7</sup>	39,570	37,510	41,576	39,303	44,897
Total Operating Expenses	<b>314,669</b>	<b>349,957</b>	<b>412,834</b>	<b>462,003</b>	<b>455,935</b>
Application of Net Tax Receipts	9,654	9,882	10,796	11,142	11,476
Net Operating Expenses	305,015	340,075	402,038	450,861	444,459
Net Water Revenue Available for Debt Service Revenue Supported Debt Service <sup>8</sup>	<b>141,385</b>	<b>162,785</b>	<b>182,811</b>	<b>192,931</b>	<b>192,458</b>
1997A Certificates	18,690	6,403	—	—	—
1998A Certificates	555	555	555	555	555
2002A Certificates	18,341	9,370	292	—	—
2004A Certificates	20,929	19,534	7,798	2,163	1,262
2005A Certificates	5,581	17,208	17,127	16,852	17,113
2008A Certificates	26,291 <sup>9</sup>	29,643	36,776	38,181	37,819
2010AB Bonds	13,676 <sup>9</sup>	18,570 <sup>10</sup>	37,017	38,576	39,497
2011A Bonds	—	5,760	13,271	13,237	13,232
2011B Bonds	—	3,569	4,688	4,707	4,707
2013A Bonds	—	—	4,194	13,982	13,982
Total Bonds Debt Service	<b>104,063</b>	<b>110,612</b>	<b>121,718</b>	<b>128,253</b>	<b>128,167</b>
Subordinate Obligation Payments					
Commercial Paper <sup>11</sup>	3,111	3,068	3,080	2,480	1,708
2011S-1 Bonds	—	4,272	4,272	4,272	4,272
Total Subordinate Obligation Payments	<b>3,111</b>	<b>7,340</b>	<b>7,352</b>	<b>6,752</b>	<b>5,980</b>
Balance Available After Debt Service and Subordinate Obligation Payments	<b>34,211</b>	<b>44,833</b>	<b>53,741</b>	<b>57,926</b>	<b>58,311</b>
Bonds Debt Service Coverage Ratio (Per General Resolution) <sup>12</sup>	1.36x	1.47x	1.50x	1.50x	1.50x
Bonds Debt Service and Subordinate Obligation Coverage Ratio <sup>12</sup>	1.34x	1.41x	1.44x	1.45x	1.45x

\* Some amounts are prepared on a basis other than generally accepted accounting principles.

<sup>1</sup> Water sales represent accrued sales to member agencies, as well as a small amount of revenues from the treatment of raw water and certain miscellaneous income items. See **Water Sales Revenue**.

<sup>2</sup> Infrastructure access charge was implemented January 1999 and is levied on retail water meters within the service area. See **Infrastructure Access Charge**.

<sup>3</sup> Build America Bonds receive a subsidy of interest payable from the United States Treasury.

<sup>4</sup> Non-operating revenue consists of interest earnings on Water Authority funds (excluding interest earnings on bond proceeds and the Rate Stabilization Fund) and other revenues (hydroelectric sales, penalties, etc.).

<sup>5</sup> Total revenues include amounts transferred to and from the Rate Stabilization Fund, and property taxes, contributions in aid of capital assets, and CIP grant reimbursements.

<sup>6</sup> Operating expenses exclude depreciation and amortization expenses.

<sup>7</sup> Includes operations, maintenance, planning, and general and administrative costs; excludes capital equipment purchases.

<sup>8</sup> Includes only debt service on Water Authority indebtedness payable from Net Water Revenues. Senior lien debt service does not include trustee fees.

<sup>9</sup> Excludes \$1,500,000 interest payment on the 2008A COPs and \$23,340,158 interest payment on the 2010A&B Bonds, which was paid with bond proceeds.

<sup>10</sup> Excludes \$18,447,012 interest payment on the 2010A&B Bonds, which was paid with bond proceeds.

<sup>11</sup> Includes the commercial paper program interest costs and program fees.

<sup>12</sup> Coverage ratios do not include program fees.

## PROJECTED OPERATING RESULTS

The Water Authority's Long-Range Financing Plan ("LRFP") serves as the financial foundation supporting the long-term strategic objectives of the Water Authority to deliver a safe and reliable water supply to member agencies. The LRFP was updated and adopted by the Board in January 2016 (the "2015 LRFP") and serves as the foundation for the capital financing plan that is incorporated into the projections presented herein. The development and update of the LRFP is a collaborative process involving significant member agency input and review at both the staff and Board levels. The LRFP is based upon the Water Authority's Facilities Master Plan and Urban Water Management Plan and provides long-term forecasts of revenues and expenditures for both operating and capital investment activities. It also contains detailed discussions of fund policies and investment objectives, capital financing sources and strategies, reserve policies, and sensitivity analyses.

The core assumptions embedded in the LRFP are those that have significant financial impacts and included water sales, local supplies, cost of imported water and transportation and the CIP. The financial projections included in the 2015 LRFP are based upon the high rate and charge assumptions, which deviate from the baseline/expected CIP and water sales levels discussed previously in the LRFP. By using the high rate and charge assumptions a more conservative financial outlook is provided. The high and low rate and charge guidance provided in the LRFP is especially important to the member agencies as they develop their own financing plans.

The 2015 LRFP highlights Water Authority's transition to an operations and asset management focused agency from a construction oriented agency. The baseline \$582 million ten-year CIP is a much more modest spending level when compared to the 2008 update of the LRFP. The largest component of the CIP is Asset Management, which makes up more than 40% of the ten-year CIP. The Water Authority's CIP project mix has shifted from a construction oriented agency towards an asset management agency focused on refurbishing existing assets that have been in service for a long time. As a result, the Water Authority updated its PAYGO/Cash funding target mix to 30% from the 23% target set in 2008 to reflect the types of CIP projects on the horizon and the availability of PAYGO funds to support the new target. Funding these projects with PAYGO/cash helps balance intergenerational equity by implementing a more pay-as-you-use approach to project funding. This approach also reduces the amount of planned new debt issuances over the planning period. The LRFP is available at the Water Authority's website. The LRFP is not part of this Official Statement and is not incorporated by reference herein.

In addition to the LRFP, the Water Authority has a long history of financial planning activities. In March 2011, the Board identified long-term fiscal sustainability as a key challenge facing the Water Authority and other water agencies at its Board Planning Retreat. Like many other water suppliers, the Water Authority's water supply and business environment had changed in unprecedented ways. Major reductions in water sales, a struggling economy, significant restrictions and future risks on Bay-Delta imported water supplies, increased emphasis on local supply development, enhanced water use efficiency and significant increases in the cost of water have changed the dynamics of the Water Authority's business and finances. Additionally, the Water Authority must manage the long-term commitments and obligations it has made to secure a reliable water supply for the Region. These commitments to supply diversification and facility improvements include major accomplishments like the Colorado River supplies resulting from the QSA, the Carlsbad Desalination Project, the ESP and the Carryover Storage Project.

In response to the Board Planning Retreat discussions, the chairman of the Water Authority Board established the Fiscal Sustainability Task Force ("FSTF"). The FSTF's objective was to further the discussion on fiscal sustainability and implement changes. The FSTF discussion was focused on key financial issues identified through discussions in the Board room and with staff.

The FSTF first established the "Guiding Principles" to assist in the evaluation of proposals and recommendations for changes to existing rates and charges or financial policies with the objective of ensuring the long-term fiscal sustainability of the Water Authority. The Guiding Principles have been used by the FSTF in its deliberations and serve to aid the Board and staff when recommending changes or additions to the Water Authority's rates and charges structure, or financial policies in the future.

In May 2013, a comprehensive cost of service study was completed. The study evaluated the Water Authority's rate and charge setting methodologies and the integration of the Desalination Project's costs into rates and charges. After extensive outreach with member agencies and other stakeholders, the study formalized the

integration of the Desalination Project costs into rates and charges. In addition the study found that the Water Authority rates and charges were set in compliance with cost of service principles and California Law.

Starting in March 2014, the Administrative and Finance Committee (“the Committee”) continued the discussions on preserving and enhancing the Water Authority’s fiscal sustainability. The focus of these discussions were on longer-term policy issues, including how to address revenue volatility, ensure equity amongst member agencies and balancing local supply development with the supply reliability provided by the Water Authority. The marquis accomplishment of this effort was the creation of the Supply Reliability Charge (“SRC”). This new fixed charge not only ensures that an equitable portion of the Water Authority’s investments in regional supply reliability is paid by all member agencies regardless of demand profile but also decreases water sales revenue volatility by reducing the amount of revenue collected on volumetric rates. The charge recovers the cost of highly reliable water supplies that include desalinated and IID transfer waters. The charge is allocated to member agencies based upon their pro rata share of the Water Authority’s 5-year rolling M&I deliveries (agricultural deliveries are not included). The SRC is effective January 1, 2016. The charge for calendar year 2016 is \$26.0 million and for calendar year 2017 will be set at \$24.8 million. In addition, the Board approved the consistent allocation of non-commodity revenue to the treatment rate category and the extension of the Transitional SAWR through calendar year 2020. See **MEMBER AGENCY WATER USE – Agricultural Water Use**.

At the conclusion of the fiscal sustainability process, the Water Authority hired an independent rate and charge consultant to perform a new comprehensive cost of service study to ensure proper implementation of the fiscal sustainability process recommendations and validate that the calendar year 2016 rates and charges comply with cost of service principles and California law. As a result of this multi-year process, the Water Authority believes that it is well positioned financially as it enters the current period of water supply uncertainty.

The General Manager’s adopted bi-annual budget for fiscal years ending June 30, 2016 and June 30, 2017, which is the basis for the financial projections, includes a partial year of desalinated water deliveries from the Carlsbad Project in fiscal year ending June 30, 2016 and all financial projections starting in fiscal year ending June 30, 2017 include the full annual delivery to the Water Authority of 42,000 acre-feet of desalinated water at the contracted price adjusted for expected inflation.

The following table showing the projection of Water Authority revenues, expenses and debt service coverage for the five-year period ending June 30, 2020 has been prepared by the Water Authority and reflects certain significant assumptions. It is based upon the Water Authority’s judgment of the most probable occurrence of certain important future events and upon certain information provided to it. The assumptions described below are material in the development of the Water Authority’s financial projections, and variations in the assumptions may produce substantially different financial results. Actual operating results achieved during the projection period may vary from those presented in the projection and such variations may be material. The Water Authority’s independent auditors, Macias, Gini & O’Connell, LLP, have not examined, reviewed, or compiled the accompanying projections and accordingly, they assume no responsibility for such projections.

**PROJECTED OPERATING RESULTS\***  
**(In Thousand Dollars)**  
**(Fiscal Years Ending June 30)**

	2016	2017	2018	2019	2020
Operating Revenue					
Water Sales <sup>1</sup>	\$509,832	\$560,527	\$607,305	\$663,621	\$721,273
Water Standby Availability Charge	11,250	11,258	11,275	11,292	11,309
Capacity Charges <sup>2</sup>	15,000	15,150	15,301	15,454	15,609
Infrastructure Access Charges <sup>3</sup>	30,434	31,088	32,435	33,691	34,756
<b>Total Operating Revenue</b>	<b>566,516</b>	<b>618,023</b>	<b>666,316</b>	<b>724,058</b>	<b>782,947</b>
Plus Withdrawals from or Minus Deposits to the Rate Stabilization Fund	(6,163)	20,050	17,000	(2,606)	(8,655)
BABs Interest Rate Subsidy <sup>4</sup>	10,534	11,303	11,303	11,303	11,303
Non-Operating Revenue <sup>5</sup>	7,668	7,914	8,346	8,328	8,474
<b>Total Revenues<sup>6</sup></b>	<b>578,556</b>	<b>657,291</b>	<b>702,965</b>	<b>741,083</b>	<b>794,069</b>
Operating Expenses <sup>7</sup>					
Cost of Sales <sup>8</sup>	371,728	431,222	472,168	515,409	564,046
Other Maintenance & Operations Costs <sup>9</sup>	49,390	48,960	50,429	52,117	53,680
<b>Total Operating Expenses</b>	<b>421,118</b>	<b>480,182</b>	<b>522,597</b>	<b>567,526</b>	<b>617,726</b>
Application of Net Tax Receipts	11,700	11,934	12,173	12,416	12,664
<b>Net Operating Expenses</b>	<b>409,418</b>	<b>468,248</b>	<b>510,424</b>	<b>555,110</b>	<b>605,062</b>
Net Water Revenue Available for Debt Service	169,137	189,043	192,541	185,973	189,006
Revenue Supported Debt Service <sup>10</sup>					
1998A Certificates	555	555	555	555	555
2005A Certificates	16,771	17,157	16,057	725	725
2008A Certificates	16,983	16,832	18,899	9,103	9,193
2010AB Bonds	37,980	37,145	37,144	37,138	37,146
2011A Bonds	13,230	13,224	13,234	13,219	13,218
2011B Bonds	4,707	4,707	4,707	4,707	4,707
2013A Bonds	13,982	13,982	13,982	27,883	27,880
2015A Bonds	6,905	8,910	8,910	15,802	16,193
2016AB Bonds	1,756	13,390	14,817	14,817	14,817
Additional Bonds	-	-	-	-	1,538
<b>Total Bonds Debt Service</b>	<b>112,868</b>	<b>125,902</b>	<b>128,304</b>	<b>123,949</b>	<b>125,971</b>
Subordinate Obligation Payments <sup>11</sup>	7,845	8,579	9,394	14,363	13,555
Balance Available After Debt Service and Subordinate Obligation Payments	48,424	54,562	54,844	47,661	49,480
Bonds Debt Service Coverage Ratio (per General Resolution)	1.50	1.50	1.50	1.50	1.50
Bonds Debt Service and Subordinate Obligation Coverage Ratio (per General Resolution) <sup>12</sup>	1.42	1.42	1.42	1.36	1.37
Bonds Debt Service Coverage Ratio (for Water Authority financial planning) <sup>13</sup>	1.36	1.34	1.33	1.28	1.29

\* Totals may not add due to rounding.

<sup>1</sup> See **Projected Operating Revenue - Water Sales Revenue** for water sales and water rate projections.

<sup>2</sup> Includes System Capacity Charge and Treatment Capacity Charge revenues.

<sup>3</sup> See **Projected Operating Revenue - Infrastructure Access Charge** for an explanation of this charge.

<sup>4</sup> Assumes Build America Bonds receive a subsidy of interest payable from the United States Treasury.

<sup>5</sup> Non-operating revenue consists of interest earnings on Water Authority funds (excluding interest earnings on bond proceeds and the Rate Stabilization Fund) and other revenues (hydroelectric sales, penalties, etc.).

<sup>6</sup> Total revenues are adjusted for amounts transferred to and from the Rate Stabilization Fund, and excludes interest earned on debt proceeds, property taxes, contributions in aid of capital assets and CIP grant reimbursements.

<sup>7</sup> Operating expenses exclude depreciation and amortization expenses.

<sup>8</sup> Reflects the Water Authority's MWD rate estimates and includes the operating costs of the TOVWTP and starting in FY 2016 the cost of the desalinated water purchased under the Water Purchase Agreement.

<sup>9</sup> Excludes the operating costs of the TOVWTP and minor capital equipment purchases.

<sup>10</sup> Excludes trustee fees.

<sup>11</sup> Includes debt service on 2016S-1 Bonds and Commercial Paper Notes, including interest on Commercial Paper Notes and program fees. Reflects issuance of the ECP Notes and the refinancing of certain outstanding Commercial Paper Notes.

<sup>12</sup> Includes debt service on 2016S-1 Bonds, and assumed debt service on the Commercial Paper Notes in accordance with the Water Authority's current financial projections. Coverage ratios do not include program fees. Reflects issuance of the ECP Notes and the refinancing of certain outstanding Commercial Paper Notes.

<sup>13</sup> "Cost of Sales" does not include Desalination Installment Payments, which do not constitute Maintenance and Operation Costs under the General Resolution. See **FINANCIAL OPERATIONS - Financial Commitments Relating to the Carlsbad Project**. If Desalination Installment Payments were included, "Costs of Sales" would have been \$376,000 in FY2016, \$440,000 in FY2017, \$481,000 in FY2018, \$525,000 in FY2019 and \$574,000 in FY2020.

## Projected Operating Revenue

*Water Sales Revenue.* Projected water sales revenue is based on the amount of water projected to be purchased by member agencies from the Water Authority and the prices charged by the Water Authority for such water. The forecast of water sales has taken into consideration estimates made by MWD about the availability of water supplies for delivery to its member agencies, including the Water Authority, and considers the water available through the contractual commitments of the QSA.

Fiscal year ended June 30, 2015 showed a decline in water sales reflecting the response to the Governor's call to reduce statewide water use by 25%. On June 25, 2015, the Water Authority Board approved a 6.6 percent increase in the cost of untreated water and 5.4 percent increase for treated water purchases by member agencies for calendar year 2016. These increases are mitigated by rate relief measures that included the debt restructuring completed in fiscal year ended June 30, 2015. The Water Authority Board is expected to approve the 2017 calendar year rates at the June 23, 2016 Board meeting.

Short-term water sales projections are a challenge due to the State's water supply outlook and continued dry conditions. See **WATER AUTHORITY WATER SUPPLY – Current California Drought**. Projecting the impact of mandatory water use restrictions and future drought conditions on the Water Authority's water sales levels is challenging. The Water Authority's water sales levels are a function of water demand in the region (dry vs. wet conditions) and the availability of member agency local supplies. With limited local supplies (i.e. drought conditions) member agencies rely more heavily on the Water Authority's supplies, which increase water sales. Mandatory restrictions on the other hand reduce regional demand and reduce Water Authority sales levels. These two factors work against each other and can help to mitigate the Water Authority's water sales volatility. Water sales projections for fiscal years ending June 30, 2016 and June 30, 2017 are based upon below normal demand conditions.

The largest determinant of the Water Authority's long-term projected water sales is expected demand from its member agencies. The demand forecast includes both M&I water demand and agricultural water demand. For M&I demand, which accounts for approximately 90 percent of total water demand within the Water Authority's service area, the Water Authority uses a computer model to forecast sectorial based regional water demands. The "CWA-MAIN," model utilizes data from the SANDAG's 2030 Regional Forecast, including number of persons per household by housing type, housing density, household income and employment counts by major industry group. This demographic and economic data is used by the model to compute water demand trends anticipated to occur in the Water Authority's service area over the next 20 years. The model also includes assumptions concerning pricing and water conservation. The Water Authority anticipates continued below average sales due to the long-term impact of State water regulations.

Agricultural water demand accounts for approximately ten percent of total water demand within the Water Authority's service area. See **MEMBER AGENCY WATER USAGE – Agricultural Water Usage**. Since the early 1990s, agricultural demands have ranged from a low of approximately 34,000 acre-feet in fiscal year ended June 30, 2011, to over 100,000 acre-feet in fiscal year ended June 30, 2004. Agricultural water demand projections for the Water Authority's service area were based on SANDAG land use projections, crop-type distribution data from DWR, and regional crop water use coefficients. MWD phased out its IAWP on December 31, 2012. As part of the three-year phase-out, IAWP customers were able to opt out of the program at the start of each calendar year and become M&I customers. IAWP customers that opted out of the program were eligible to enter the Water Authority's Transitional SAWR program, which is scheduled to remain in place through December 31, 2020. Agricultural water demand is projected to remain relatively flat at the current levels, due to reductions in demand as a result of conservation efforts as well as changes in the make-up of the regions agribusiness, which has shifted from fruit crops towards floriculture and other higher value crops.

The following table provides the total water demand forecast used to project water sales revenue in the “**Projected Operating Results**” table above. The projected decrease between actual fiscal year ended June 30, 2015 and forecasted fiscal year ending June 30, 2016 Water Authority sales is attributable to the Governor’s Emergency Proclamation and Executive Orders that require a reduction in urban water agencies’ demand. The forecast incorporates the Water Authority’s mandatory conservation standards under the current drought regulation on future sales. The sales forecast is shown in the table below and incorporated into the financial projections provided above.

**PROJECTED WATER AUTHORITY WATER SALES<sup>1</sup>**

<u>Fiscal Years Ended June 30</u>	<u>Water Authority Water Sales (acre-feet)</u>
2016	416,615
2017	427,771
2018	430,269
2019	438,099
2020	442,054

<sup>1</sup> Water sales projections shown are those used in most recent rate setting analyses.

The water sales revenue projection is also based on Water Authority water rates charged per acre-foot and through fixed charges by the Water Authority for each fiscal year of the projection period. The Water Authority melds the cost of water purchases from MWD, IID and desalination and adds an additional component to provide the balance of revenues not provided through other rates and charges to finance its operating and capital costs. The charges for water purchased from MWD have varied over recent years, and the current charge is \$594 per acre-foot for untreated non-interruptible water and \$942 per acre-foot for treated non-interruptible water. The projection assumes the MWD rate structure adopted in April 2016 for calendar years 2017 and 2018 and assumes an annual increase thereafter that reflects supply and future infrastructure investments (e.g. Bay-Delta improvements). Current indications are that the Water Authority will be able to purchase the majority of its water at MWD’s Tier 1 rate. Projections assume that approximately 30 percent of the water purchased from MWD is treated water. Furthermore, with the TOVWTP in operation, treated water purchases from MWD are projected to be significantly lower than in the past.

The estimated average treated water rate is projected to go from \$1,460/acre-foot to \$1,877/acre-foot over the projection period due to among other things the scheduled delivery of desalinated water from the Carlsbad Project. The average rate includes both the Water Authority’s commodity rates, which includes the Melded Supply & Treatment and Transportation, and the fixed charges (Storage, Customer Service and Supply Reliability Charge) converted to a \$/acre-foot estimate based upon projected sales. It is important to note that this is just an average and the actual rates paid by each member agency will vary depending on their water usage.

If water sales, or other expected revenues, should be less than required to meet the Water Authority’s financial obligations, the Water Authority expects to use monies in the Rate Stabilization Fund and, if necessary, to increase its water rates.

*Water Standby Availability Charges.* The number of acres or parcels to which the Water Standby Availability Charges apply is projected based upon fiscal year ended June 30, 2015 collections and the SANDAG 2020 population forecast, indicating housing units and non-residential developed acres. Water standby availability charge collections for the fiscal year ending June 30, 2015 were \$11.1 million. Water standby availability charges are projected to be relatively flat through fiscal year ending June 30, 2020.

*Capacity Charges.* In fiscal year ended June 30, 2006, the capacity charge revenue, which includes the System Capacity and the Treatment Capacity charges revenue, peaked at \$33.9 million and subsequently plummeted to \$10.3 million in fiscal year June 30, 2011. Since then the capacity charge revenue has rebounded to \$22.6 million for fiscal year ended June 30, 2015. The capacity charge revenue is projected conservatively by taking into account historical volatility and using a longer term historical average to project revenues increasing from \$15.0 million in fiscal year ending June 30, 2016 to \$15.6 million in fiscal year ending June 30, 2020. The capacity charges are expected to be administratively adjusted annually for regional inflation.

*Infrastructure Access Charge.* The IAC is based upon the total household meter equivalents within each member agency service area as of December 31<sup>st</sup> of the previous year. The intent of the IAC is to provide the Water Authority with the balance of “fixed” revenues required to generate a 25 percent ratio of fixed revenues to fixed expenditures, taking into account the Water Authority’s existing fixed revenues produced by the Water Standby Availability Charge and property taxes. The Water Authority’s IAC was set at \$1.00 per meter equivalent per month at its inception on January 1, 1999. The IAC is currently set at \$2.76 per meter equivalent and is expected to generate approximately \$33.12 million in the fiscal year ending June 30, 2016, and is expected to increase to \$38.26 million by the end of the forecast period in the fiscal year ending June 30, 2020. Increasing debt service and operating expenses will increase the amount of revenues required to be generated by the IAC, increasing this charge to approximately \$3.19 per meter equivalent per month by the end of the forecast period.

*Non-Operating Revenue.* This includes revenues derived from the Water Authority’s hydroelectric facilities. The hydroelectric revenues are projected to \$3.5 million by the fiscal year ending June 30, 2020. Other non-operating revenue consists of revenues derived from the investment of Water Authority funds, including the proceeds of debt issuances. This revenue is based upon conservative investment earnings rates and projected fund balances during the projection period. Total Non-Operating Revenue is projected to reach \$8.5 million by the fiscal year ending June 30, 2020.

*Property Tax Revenues.* Tax revenues are used to offset certain operating expenditures of the Water Authority. The net tax revenues and in-lieu charges were \$11.5 million for the fiscal year ended June 30, 2015 and are expected to grow to \$12.7 million by the fiscal year ending June 30, 2020.

*Rate Stabilization Fund Transfers.* The RSF was established for the purpose of avoiding fluctuations in the water rate. A \$28.5 million deposit into the RSF for the fiscal year ended June 30, 2015 was completed, increasing the balance to \$115.4 million. In the fiscal year ending June 30, 2016, the Water Authority is projecting to make a deposit.

### **Projected Operating Expenses**

*MWD Water Purchases.* The Water Authority purchases its water from MWD at rates set by MWD. The Water Authority passes MWD water costs through to member agencies and adds its additional water supply rate component. MWD’s calendar year 2017 and 2018 rates are \$666 and \$695 per acre-foot of untreated full service water and \$979 and \$1,015 per acre-foot of treated non-interruptible water.

The Water Authority assumes in its projections that approximately 39 percent of the water sold is treated water in calendar year 2016. Looking forward, more untreated water will be purchased from MWD and treated at the Water Authority’s treatment facility as the Water Authority optimizes its treatment operations. Both MWD untreated water purchases and treatment operations are impacted by the desalination plant water production. These factors combined reduce the percent of treated water supplied by MWD to 14 percent in calendar year 2020. This reduction in MWD treated water purchases lowers the projected cost of MWD water but increases the Water Authority’s costs, which includes the cost of operating the treatment facility and of purchasing desalinated water. Because of MWD’s recent rate volatility, only limited rate and charge projections data is available from MWD. As a result, the Water Authority projects MWD’s rates and charges based upon supply and infrastructure cost projections.

In addition to the cost of water based upon MWD water rates, MWD also charges its member agencies an RTS Charge and a Capacity Charge.

The RTS Charge is an MWD fixed charge based upon average historical water purchases by MWD member agencies. The Water Authority’s MWD RTS payment is offset each year by the amount of MWD standby charge collected within the Water Authority’s service area to produce a “net” RTS Charge payable by the Water Authority as part of purchased water costs. The Water Authority passes this charge through to its member agencies based upon the identical calculation methodology used by MWD to apportion the charge among its member agencies. The table provided below provides a projection of the RTS Charge payable by the Water Authority over the next five fiscal years. The net RTS Charge also includes administrative costs imposed by MWD.

**PROJECTED MWD READINESS-TO-SERVE CHARGE  
PAYABLE BY THE WATER AUTHORITY**

Fiscal Years <u>Ending June 30</u>	<u>Gross RTS</u>	MWD Assessed <u>Standby Credit</u>	<u>Net RTS Charge</u> <sup>1</sup>
2016	\$34,766,044	(\$12,620,131)	\$22,145,912
2017	31,277,430	( 12,653,852)	18,623,577
2018	32,215,753	( 13,033,468)	19,182,285
2019	33,182,225	( 13,424,472)	19,757,754
2020	34,177,692	( 13,827,206)	20,350,487

<sup>1</sup> Totals may not add due to rounding

*Cost of IID Water.* The cost of IID water is projected to be \$1,277 per acre-foot by the fiscal year ending June 30, 2020, including MWD wheeling charges.

*Cost of All-American Canal Lining Project and Coachella Canal Lining Project Water.* The cost of water from the canal lining projects is projected to be \$579 per acre-foot by the fiscal year ending June 30, 2020, including MWD wheeling charges.

*Cost of the Carlsbad Project.* Beginning in the fiscal year ending June 30, 2017, the first full year of production, the desalination plant is projected to produce a minimum of 48,000 acre-feet a year. Of the 48,000 acre-feet of water produced by the desalination plant, the Water Authority expects to receive at least 42,000 acre-feet with the remaining 6,000 acre-feet being purchased directly by Water Authority member agencies. Although under the General Resolution the Desalination Installment Payments are not Maintenance and Operations Costs, for planning purposes, the cost of the desalinated water is included in the cost of water. The projected cost of desalinated water in the fiscal years ending June 30, 2017 and June 30, 2018 is approximately \$101.8 million and \$104.2 million for 42,000 acre-feet of product water.

*Other Maintenance and Operations Costs.* Other Water Authority operating expenses, consisting of system operations and maintenance, planning and general and administrative costs are projected to be approximately \$49.4 million in the fiscal year ending June 30, 2016, which is the first year of the current bi-annual budget. Costs for the fiscal years ending June 30, 2016 and 2017 are based upon the Water Authority adopted bi-annual budget. Future increases are due to inflationary pressures and are projected to increase operating expenditures to \$53.7 million in fiscal year ending June 30, 2020.

*Debt Service.* Over the projection period, long-term debt (including existing debt proceeds) and short-term debt are expected to fund approximately \$186 million in capital expenditures over the projection period. The projections anticipate a new long-term debt issuance in 2017 with capitalized interest through fiscal year ending June 30, 2019.

In addition to the projections provided in this section, the Water Authority expects to continue the financing of its CIP through a combination of funds, including proceeds derived from the sale of long-term fixed rate debt, variable rate debt and cash generated from Water Authority operations. Overall, the Water Authority plans to fund approximately 30 percent of its \$2.8 billion CIP with cash and the balance from a combination of long-term fixed rate debt, short-term debt and variable rate debt. The financial projections included in this Official Statement reflect a long-term adherence to the overall funding ratio, rather than an attempt to maintain this ratio of funding in individual years.

**CONSTITUTIONAL LIMITATIONS**

**Article XIII A**

The taxing powers of California public agencies are limited by Article XIII A of the California Constitution, added by an initiative amendment approved by the voters on June 6, 1978, and commonly known as Proposition 13.

Article XIII A limits the maximum ad valorem tax on real property to one percent of “full cash value,” which is defined as “the County Assessor’s valuation of real property as shown on the fiscal year 1975-76 tax bill under ‘full cash value’ or, thereafter, the appraised value of real property when purchased, newly constructed, or a change in ownership has occurred after the 1975 assessment.” The full cash value may be adjusted annually to reflect inflation at a rate not to exceed 2 percent per year, or reduction in the consumer price index or comparable local data, or declining property value caused by damage, destruction, or other factors.

The tax rate limitation referred to above does not apply to ad valorem taxes to pay the debt service on any indebtedness approved by the voters before July 1, 1978, or on any bonded indebtedness for the acquisition or improvement of real property approved by two-thirds of the votes cast by the voters voting on the proposition.

Under the terms of Article XIII A and pursuant to an allocation system created by implementing legislation, each county is required to levy the maximum ad valorem tax permitted by Article XIII A and to distribute the proceeds to local agencies, including special districts such as the Water Authority. The allocation of property tax revenues among special districts, while subject to certain statutory procedures and criteria, is largely discretionary with each county.

Assessed valuation growth allowed under Article XIII A (new construction, change of ownership and 2 percent annual value growth) is allocated on the basis of sites among the jurisdictions that serve the tax rate area within which the growth occurs. Local agencies and schools share the growth of base revenues from the tax rate area. Each year’s growth allocation becomes part of each agency’s allocation in the following year. The availability of revenues from tax bases to such entities were affected by the establishment of redevelopment agencies that, under certain circumstances, may be entitled to such revenues resulting from the upgrading of certain property values.

Under California law, any fee that exceeds the reasonable cost of providing the service for which the fee is charged may be considered a “special tax,” which under Article XIII A must be authorized by a two-thirds vote of the electorate. Accordingly, if a portion of the Water Authority’s water user rates or capacity charges were determined by a court to exceed the reasonable cost of providing service, the Water Authority would not be permitted to continue to collect that portion unless it were authorized to do so by a two-thirds majority of the votes cast in an election to authorize the collection of that portion of the rates or fees. If the Water Authority were unable to obtain such a two-thirds majority vote, such failure could adversely affect the Water Authority’s ability to pay the debt service with respect to the 2016AB Bonds. However, the reasonable cost of providing water services has been determined by the State Controller to include depreciation and allowance for the cost of capital improvements. In addition, the California courts have determined that fees such as capacity charges will not be special taxes if they approximate the reasonable cost of constructing the water system improvements contemplated by the local agency imposing the fee.

The United States Supreme Court has upheld Article XIII A against a challenge alleging violation of equal protection under the Fourteenth Amendment to the United States Constitution.

### **Articles XIII C and XIII D**

Proposition 218, a State ballot initiative known as the “Right to Vote on Taxes Act,” was approved by the voters on November 5, 1996. The initiative added Articles XIII C and XIII D to the California Constitution, creating additional requirements for the imposition by most local governments of “general taxes,” “special taxes,” “assessments,” “fees,” and “charges.” The Water Authority and its members are local governments within the meaning of Articles XIII C and XIII D. Articles XIII C and XIII D became effective, pursuant to their terms, as of November 6, 1996, although compliance with some of the provisions was deferred until July 1, 1997, and certain of the provisions purport to apply to any tax imposed for general governmental purposes (i.e., “general taxes”) imposed, extended or increased on or after January 1, 1995 and prior to November 6, 1996.

Article XIII D imposes substantive and procedural requirements on the imposition, extension or increase of any “fee” or “charge” subject to its provisions. A “fee” or “charge” subject to Article XIII D includes any levy, other than an ad valorem tax, special tax or assessment, imposed by an agency upon a parcel or upon a person as an incident of property ownership. Article XIII D prohibits, among other things, the imposition of any proposed fee or charge, and, possibly, the increase of any existing fee or charge, in the event written protests against the proposed fee or charge are presented at a required public hearing on the fee or charge by a majority of owners of the parcels

upon which the fee or charge is to be imposed. Except for fees and charges for water, sewer and refuse collection services, the approval of a majority of the property owners subject to the fee or charge, or at the option of the agency, by a two-thirds vote of the electorate residing in the affected area, is required within 45 days following the public hearing on any such proposed new or increased fee or charge. In the view of the Water Authority, rates for water usage charged by the Water Authority to its member agencies are not fees or charges under Article XIID, although no assurance may be given by the Water Authority that a court would not determine otherwise.

The California Supreme Court decisions in *Richmond v. Shasta Community Services District*, 32 Cal. 4th 409 (2004) (“*Richmond*”), and *Bighorn-Desert View Water Authority vs. Verjil*, 39 Cal. 4th 2005 (2006) (“*Bighorn*”) have clarified some of the uncertainty surrounding the applicability of Section 6 of Article XIID to service fees and charges. In *Richmond*, the Shasta Community Services District charged a water connection fee, which included a capacity charge for capital improvements to the water system and a fire suppression charge. The Court held that both the capacity charge and the fire suppression charge were not subject to Article XIID because a water connection fee is not a property-related fee or charge because it results from the property owner’s voluntary decision to apply for the connection. Under this reasoning the Water Authority’s capacity charge is not subject to Article XIID. In both *Richmond* and *Bighorn*, however, the Court stated that a fee for ongoing water service through an existing connection is imposed “as an incident of property ownership” within the meaning of Article XIID, rejecting, in *Bighorn*, the argument that consumption-based water charges are not imposed “as an incident of property ownership” but as a result of the voluntary decisions of customers as to how much water to use.

Article XIID also provides that “standby charges” are considered “assessments” and must follow the procedures required for “assessments” under Article XIID and imposes several procedural requirements for the imposition of any assessment, which may include (1) various notice requirements, including the requirement to mail a ballot to owners of the affected property; (2) the substitution of a property owner ballot procedure for the traditional written protest procedure, and providing that “majority protest” exists when ballots (weighted according to proportional financial obligation) submitted in opposition exceed ballots in favor of the assessments; and (3) the requirement that the levying entity “separate the general benefits from the special benefits conferred on a parcel” of land. The Water Authority has not increased its Water Standby Availability Charge since the enactment of Article XIID. Any increase to the Water Authority’s current standby charge could require notice to property owners and approval by a majority of such owners returning mail-in ballots approving or rejecting any imposition or increase of such standby charge. Article XIID also precludes standby charges for services that are not immediately available to the parcel being charged. This could adversely impact the ability of the Water Authority and its member agencies to collect standby charges on undeveloped land.

Article XIID provides that all existing, new or increased assessments are to comply with its provisions beginning July 1, 1997. Existing assessments imposed on or before November 5, 1996, and “imposed exclusively to finance the capital costs or maintenance and operations expenses for water” are exempted from some of the provisions of Article XIID applicable to assessments. The Water Authority has authorized and imposed water standby charges since 1989.

Article XIIC extends the people’s initiative power to reduce or repeal previously authorized local taxes, assessments, fees and charges. This extension of the initiative power is not limited by the terms of Article XIIC to fees, taxes, assessment fees and charges imposed after November 6, 1996 and absent other authority could result in retroactive reduction in any existing taxes, assessments, fees or charges. In *Bighorn*, the Court concluded that under Article XIIC local voters by initiative may reduce a public agency water rates and delivery charges. The Court noted, however, that it was not holding that the authorized initiative power is free of all limitations, stating that it was not determining whether the electorate’s initiative power is subject to the public agency statutory obligation to set water service charges at a level that will “pay the operating expenses of the agency, ... provide for repairs and depreciation of works, provide a reasonable surplus for improvements, extensions, and enlargements, pay the interest on any bonded debt, and provide a sinking or other fund for the payment of the principal of such debt as it may become due.”

No assurance can be given that Articles XIIC and XIID will not have a material adverse impact on the Water Authority’s revenues.

## **Proposition 26**

On November 2, 2010, the California voters approved Proposition 26, an initiative measure amending Article XIIC of the California Constitution. Proposition 26 adds a new definition of “tax” applicable to local government agencies to include any levy, charge, or exaction imposed by a local government, but which expressly excepts from that definition charges imposed for benefits or privileges or for services or products granted or provided to the payor (and not to those not charged) that do not exceed their reasonable cost; regulatory fees that do not exceed the cost of regulation; fees for the use of local governmental property; fines and penalties imposed for violations of law; fees imposed as a condition of property development; and assessments and property-related fees imposed under Article XIID of the California Constitution. California local taxes are subject to voter approval.

No assurance can be given that Proposition 26 will not have a material adverse impact on the Water Authority’s revenues.

## **Other Initiative Measures**

Article XIII A, Articles XIIC and XIID and Proposition 26 were adopted pursuant to California’s constitutional initiative process. From time to time other initiative measures could be adopted by California voters, placing additional limitations on the ability of the Water Authority to increase revenues.

## **TAX STATUS**

In the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel, based upon 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 2016AB Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 (the “Code”) and is exempt from State of California personal income taxes. Bond Counsel is of the further opinion that interest on the 2016AB Bonds is not a specific preference item for purposes of the federal individual or corporate alternative minimum taxes, although Bond Counsel observes that such interest is included in adjusted current earnings when calculating corporate alternative minimum taxable income. A copy of the proposed form of opinion of Bond Counsel is set forth in Appendix F hereto.

2016AB Bonds purchased, whether at original issuance or otherwise, for an amount higher than their principal amount payable at maturity (or, in some cases, at their earlier call date) (“Premium Bonds”) will be treated as having amortizable bond premium. No deduction is allowable for the amortizable bond premium in the case of bonds, like the Premium Bonds, the interest on which is excluded from gross income for federal income tax purposes. However, the amount of tax exempt interest received, and a Beneficial Owner’s basis in a Premium Bond, will be reduced by the amount of amortizable bond premium properly allocable to such Beneficial Owner. Beneficial owners of Premium Bonds should consult their own tax advisors with respect to the proper treatment of amortizable bond premium in their particular circumstances.

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 2016AB Bonds. The Water Authority has made certain representations and covenanted to comply with certain restrictions, conditions and requirements designed to ensure that interest on the 2016AB Bonds 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 2016AB Bonds being included in gross income for federal income tax purposes, possibly from the date of original issuance of the 2016AB Bonds. The opinion of Bond Counsel assumes the accuracy of these representations and compliance with these covenants. Bond Counsel has not undertaken to determine (or to inform any person) whether any actions taken (or not taken) or events occurring (or not occurring), or any other matters coming to Bond Counsel’s attention after the date of issuance of the 2016AB Bonds may adversely affect the value of or the tax status of interest on the 2016AB Bonds. Accordingly, the opinion of Bond Counsel is not intended to, and may not, be relied upon in connection with any such actions, events or matters.

Although Bond Counsel has rendered an opinion that the interest portion on the 2016AB Bonds is excluded from gross income for federal income tax purposes, the ownership or disposition of the 2016AB Bonds and the accrual or receipt of the interest thereto may otherwise affect a 2016AB Bond owner’s tax liability. The nature and

extent of these other tax consequences will depend upon each 2016AB Bond owner's particular tax status and the 2016AB Bond owner's other items of income or deduction. Bond 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 2016AB Bonds to be subject, directly or indirectly, in whole or in part, to federal income taxation or to be subject to or exempted from state income taxation, or otherwise prevent 2016AB Bond owners from realizing the full current benefit of the tax status of such interest. For example, the Obama Administration's budget proposals in recent years have proposed legislation that would limit the exclusion from gross income of interest on the 2016AB Bonds to some extent for high-income individuals. The introduction or enactment of any such future legislative proposals, clarification of the Code or court decisions may also affect, perhaps significantly, the market price for, or marketability of, the 2016AB Bonds. Prospective purchasers of the 2016AB Bonds should consult their own tax advisors regarding the potential impact of any pending or proposed federal or state tax legislation, regulations or litigation, as to which Bond Counsel expresses no opinion.

The opinion of Bond Counsel is based on current legal authority, covers certain matters not directly addressed by such authorities, and represents Bond Counsel's judgment as to the proper treatment of the 2016AB Bonds for federal income tax purposes. It is not binding on the Internal Revenue Service ("IRS") or the courts. Furthermore, Bond Counsel cannot give and has not given any opinion or assurance about the future activities of the Water Authority, or about the effect of future changes in the Code, the applicable regulations the interpretation thereof or the enforcement thereof by the IRS. The Water Authority has covenanted, however, to comply with the requirements of the Code.

Bond Counsel's engagement with respect to the 2016AB Bonds ends with the issuance of the 2016AB Bonds, and, unless separately engaged, Bond Counsel is not obligated to defend the Water Authority or the owners of the 2016AB Bonds regarding the tax-exempt status of the 2016AB Bonds in the event of an audit examination by the IRS. Under current procedures, parties other than the Water Authority, and its appointed counsel, including the owners of the 2016AB Bonds, 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 bonds is difficult, obtaining an independent review of IRS positions with which the Water Authority legitimately disagrees, may not be practicable. Any action of the IRS, including but not limited to selection of the 2016AB Bonds 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 2016AB Bonds, and may cause the Water Authority or the owners of the 2016AB Bonds to incur significant expense.

#### **CONTINUING DISCLOSURE**

The Water Authority has covenanted for the benefit of the owners and beneficial owners of the 2016AB Bonds to provide certain financial information and operating data relating to the 2016AB Bonds and the Water Authority by not later than 270 days after the end of the Water Authority's fiscal year (presently June 30) commencing with the report for the Water Authority's fiscal year ending June 30, 2015 (the "Annual Disclosure Reports"), and to provide notices of the occurrence of certain enumerated events. The Annual Disclosure Reports and notices of material events will be filed by Digital Assurance Certification, L.L.C., as Dissemination Agent on behalf of the Water Authority, with the MSRB. The specific nature of the information to be contained in the Annual Disclosure Reports or the notices of specified events is set forth in **APPENDIX D – FORM OF CONTINUING DISCLOSURE AGREEMENT**. These covenants have been made in order to assist the Underwriters in complying with Rule 15c2-12(b)(5) of the Securities and Exchange Commission (the "Rule").

The Water Authority has not filed material event notices upon the occurrence of bond insurer downgrades not resulting in rating changes of insured bonds or certificates of participation.

#### **RATINGS**

The 2016AB Bonds have been rated "AA+" by Fitch, Inc. ("Fitch"), 33 Whitehall Street, New York, New York, "Aa2" by Moody's Investors Service, Inc. ("Moody's"), 7 World Trade Center, 250 Greenwich Street, New York, New York, and "AAA" by Standard & Poor's Ratings Services, a Standard & Poor's Financial Services LLC business, 55 Water Street, New York, New York ("Standard & Poor's"). The ratings assigned by Fitch, Moody's

and Standard & Poor's express only the views of the rating agencies. The explanation of the significance of the ratings may be obtained from Fitch, Moody's and Standard & Poor's, respectively. There is no assurance such ratings will continue for any given period of time or that such ratings will not be revised downward or withdrawn entirely by the rating agencies, if in the judgment of such rating agencies, circumstances so warrant. Any such downward revision or withdrawal of such ratings may have an adverse effect on the market price of the 2016AB Bonds.

#### **VERIFICATION OF MATHEMATICAL COMPUTATIONS**

The Arbitrage Group, Inc., a firm of independent certified public accountants, upon delivery of the 2016AB Bonds, will deliver to the Water Authority its attestation report indicating that it has verified, in accordance with standards established by the American Institute of Certified Public Accountants, the mathematical accuracy of computations provided by the Underwriter, relating to (a) the sufficiency of the anticipated receipts from the 2008 Escrow Securities, together with the initial cash deposit, to pay, when due, the principal and interest requirements of the Refunded 2008A Certificates to their date of prepayment, (b) the sufficiency of the anticipated receipts from the 2010 Escrow Securities together with the initial cash deposit, to pay, when due, the principal and interest requirements of the Refunded 2010A Bonds to their redemption date and (c) the "yield" on the Escrow Securities and on the 2016AB Bonds. See **PLAN OF REFUNDING**.

The report of The Arbitrage Group, Inc. will include the statement that the scope of their engagement was limited to verifying the mathematical accuracy of the computations contained in such schedules provided to them and that they have no obligation to update their report because of events occurring, or data or information coming to their attention, subsequent to the date of their report.

#### **UNDERWRITING**

Pursuant to the Contract of Purchase by and between the Water Authority and Citigroup Global Markets Inc., as representative of the underwriters (the "Underwriters"), the 2016AB Bonds will be purchased jointly and severally for reoffering by the Underwriters at a purchase price of \$369,816,263.34 representing the aggregate principal amount of the 2016AB Bonds, plus \$74,362,338.95 of original issue premium, less an underwriting discount of \$886,075.61. The Underwriters may offer and sell 2016AB Bonds to certain dealers (including dealers depositing 2016AB Bonds into investment trusts) and others at prices lower than the offering prices stated on the cover of this Official Statement. After the initial public offering, the public offering prices of the 2016AB Bonds may be changed from time to time by the Underwriters.

Citigroup Global Markets Inc., an underwriter of the 2016AB Bonds, has entered into a retail distribution agreement with each of the TMC Bonds L.L.C. ("TMC") and UBS Financial Services Inc. ("UBSFS"). Under these distribution agreements, Citigroup Global Markets Inc. may distribute municipal securities to retail investors through the financial advisor network of UBSFS and the electronic primary offering platform of TMC. As part of this arrangement, Citigroup Global Markets Inc. may compensate TMC (and TMC may compensate its electronic platform member firms) and UBSFS for their selling efforts with respect to the 2016AB Bonds.

Backstrom McCarley Berry & Co., LLC ("BMcB"), one of the underwriters of the 2016AB Bonds, has independently entered into non-exclusive distribution agreements with D.A. Davidson & Company and Hilltop Securities, Inc. to augment both its institutional and retail marketing capabilities, for the distribution of certain securities offerings, including the Authority's 2016AB Bonds at the original issue price. Pursuant to such distribution agreements, D.A. Davidson & Company and Hilltop Securities, Inc. may purchase bonds from BMcB at the original issue price less a negotiated portion of the selling concession applicable to any 2016AB Bonds that such firm sells.

The following two paragraphs have been provided by the Underwriters for inclusion in this Official Statement and the Water Authority does not assume any responsibility for the accuracy or completeness of such statement or information.

The Underwriters and their respective affiliates are full service financial institutions engaged in various activities that may include securities trading, commercial and investment banking, municipal advisory, investment management, investment research, principal investment, hedging, market making, brokerage and other financial and

non-financial activities and services. Certain of the Underwriters and their respective affiliates have provided, and may in the future provide, a variety of these services to the Water Authority and to persons and entities with relationships with the Water Authority, for which they received or will receive customary fees and expenses. The Underwriters and their respective affiliates may also make loans or otherwise extend credit to the Water Authority.

In the ordinary course of their various business activities, the Underwriters and their respective affiliates, officers, directors and employees any purchase, sell or hold a broad array of investments and actively trade securities, derivatives, loans, commodities, currencies, credit default swaps and other financial instruments for their own account and for the accounts of their customers, and such investment and trading activities may involve or relate to assets, securities and/or instruments of the Water Authority (directly, as collateral securing other obligations or otherwise) and/or persons and entities with relationships with the Water Authority. The Underwriters and their respective affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such assets, securities or instruments and may at any time hold or recommend to clients that they should acquire, long and/or short positions in such assets, securities and instruments.

### **LITIGATION**

No litigation is pending or threatened concerning the validity or enforceability of the 2016AB Bonds or the Indenture.

The Water Authority is subject to lawsuits and claims which arise out of the normal course of business. The Water Authority believes the disposition of such actions of which it is aware will not have a material effect on the financial position, results of operation or liquidity of the Water Authority.

### **CERTAIN LEGAL MATTERS**

Orrick, Herrington & Sutcliffe LLP, San Francisco, California, Bond Counsel, will render an opinion with respect to the 2016AB Bonds substantially in the form set forth in Appendix F hereto. Orrick, Herrington & Sutcliffe LLP is also acting as Disclosure Counsel. Certain legal matters will be passed upon for the Water Authority by Mark J. Hattam, its General Counsel. Certain legal matters will be passed upon for the Underwriters by Norton Rose Fulbright US LLP, Los Angeles, California, counsel to the underwriters.

### **FINANCIAL ADVISORS**

The Water Authority has retained Acacia Financial Group, Inc., and Montague DeRose and Associates, LLC (the "Financial Advisors"), as financial advisors with respect to the issuance and delivery of the 2016AB Bonds. The Financial Advisors are not obligated to undertake, and have not undertaken to make, an independent verification or to assume responsibility for the accuracy, completeness or fairness of the information contained in this Official Statement.

### **INFORMATION CONCERNING THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA**

MWD periodically files official statements and disclosure reports with the MSRB in connection with its publicly offered bonds. Such official statements and disclosure reports contain, among other things, information on MWD, MWD's water supply and MWD's rates and charges. Such official statements and disclosure reports are available from the MSRB but are not incorporated by reference herein and neither the Water Authority nor the Underwriters assume any responsibility for the completeness or accuracy thereof. MWD is not obligated in any manner for the payment of principal of or interest on the 2016AB Bonds and has not provided and will not provide any certifications regarding this Official Statement, nor has MWD made any undertaking for the benefit of the owners and beneficial owners of the 2016AB Bonds to file any information with the MSRB.

## MISCELLANEOUS

This Official Statement has been duly approved, executed and delivered by the Water Authority. Copies of this Official Statement may be obtained from the Water Authority at 4677 Overland Avenue, San Diego, California 92123.

Financial statements of the Water Authority, summaries of the principal legal documents to be executed and delivered in connection with the offering of the 2016AB Bonds, the form of the opinion to be delivered by Bond Counsel, the form of the Continuing Disclosure Agreement, information on the economy of San Diego County and a description of DTC's book-entry system are attached hereto as Appendices. The Appendices are integral parts of this Official Statement and must be read together with all other parts of this Official Statement.

Insofar as any statements made in this Official Statement involve matters of opinion, forecasts or estimates, whether or not expressly stated, they are set forth as such and not as representations of fact.

The delivery of this Official Statement, including the Appendices and other information herein, has been duly authorized by the Water Authority.

SAN DIEGO COUNTY WATER AUTHORITY

By: /s/ Mark Weston  
Chair of the Board of Directors

By: /s/ Maureen A. Stapleton  
General Manager

By: /s/ Lisa Marie Harris  
Director of Finance/Treasurer

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## WATER AUTHORITY FINANCIAL STATEMENTS



Certified  
Public  
Accountants

Sacramento  
Walnut Creek  
Oakland  
Los Angeles  
Century City  
Newport Beach  
San Diego

### Independent Auditor's Report

To the Board of Directors of the  
San Diego County Water Authority

#### Report on the Financial Statements

We have audited the accompanying financial statements of the San Diego County Water Authority (Water Authority) as of and for the fiscal years ended June 30, 2015 and 2014, and the related notes to the financial statements, which collectively comprise the Water Authority'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 audits. We conducted our audits 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.

#### *Opinion*

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Water Authority as of June 30, 2015 and 2014, and the changes in its financial position and its cash flows for the fiscal years then ended in accordance with accounting principles generally accepted in the United States of America.

### ***Emphasis of Matter***

As discussed in Notes 2a and 18 to the basic financial statements, effective July 1, 2014, the Water Authority adopted the provisions of Governmental Accounting Standards Board (GASB) Statement No. 68, *Accounting and Financial Reporting for Pensions – An Amendment of GASB Statement No. 27* and GASB Statement No. 71, *Pension Transition for Contributions Made Subsequent to the Measurement Date – An Amendment of GASB Statement No. 68*. As a result of the implementation of GASB Statement Nos. 68 and 71, net position as of July, 1, 2014, was restated and reduced by \$61,177,953. The Water Authority's basic financial statements as of and for the fiscal year ended June 30, 2014 were not restated because defined benefit plan pension information prepared in accordance with the requirements of GASB Statement No. 68 was not available for periods prior to July 1, 2014.

Our opinion is not modified with respect to this matter.

### **Other Matters**

#### ***Required Supplementary Information***

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and defined benefit pension plan and other post-employment benefits schedules on pages 19-29 and 97-99 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 audits 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 that collectively comprise the Water Authority's basic financial statements. The introductory section, other supplementary information, statistical section, and continuing disclosure section are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The other supplementary information – budgetary comparison schedule is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audits of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the budgetary comparison schedule is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The introductory section, statistical section, and continuing disclosure have not been subjected to the auditing procedures applied in the audits 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 November 12, 2015, on our consideration of the Water Authority'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 for the fiscal year ended June 30, 2015. The purpose of that report is 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 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 Water Authority's internal control over financial reporting and compliance.

Macias Gini & O'Connell LLP

San Diego, California

November 12, 2015

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## **Management's Discussion and Analysis**

The following Management's Discussion and Analysis (MD&A) provides a narrative overview and analysis of the financial performance of the San Diego County Water Authority (Water Authority) during the fiscal years ended June 30, 2015 and 2014. Please read it in conjunction with the Letter of Transmittal located in the Introductory Section, and the Water Authority's Basic Financial Statements and accompanying Notes to the Financial Statements (Notes), which follow this section. All amounts, unless otherwise indicated, are expressed in millions of dollars.

### **Overview of the Financial Statements**

The basic financial statements report information about the Water Authority's financial position and changes in financial position using the accrual basis of accounting, similar to methods used by private sector companies. They are designed to provide readers with a broad overview of the finances, and also present changes in cash balances and information about both short-term and long-term activities. There are three required components to these statements: the MD&A, the Financial Statements, and the Notes.

The Statements of Net Position present information on all of the Water Authority's assets, deferred outflows of resources, liabilities, and deferred inflows of resources, with the difference reported as net position. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the Water Authority is improving or deteriorating.

The Statements of Revenues, Expenses, and Changes in Net Position present information on how the Water Authority's net position changed during the fiscal year. All changes in net position are reported on the accrual basis of accounting, recognizing all revenues when earned and all expenses when incurred.

The Statements of Cash Flows report cash receipts, cash payments, and net changes in cash resulting from operating activities, non-capital financing activities, capital and related financing activities, and investing activities for the fiscal year.

The Notes provide additional information essential for a full understanding of the data provided in the Financial Statements. The Notes are located immediately following the Financial Statements.

### **Other Information**

The Financial Statements include the accounts of the San Diego County Water Authority Financing Corporation, a separate legal entity established in December 1997, and the San Diego County Water Authority Financing Agency, a Joint Powers Authority (JPA), established in December 2009. The accounts of these entities are blended into the Water Authority's Financial Statements in accordance with Governmental Accounting Standards Board (GASB) Statement No. 14 and GASB Statement No. 61. See Note 1(a) for further information regarding these entities.

## Financial Analysis of the Water Authority

### San Diego County Water Authority Condensed Statements of Net Position, in Millions (\$)

	June 30,		
	2015	2014	2013
<b>Assets:</b>			
Capital assets	\$ 3,257.3	\$ 3,213.8	\$ 3,167.4
Other assets	656.9	737.8	729.1
<b>Total assets</b>	<u>3,914.2</u>	<u>3,951.6</u>	<u>3,896.5</u>
<b>Deferred outflows of resources</b>	<u>57.0</u>	<u>56.5</u>	<u>60.1</u>
<b>Liabilities:</b>			
Long-term liabilities	2,010.2	2,059.3	2,104.8
Other liabilities	454.6	477.2	461.2
<b>Total liabilities</b>	<u>2,464.8</u>	<u>2,536.5</u>	<u>2,566.0</u>
<b>Deferred inflows of resources</b>	<u>9.8</u>	<u>-</u>	<u>-</u>
<b>Net position:</b>			
Net investment in capital assets	1,102.1	1,011.4	980.4
Restricted	143.5	202.2	152.3
Unrestricted	251.0	258.0	257.9
<b>Total net position</b>	<u>\$ 1,496.6 <sup>(1)</sup></u>	<u>\$ 1,471.6</u>	<u>\$ 1,390.6</u>

*Note:*

(1) Beginning net position was restated by a decrease of \$61,177,953 pursuant to GASB Statement Nos. 68 and 71 implementation in Fiscal Year 2015.

### Fiscal Year 2015 compared to Fiscal Year 2014

Over time, net position may serve as a useful indicator of an entity's financial position. For the Water Authority, assets and deferred outflows of resources, exceeded liabilities and deferred inflows of resources by \$1,496.6 million and \$1,471.6 million as of June 30, 2015 and 2014, respectively. Of these amounts, \$251.0 million and \$258.0 million in unrestricted net position as of June 30, 2015 and 2014, respectively, were available for current approved services and construction projects, and for new programs for the regions' citizenry. During Fiscal Year 2015, total net position increased by \$25.0 million, or 1.7 percent. The largest portion of the Water Authority's net position, 73.6 percent, reflected the investment in capital assets less any related outstanding debt and deferred outflows of resources used to acquire those assets.

### Fiscal Year 2014 compared to Fiscal Year 2013

Assets and deferred outflows of resources, exceeded liabilities by \$1,471.6 million and \$1,390.6 million as of June 30, 2014 and 2013, respectively. Of these amounts, \$258.0 million and \$257.9 million in unrestricted net position as of June 30, 2014 and 2013, respectively, were available for current approved services and construction projects, and for new programs for the regions' citizenry. During Fiscal Year 2014, total net position increased by \$81.0 million, or 5.8 percent. The largest portion of the Water Authority's net position, 68.7 percent, reflected the investment in capital assets less any related outstanding debt and deferred outflows of resources used to acquire those assets.

## Capital Assets

### San Diego County Water Authority Capital Assets (Net of Accumulated Depreciation and Amortization), in Millions (\$)

	June 30,		
	2015	2014	2013
Capital assets - Non-depreciable	\$ 640.1	\$ 633 .1	\$ 527.7
Capital assets - Depreciable	2,617.2	2,580.7	2,639.7
<b>Total</b>	<b>\$ 3,257.3</b>	<b>\$ 3,213.8</b>	<b>\$ 3,167.4</b>

Capital assets are classified into two categories: non-depreciable and depreciable capital assets. Non-depreciable capital assets include land, easements, mitigation bank, storage rights, and construction in progress. Depreciable capital assets include pipelines, facilities, equipment, computer systems software, and participation and capacity rights, net of accumulated depreciation and amortization. In accordance with the Water Authority's capitalization policy, capital assets are capitalized when a project is substantially complete and has been issued a notice of operational acceptance. Additional information regarding capital assets can be found in the Notes (particularly notes 7 - 9 and note 17).

### Fiscal Year 2015 Compared to Fiscal Year 2014

During Fiscal Years 2015 and 2014, capital asset additions were \$104.2 million and \$130.3 million, respectively. Of those amounts, \$99.1 million and \$122.1 million were additions to construction in progress for the years ended June 30, 2015 and 2014, respectively. Included in capital asset additions were \$14.8 million and \$20.6 million of capitalized interest for Fiscal Years 2015 and 2014, respectively.

The following projects accounted for the majority of capital expenditures incurred during Fiscal Year 2015:

<i>San Vicente Marina Facilities</i>	<i>\$18.8 million</i>
<i>Pipeline 3 Desalination Relining</i>	<i>\$14.6 million</i>
<i>San Vicente Dam Raise</i>	<i>\$7.9 million</i>
<i>Pipeline 4 Relining – San Luis Rey</i>	<i>\$7.8 million</i>
<i>San Vicente By-Pass Pipeline</i>	<i>\$7.4 million</i>

Material commitments under construction contracts decreased to \$12.4 million at the end of Fiscal Year 2015 from \$26.9 million at the end of Fiscal Year 2014, as significant capital improvement projects continued to progress towards completion. At the end of Fiscal Year 2015, \$9.2 million in new construction contract commitment was outstanding for San Vicente By-Pass Pipeline, and \$3.1 million in commitment was outstanding for Twin Oaks Valley Water Treatment Plant Expanded Service Area.

### Fiscal Year 2014 Compared to Fiscal Year 2013

During Fiscal Years 2014 and 2013, capital asset additions were \$130.3 million and \$133.1 million, respectively. Of those amounts, \$122.1 million and \$126.7 million were additions to construction in progress for the years ended June 30, 2014 and 2013, respectively. Included in capital asset additions were \$20.6 million and \$16.1 million of capitalized interest for Fiscal Years 2014 and 2013, respectively.

The following projects accounted for the majority of capital expenditures incurred during Fiscal Year 2014:

<b><i>San Vicente Dam Raise</i></b>	<b><i>\$22.4 million</i></b>
<b><i>Pipeline 3 Desalination Relining</i></b>	<b><i>\$15.7 million</i></b>
<b><i>Twin Oaks Valley Water Treatment Plant Modifications</i></b>	<b><i>\$14.8 million</i></b>
<b><i>Pipeline 3 Sweetwater Reservoir to Otay</i></b>	<b><i>\$14.5 million</i></b>
<b><i>Pipeline 3 Otay Vent 1 to Lower Otay Reservoir</i></b>	<b><i>\$14.2 million</i></b>
<b><i>San Vicente Marina Facilities</i></b>	<b><i>\$11.7 million</i></b>

Material commitments under construction contracts increased to \$26.9 million at the end of Fiscal Year 2014 from \$21.8 million at the end of Fiscal Year 2013, as significant capital improvement projects continued to progress towards completion. At the end of Fiscal Year 2014, \$13.3 million in new construction contract commitment was outstanding for Pipeline 3 Desalination Relining - San Marcos to Twin Oaks, and \$13.7 million in commitment was outstanding for San Vicente Marina Facilities.

## **Debt Administration**

### **San Diego County Water Authority Outstanding Short-Term Debt, in Millions (\$)**

	<b>June 30,</b>		
	<b>2015</b>	<b>2014</b>	<b>2013</b>
Tax-Exempt Commercial Paper Program	\$ 310.0	\$ 310.0	\$ 360.0
Extendable Commercial Paper Program	50.0	50.0	-
<b>Total</b>	<b>\$ 360.0</b>	<b>\$ 360.0</b>	<b>\$ 360.0</b>

## **Short-Term Debt**

The Water Authority has a short-term Tax-Exempt Commercial Paper (TECP) program and an Extendable Commercial Paper (ECP) program to provide financing for the capital improvement programs. More detailed information on short-term debt is presented in Note 10 of the Notes to the Financial Statements.

### **Fiscal Year 2015 Compared to Fiscal Year 2014**

The Water Authority's total short-term debt remained unchanged at \$360 million at the end of Fiscal Years 2015 and 2014.

### **Fiscal Year 2014 Compared to Fiscal Year 2013**

During Fiscal Year 2014, the Water Authority terminated the \$110 million Commercial Paper Notes, Series 1 and the \$50 million Commercial Paper Notes, Series 6 in their entirety, and issued Commercial Paper Notes, Series 8 for \$110 million and Extendable Commercial Paper Notes, Series 1 for \$50 million. The total short-term debt remained unchanged at \$360 million at the end of Fiscal Years 2014 and 2013.

## Long-Term Debt

### San Diego County Water Authority Outstanding Long-Term Debt, in Millions (\$)

	June 30,		
	2015	2014	2013
Revenue Bonds	\$ 1,219.9	\$ 1,229.6	\$ 1,238.0
Certificates of Participation	581.7	662.6	686.2
<b>Total</b>	<b>\$ 1,801.6</b>	<b>\$ 1,892.2</b>	<b>\$ 1,924.2</b>

Long-term debt consists of revenue bonds and certificates of participation used to fund the capital improvement programs. The Water Authority continues to hold long-term senior lien credit ratings of AA+, AA+, and Aa2 from Standard & Poor's, Fitch, and Moody's, respectively. Long-term subordinate lien credit ratings are customarily rated one level below the senior lien credit ratings of the same issuer. Accordingly, credit ratings of long-term Water Authority subordinate lien debt are inferred to be at AA, AA, and Aa3, respectively. More detailed information on long-term debt is presented in Note 11 of the Notes to the Financial Statements.

#### Fiscal Year 2015 Compared to Fiscal Year 2014

As of June 30, 2015 the Water Authority had \$1.8 billion in long-term debt outstanding, a decrease compared to Fiscal Year 2014. As of June 30, 2015 and 2014, the total Revenue Bonds outstanding was \$1,219.9 million and \$1,229.6 million, respectively. During Fiscal Year 2015, \$43.9 million of the Certificates of Participation (COPs) were defeased and the principal payments were \$46.7 million. The total COPs outstanding as of June 30, 2015 and 2014 was \$581.7 million and \$662.6 million, respectively.

#### Fiscal Year 2014 Compared to Fiscal Year 2013

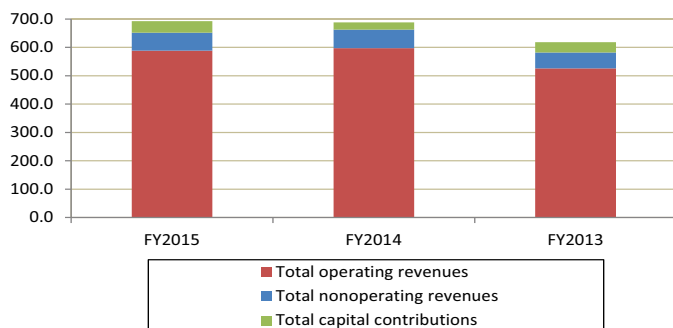
As of June 30, 2014 the Water Authority had \$1.9 billion in long-term debt outstanding, a slight decrease compared to Fiscal Year 2013. During Fiscal Year 2014 principal payments totaled \$32.0 million. As of June 30, 2014 and 2013, the total Revenue Bonds outstanding was \$1,229.6 million and \$1,238.0 million, respectively. The total Certificates of Participation outstanding as of June 30, 2014 and 2013 was \$662.6 million and \$686.2 million, respectively.

**San Diego County Water Authority Statements of Revenues, Expenses and Changes in Net Position, in Millions (\$)**

	June 30,		
	2015	2014	2013
<b>Operating revenues:</b>			
Water sales	\$ 584.2	\$ 593.7	\$ 523.5
Other revenues	4.6	3.9	2.6
<b>Total operating revenues</b>	<u>588.8</u>	<u>597.6</u>	<u>526.1</u>
<b>Nonoperating revenues:</b>			
Property taxes and in-lieu charges	11.5	11.1	10.8
Infrastructure access charges	29.9	29.2	28.7
Investment income	2.9	3.7	2.9
Other income	7.8	10.6	1.7
Intergovernmental	11.1	10.7	11.9
<b>Total nonoperating revenues</b>	<u>63.2</u>	<u>65.3</u>	<u>56.0</u>
<b>Total revenues</b>	<u>652.0</u>	<u>662.9</u>	<u>582.1</u>
<b>Operating expenses:</b>			
Cost of sales	411.0	422.7	371.3
Operations and maintenance	22.4	18.8	19.3
Planning	8.4	6.8	9.0
General and administrative	14.1	13.7	13.3
Depreciation and amortization	57.8	56.6	52.3
<b>Total operating expenses</b>	<u>513.7</u>	<u>518.6</u>	<u>465.2</u>
<b>Nonoperating expenses:</b>			
Interest expense	81.8	77.8	80.7
Debt issuance costs	-	0.3	1.0
Other expenses	10.9	10.4	10.2
Loss on sale/retirement of capital assets	-	-	0.3
<b>Total nonoperating expenses</b>	<u>92.7</u>	<u>88.5</u>	<u>92.2</u>
<b>Total expenses</b>	<u>606.4</u>	<u>607.1</u>	<u>557.4</u>
<b>Income before capital contributions</b>	<u>45.6</u>	<u>55.8</u>	<u>24.7</u>
<b>Capital contributions:</b>			
Capacity charges	22.6	13.8	17.7
Water standby availability charges	11.1	11.2	11.1
Contributions in aid of capital assets	6.9	0.2	7.4
<b>Total capital contributions</b>	<u>40.6</u>	<u>25.2</u>	<u>36.2</u>
<b>Changes in net position:</b>			
	86.2	81.0	60.9
Net position, beginning of year, as previously reported	1,471.6	1,390.6	1,329.7
Less: Cumulative effect of change in accounting principle (Implementation of GASB Statements No. 68 and 71)	(61.2)	-	-
<b>Net position, beginning of year, as restated</b>	<u>1,410.4</u>	<u>1,390.6</u>	<u>1,329.7</u>
<b>Net position, end of year</b>	<u>\$ 1,496.6</u>	<u>\$ 1,471.6</u>	<u>\$ 1,390.6</u>

## Revenues by Source

**Total Revenues and Capital Contributions, in Millions (\$)**

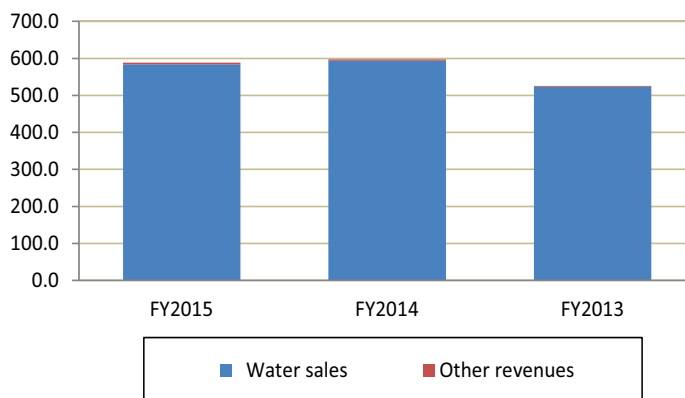


Total revenues (operating and nonoperating) and capital contributions for the Fiscal Years 2015, 2014, and 2013 were \$692.6 million, \$688.1 million, and \$618.3 million, respectively. Operating revenues consist primarily of water sales. Nonoperating revenues include property taxes and in-lieu charges, infrastructure access charges (IAC), investment income, intergovernmental revenue, gain on sale/retirement of capital assets, and other income. Capital contributions include capacity charges, water standby availability charges, and contributions in aid of capital assets. For Fiscal Year 2015, water sales and other operating revenues, nonoperating revenues, and capital contributions accounted for 85.0 percent, 9.1 percent and 5.9 percent, respectively, of the total revenues and capital contributions.

### Fiscal Year 2015 compared to Fiscal Year 2014

Water sales revenue is the principal source of revenue and totaled \$584.2 million for Fiscal Year 2015, a decrease of \$9.5 million from the Fiscal Year 2014 total of \$593.7 million. The decrease in water sales revenue was mainly attributed to mandatory water use restrictions due to the extended drought. In Fiscal Year 2015, total water deliveries decreased to 494,983 acre-feet (AF) from 522,453 AF in Fiscal Year 2014. The 5.3 percent decrease in water deliveries resulted from decreased water consumption in the Water Authority's service due to the mandatory restrictions. Other revenues increased by \$0.7 million compared to Fiscal Year 2014.

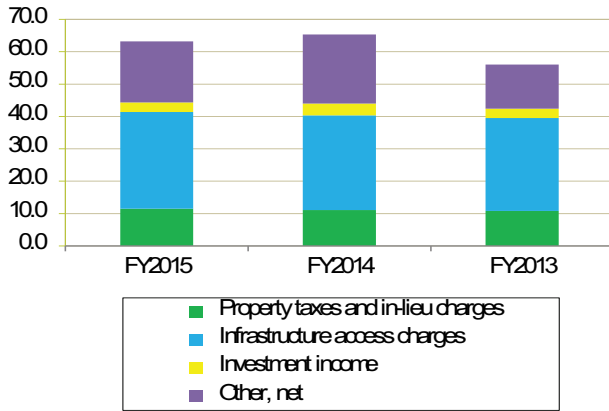
**Operating Revenues, in Millions (\$)**



### Fiscal Year 2014 compared to Fiscal Year 2013

Water sales revenue is the principal source of revenue and totaled \$593.7 million for Fiscal Year 2014, an increase of \$70.2 million over the Fiscal Year 2013 total of \$523.5 million. The increase in water sales revenue was attributed to both the increase in water deliveries and water rates. In Fiscal Year 2014, total water deliveries increased to 522,453 AF from 482,013 AF in Fiscal Year 2013. The 8.4 percent increase in water deliveries resulted from increased water consumption in the Water Authority's service area from the increasingly severe drought conditions. Other revenues increased by \$1.3 million compared to Fiscal Year 2013; the result of higher hydroelectric revenue from Rancho Penasquitos and Lake Hodges hydroelectric facilities.

**Nonoperating Revenues, in Millions (\$)**



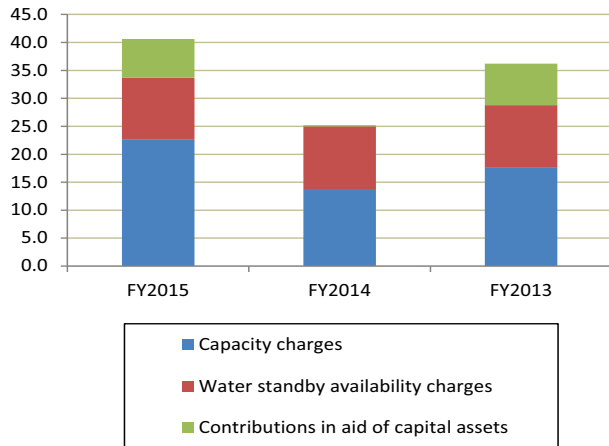
**Fiscal Year 2015 compared to Fiscal Year 2014**

Nonoperating revenues were \$2.1 million lower in Fiscal Year 2015 compared to Fiscal Year 2014. Integrated Resources Water Management pass-through grant revenue decreased by \$1.4 million due to lower activity levels.

**Fiscal Year 2014 compared to Fiscal Year 2013**

Nonoperating revenues were \$9.3 million higher in Fiscal Year 2014 compared to Fiscal Year 2013. Integrated Resources Water Management pass-through grant revenue increased by \$7.6 million due to higher activity levels. In addition, \$1.0 million was received from the Lake Hodges settlement.

**Capital Contributions, in Millions (\$)**



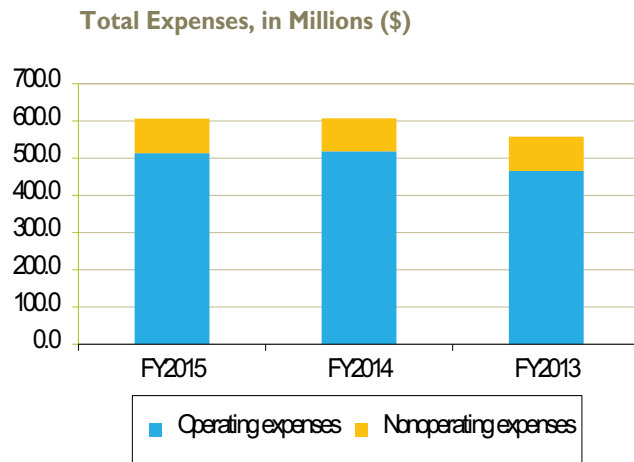
**Fiscal Year 2015 compared to Fiscal Year 2014**

Capital contributions increased by \$15.4 million in Fiscal Year 2015 compared to Fiscal Year 2014. The change was the result of increased building permits being issued during Fiscal Year 2015 resulting in an increase in capacity charges from \$13.8 million in Fiscal Year 2014 to \$22.6 million in Fiscal Year 2015, and the Fiscal Year 2015 donation of Olivenhain Flow Control Facilities 9 and 10 valued at \$3.9 million.

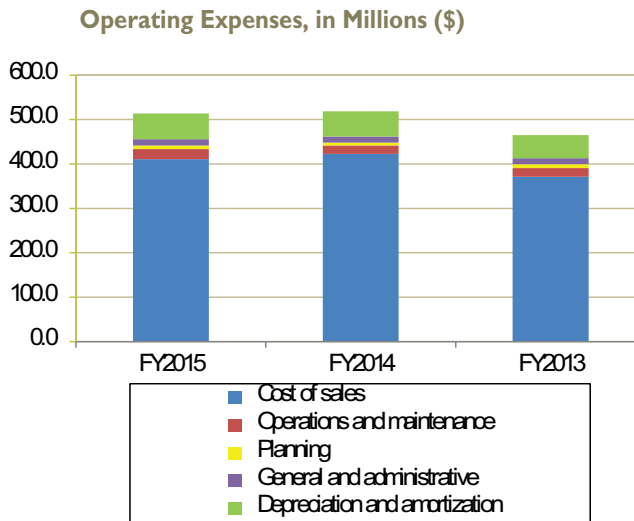
**Fiscal Year 2014 compared to Fiscal Year 2013**

Capital contributions decreased by \$11.0 million in Fiscal Year 2014 compared to Fiscal Year 2013. The change was the result of two nonrecurring one-time revenue recognition events during Fiscal Year 2013: the one-time \$5.1 million refund received from SDG&E for the cost of Lake Hodges Hydro facility network upgrades, and the \$3.5 million in capacity charges revenue resulting from the change in year-end accrual procedure.

**Expenses by Function**



Total expenses for Fiscal Years 2015, 2014, and 2013 were \$606.4 million, \$607.1 million, and \$557.4 million, respectively. Operating expenses include the cost of water sales, operating department/program expenses, and depreciation and amortization expenses. Operating expenses were \$513.7 million, \$518.6 million, and \$465.2 million for Fiscal Years 2015, 2014, and 2013, respectively. Nonoperating expenses, consisting of interest and other expenses, were \$92.7 million, \$88.5 million, and \$92.2 million for Fiscal Years 2015, 2014, and 2013, respectively. Interest expense, net of capitalized interest, was \$81.8 million, \$77.8 million, and \$80.7 million for Fiscal Years 2015, 2014, and 2013, respectively.



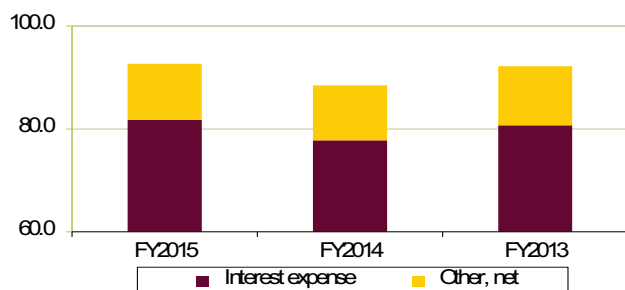
**Fiscal Year 2015 compared to Fiscal Year 2014**

Total operating expenses decreased by \$4.9 million in Fiscal Year 2015 compared to Fiscal Year 2014. The 0.9 percent decrease in operating expenses in Fiscal Year 2015 was primarily due to a \$11.7 million decrease in the cost of water sales. Total operating department expenses increased by \$5.6 million in Fiscal Year 2015 compared to Fiscal Year 2014. The increase was attributed to filling of vacancies and transition from a capital project focus to maintenance focused organization as major projects are being completed and become operational.

**Fiscal Year 2014 compared to Fiscal Year 2013**

Total operating expenses increased by \$53.4 million in Fiscal Year 2014 compared to Fiscal Year 2013. The 8.4 percent increase in total water deliveries and increased purchase water rates in Fiscal Year 2014 resulted in a \$51.4 million increase in the cost of water sales. Total operating department expenses decreased by \$2.3 million in Fiscal Year 2014 compared to Fiscal Year 2013. The decrease was attributed to personnel related cost savings from vacancies throughout the year.

**Nonoperating Expenses, in Millions (\$)**



**Fiscal Year 2015 compared to Fiscal Year 2014**

Total nonoperating expenses, consisting primarily of interest expense, totaled \$92.7 million and \$88.5 million in Fiscal Years 2015 and 2014, respectively. In Fiscal Year 2015, total interest expense was \$81.8 million, net of \$14.8 million in capitalized interest. In Fiscal Year 2014, total interest expense was \$77.8 million, net of \$20.6 million in capitalized interest. Other expenses increased by \$0.2 million in Fiscal Year 2015 compared to Fiscal Year 2014.

**Fiscal Year 2014 compared to Fiscal Year 2013**

Total nonoperating expenses, consisting primarily of interest expense, totaled \$88.5 million and \$92.2 million in Fiscal Years 2014 and 2013, respectively. In Fiscal Year 2014, total interest expense was \$77.8 million, net of \$20.6 million in capitalized interest. In Fiscal Year 2013, total interest expense was \$80.7 million, net of \$16.1 million in capitalized interest. The higher interest expense in Fiscal Year 2013 reflected the cost of issuance and interest expense related to the new 2013A Bonds. Other expenses decreased by \$0.8 million in Fiscal Year 2014 compared to Fiscal Year 2013.

**Currently Known Facts, Conditions, or Decisions**

**Defined Benefit Pension Plans**

Effective July 1, 2014, Technical/Support, Professional/Administrative, Managerial/Supervisory, and Confidential employees increased the amount they pay toward the California Public Employees' Retirement System (CalPERS) by one percent for a total contribution of eight percent. Executive and Senior Management employees also pay eight percent in total contribution toward CalPERS and have been since July 1, 2013.

**Metropolitan Water District Litigation**

San Francisco Superior Court Judge Curtis E.A. Karnow has issued final Statement of Decisions in both Phase 1 and Phase 2 of the Water Authority's legal challenge to rates set by the Los Angeles-based Metropolitan Water District of Southern California. Additional information on this litigation can be found on page nine in the Introductory Section as well as in Note 19 of the Notes.

**OPEB's Recent Funding Changes**

In September 2014, the Board of Director's approved pre-funding a significant portion of the Water Authority's Other Post-Employment Benefits (OPEB) through an irrevocable trust with the California Employers' Retiree Benefit Trust (CERBT). The OPEB liability is associated with the retiree health insurance coverage benefit, a monthly subsidy not to exceed \$320 (retiree and spouse) until the age of 65.

As of June 30, 2015, the Actuarial Accrued Surplus for OPEB was \$92,104 based on the June 30, 2015 actuarial report. This was based on a 7.28 percent discount rate used to calculate the liability on a pre-funded basis. This \$4.3 million pre-funding will reduce future annual required contribution payments for OPEB due to the elimination of the amortization of the unfunded liability and the use of the higher discount rate consistent with the investment strategy of the plan. More detailed information on OPEB's recent funding changes is presented in Note 13 of the Notes.

### **GASB Statement No. 68 Implementation**

The Water Authority implemented GASB Statement No. 68, *Accounting and Financial Reporting for Pensions – an amendment of GASB Statement No. 27* for the fiscal year ended June 30, 2015. Statement No. 68 contains requirements for measuring pension liability and expense, with enhancements to financial statement note disclosure and the presentation of required supplementary information (RSI). Implementation of Statement No. 68 allows consistency for certain plan information among all governmental agencies. Net pension liability is now elevated to be reported in the Statements of Net Position. Investments in the plan are valued at fair value and the actuarial discount rate for calculating pension liability is based on long-term rate of return on investments.

### **Contacting the Water Authority's Finance Department**

This financial report is designed to provide the Board of Directors, the Water Authority's member agencies, taxpayers, creditors, and investors with a general overview of the Water Authority's accountability for the financial resources it manages. If you have questions about this report or need additional financial information, contact the Finance Department at the San Diego County Water Authority, 4677 Overland Avenue, San Diego, California 92123, via email at [www.sdcwa.org/contact-us](http://www.sdcwa.org/contact-us) , or 858-522-6670.

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San Diego County Water Authority  
Statements of Net Position, June 30, 2015 and 2014

	2015	2014
<b>Assets:</b>		
<b>Current assets:</b>		
Cash and investments (Note 3)	\$ 111,130,235	\$ 1,609,258
Restricted cash and investments (Note 3)	170,873,233	337,066,803
Water receivables	90,113,890	115,790,820
Interest receivable	1,222,552	1,317,844
Taxes receivable	1,159,303	1,364,468
Other receivables	15,697,438	9,761,981
Inventories (Note 4)	52,428,622	27,589,904
Prepaid expenses (Note 5)	4,636,815	4,637,593
<b>Total current assets</b>	<b>447,262,088</b>	<b>499,138,671</b>
<b>Noncurrent assets:</b>		
Cash and investments (Note 3)	115,405,373	200,567,595
Restricted cash and investments (Note 3)	70,039,820	16,715,590
Advances to other agencies	278,977	343,874
Retention receivable	1,724,761	1,021,168
Long-term loan receivables (Note 6)	20,000,000	20,000,000
Net OPEB asset (Note 13)	2,157,000	-
Capital assets (Notes 7 and 9):		
Non-depreciable	640,109,515	633,109,800
Depreciable	2,617,179,700	2,580,689,573
<b>Total noncurrent assets</b>	<b>3,466,895,146</b>	<b>3,452,447,600</b>
<b>Total assets</b>	<b>3,914,157,234</b>	<b>3,951,586,271</b>
<b>Deferred outflows of resources:</b>		
Deferred loss on refunding	52,891,210	56,480,770
Employer contributions subsequent to measurement date (Note 12)	4,142,513	-
<b>Total deferred outflows of resources</b>	<b>57,033,723</b>	<b>56,480,770</b>
<b>Liabilities:</b>		
<b>Current liabilities:</b>		
Accounts payable and other liabilities	75,697,190	97,556,079
Interest payable	18,448,486	19,312,756
Construction deposits	451,123	315,406
Short-term liabilities (Note 10)	360,000,000	360,000,000
Current portion of long-term liabilities (Note 11)	39,205,400	44,267,111
<b>Total current liabilities</b>	<b>493,802,199</b>	<b>521,451,352</b>
<b>Noncurrent liabilities:</b>		
Long-term liabilities (Note 11)	1,913,161,795	2,015,008,349
Net pension liability (Note 12)	57,843,537	-
<b>Total noncurrent liabilities</b>	<b>1,971,005,332</b>	<b>2,015,008,349</b>
<b>Total liabilities</b>	<b>2,464,807,531</b>	<b>2,536,459,701</b>
<b>Deferred inflows of resources:</b>		
Differences between projected and actual earnings on pension plan investments (Note 12)	9,810,726	-
<b>Net position:</b>		
Net investment in capital assets	1,102,128,289	1,011,397,033
Restricted for construction projects	143,366,311	201,696,008
Restricted for debt service	113,537	549,186
Unrestricted	250,964,563	257,965,113
<b>Total net position</b>	<b>\$ 1,496,572,700</b>	<b>\$ 1,471,607,340</b>

See accompanying notes to the financial statements.



**San Diego County Water Authority**  
**Statements of Revenues, Expenses, and Changes in Net Position**  
**For the Fiscal Years Ended June 30, 2015 and 2014**

	2015	2014
<b>Operating revenues:</b>		
Water sales	\$ 584,172,839	\$ 593,695,290
Other revenues	4,567,285	3,935,305
<b>Total operating revenues</b>	<b>588,740,124</b>	<b>597,630,595</b>
<b>Operating expenses:</b>		
Cost of sales	411,037,897	422,699,658
Operations and maintenance	22,365,531	18,780,808
Planning	8,416,134	6,851,384
General and administrative	14,115,738	13,670,808
Depreciation and amortization	57,751,284	56,589,618
<b>Total operating expenses</b>	<b>513,686,584</b>	<b>518,592,276</b>
<b>Operating income</b>	<b>75,053,540</b>	<b>79,038,319</b>
<b>Nonoperating revenues (expenses):</b>		
Property taxes and in-lieu charges	11,475,607	11,142,102
Infrastructure access charges	29,895,726	29,205,684
Investment income	2,905,952	3,674,934
Other income	7,786,392	10,570,654
Intergovernmental	11,148,139	10,645,707
Gain on sale/retirement of capital assets	32,557	48,709
Interest expense	(81,792,704)	(77,791,397)
Debt issuance costs	(16,840)	(280,650)
Other expenses	(10,909,171)	(10,434,146)
<b>Total nonoperating revenues (expenses)</b>	<b>(29,474,342)</b>	<b>(23,218,403)</b>
<b>Income before capital contributions</b>	<b>45,579,198</b>	<b>55,819,916</b>
<b>Capital contributions:</b>		
Capacity charges	22,559,844	13,815,194
Water standby availability charges	11,106,743	11,137,248
Contributions in aid of capital assets	6,897,528	230,952
<b>Total capital contributions</b>	<b>40,564,115</b>	<b>25,183,394</b>
<b>Changes in net position</b>	<b>86,143,313</b>	<b>81,003,310</b>
<b>Net position, beginning of year, as previously reported</b>	<b>1,471,607,340</b>	<b>1,390,604,030</b>
Less: Cumulative effect of change in accounting principle (Note 18)	(61,177,953)	-
<b>Net position, beginning of year, as restated</b>	<b>1,410,429,387</b>	<b>1,390,604,030</b>
<b>Net position, end of year</b>	<b>\$ 1,496,572,700</b>	<b>\$ 1,471,607,340</b>

See accompanying notes to the financial statements.

San Diego County Water Authority  
Statements of Cash Flows  
For the Fiscal Years Ended June 30, 2015 and 2014

	2015	2014
<b>Cash flows from operating activities:</b>		
Receipts from customers	\$ 646,163,715	\$ 624,137,131
Payments to suppliers for purchases of water	(450,380,188)	(421,655,434)
Payments to suppliers for goods and services	(9,972,384)	(10,479,237)
Payments to employees for services	(45,025,564)	(39,308,857)
<b>Net cash provided by operating activities</b>	<b>140,785,579</b>	<b>152,693,603</b>
<b>Cash flows from noncapital financing activities:</b>		
Property taxes and in-lieu charges received	11,680,772	11,303,256
Intergovernmental	11,148,139	10,645,707
<b>Net cash provided by noncapital financing activities</b>	<b>22,828,911</b>	<b>21,948,963</b>
<b>Cash flows from capital and related financing activities:</b>		
Acquisition and construction of capital assets	(92,886,727)	(106,076,382)
Contributions and capital related revenues received from other governments	36,651,426	25,183,394
Settlement proceeds - Lake Hodges	-	27,285,920
Proceeds from disposition of capital assets	85,063	48,709
Cost of debt issuance	(16,840)	(280,650)
Principal paid on long-term debt	(92,190,433)	(37,347,932)
Interest paid on debt	(102,716,446)	(103,958,887)
<b>Net cash used for capital and related financing activities</b>	<b>(251,073,957)</b>	<b>(195,145,828)</b>
<b>Cash flows from investing activities:</b>		
Purchase of investments	(172,314,647)	(202,073,723)
Proceeds from sale of investments	222,845,978	187,727,401
Interest received on investments	3,001,244	3,857,901
<b>Net cash provided by (used for) investing activities</b>	<b>53,532,575</b>	<b>(10,488,421)</b>
<b>Net decrease in cash and cash equivalents</b>	<b>(33,926,892)</b>	<b>(30,991,683)</b>
<b>Cash and cash equivalents at beginning of year</b>	<b>176,286,441</b>	<b>207,278,124</b>
<b>Cash and cash equivalents at end of year</b>	<b>\$ 142,359,549</b>	<b>\$ 176,286,441</b>
<b>Reconciliation of cash and cash equivalents at end of year to the Statements of Net Position:</b>		
Current assets:		
Cash and investments	\$ 111,130,235	\$ 1,609,258
Restricted cash and investments	170,873,233	337,066,803
Noncurrent assets:		
Cash and investments	115,405,373	200,567,595
Restricted cash and investments	70,039,820	16,715,590
Less investments not meeting the definition of cash equivalents	(325,089,112)	(379,672,805)
<b>Cash and cash equivalents at end of year</b>	<b>\$ 142,359,549</b>	<b>\$ 176,286,441</b>

See accompanying notes to the financial statements.

San Diego County Water Authority  
Statements of Cash Flows  
For the Fiscal Years Ended June 30, 2015 and 2014, (continued)

	2015	2014
<b>Reconciliation of operating income to net cash provided by operating activities:</b>		
Operating income	\$ 75,053,540	\$ 79,038,319
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation and amortization	57,751,284	56,589,618
Infrastructure access charges	29,895,726	29,205,684
Other expenses	(7,978,836)	(10,395,261)
Other income	7,786,392	10,570,654
(Increase) Decrease in assets:		
Water receivables	25,676,930	(12,227,929)
Other receivables	(5,935,457)	(1,041,873)
Inventories	(24,838,718)	(11,507,813)
Prepaid expenses	778	(257)
Retention receivable	(703,593)	(768,423)
Net OPEB asset	(2,157,000)	-
(Increase) Decrease in deferred outflows of resources:		
Employer contributions subsequent to measurement date (change in accounting principle)	5,273,604	-
Employer contributions subsequent to measurement date	(4,142,513)	-
Increase (Decrease) in liabilities:		
Accounts payable and other liabilities	(14,423,543)	12,663,916
Construction deposits	135,717	21,717
Compensated absences	562	204,251
OPEB liability	(1,812,000)	341,000
Net pension liability: California Public Employees' Retirement System	(8,608,020)	-
Increase (Decrease) in deferred inflows of resources:		
Differences between projected and actual earnings on pension plan investments	9,810,726	-
<b>Total adjustments</b>	<b>65,732,039</b>	<b>73,655,284</b>
<b>Net cash provided by operating activities</b>	<b>\$ 140,785,579</b>	<b>\$ 152,693,603</b>
<b>Noncash operating, capital and financing activities:</b>		
Adjustments associated with GASB 68	\$ 10,941,817	\$ -
Cancellation of projects from construction in progress	(2,930,335)	(38,885)
Net book value of capital assets disposition	(52,506)	-
Amortization of premiums, and deferred loss on refundings	(5,264,472)	(5,264,472)
Capitalized interest	(14,795,000)	(20,566,000)
Contribution of capital assets	3,912,689	-
Capital asset acquisitions included in accounts payable	(4,775,382)	(12,210,728)
Short-term debt retired from issuance of commercial paper and extendable commercial paper (Note 10a and 10c)	-	(160,000,000)
Long-term debt retired from release of debt service reserve fund (Note 11b)	(4,052,362)	-
Issuance of commercial paper and extendable commercial paper (Note 10e and 10f)	-	160,000,000
Release of debt service reserve fund (Note 11b)	4,052,362	-

See accompanying notes to the financial statements.

## **Notes to the Financial Statements**

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## **I. Nature of Business and Summary of Significant Accounting Policies**

### **(a) Nature of Business**

The San Diego County Water Authority (Water Authority) was organized on June 9, 1944 under the County Water Authority Act (Act). The Water Authority's primary purpose is providing wholesale water to its member agencies for domestic, municipal, and agricultural uses. The Water Authority consists of 24 member public agencies that are each represented by at least one person on the Water Authority's Board of Directors (Board). The Water Authority is a member of the Metropolitan Water District of Southern California (MWD). Historically, the Water Authority purchased all the water it required from MWD to meet the demands of the member agencies. The Water Authority has been in the process of diversifying its supply. Pursuant to the Quantification Settlement Agreement (QSA), signed on October 10, 2003, and its related contracts, the Water Authority is obtaining conserved water from the Imperial Irrigation District (IID) and will also receive water conserved by lining of the All-American and Coachella Canals. The Water Authority also adopted a Regional Water Facilities Master Plan in 2004 that calls for further supply diversification.

The MWD Act provides a preferential right for the purchase of water by each of its constituent agencies. This preferential right is calculated using a formula. Based on the formula, the Water Authority has a statutory preferential right to approximately 18.27 percent of MWD's total supply as of June 30, 2015. MWD has represented that it will provide reliable water supplies notwithstanding preferential rights.

The San Diego County Water Authority Financing Corporation (SDCWAFC) was incorporated on December 29, 1997. The SDCWAFC is a California non-profit public benefit corporation formed to assist the Water Authority as a financing entity and is administered by a governing board, which consists of five members as follows: the Chair of the Board of Directors of the Water Authority, the Chair of the Administrative and Finance Committee of the Board, the General Manager of the Water Authority, the Director of Finance/Treasurer of the Water Authority, and the General Counsel of the Water Authority.

The San Diego County Water Authority Financing Agency (SDCWAF) was established on December 17, 2009 to facilitate financing and refinancing of capital improvement projects of the Water Authority. The SDCWAF is a Joint Powers Authority (JPA) with statutory authority to issue revenue bonds and was formed by an agreement between the Water Authority and the California Municipal Finance Authority (CMFA). The CMFA itself is a JPA that was created in 2004 by various local agencies to facilitate tax-exempt financing. The CMFA has entered into such JPA agreements. Under the JPA agreement, the Water Authority has control over all finance matters.

The SDCWAF's sole purpose is to be a financing entity for the Water Authority and is administered by a governing board, which consists of five members as follows: the Chair of the Board of Directors of the Water Authority, the Chair of the Administrative and Finance Committee of the Board, the General Manager of the Water Authority, the Director of Finance/Treasurer of the Water Authority, and the General Counsel of the Water Authority.

## **I. Nature of Business and Summary of Significant Accounting Policies, (continued)**

### **(b) Basis of Accounting**

The Water Authority is accounted for as an enterprise fund (proprietary fund type). A fund is an accounting entity with a self-balancing set of accounts established to record the financial position and changes in financial position of a specific governmental activity. The activities of enterprise funds closely resemble those of private-sector businesses in which the purpose is to conserve and add to basic resources while meeting operating expenses from current revenues. Enterprise funds account for operations that provide services on a continuous basis and are substantially financed by revenues derived from user charges.

The Water Authority utilizes the accrual basis of accounting. Revenues are recognized when earned, and expenses are recognized as they are incurred. The Water Authority's financial statements apply all effective pronouncements of the Governmental Accounting Standards Board (GASB).

### **(c) Cash and Investments**

The Water Authority's cash and cash equivalents are considered to be cash on hand, demand deposits, investments in money market mutual funds, pooled funds, and short-term investments with original maturities of three months or less from the date of acquisition. For financial statement presentation purposes, cash and cash equivalents includes both restricted and unrestricted cash and investments.

The Water Authority has the following legally restricted funds: Construction, Debt Service Reserve, and Pay-As-You-Go. The Construction Fund includes the proceeds from long-term and short-term debt and is restricted for use on capital project expenses. The Debt Service Reserve Fund holds the required amount for Water Authority debt issues. The Debt Service Reserve Fund is held for the purpose of making an issue's annual debt service payments in the event that the Water Authority should be unable to make such payments. The Pay-As-You-Go Fund consists of Capacity Charges and Water Standby Availability Charges and is restricted per Board adopted ordinances for the Capital Improvement Program (CIP). The funds are dedicated for capital project outlays, as well as debt service.

Investments are reported at fair value, consistent with quoted market prices, in accordance with GASB Statement No. 31, *Accounting and Financial Reporting for Certain Investments and External Investment Pools*, except for certain guaranteed investment contracts that are reported at cost because they are not transferable and have terms that are not affected by changes in market interest rates. The State Treasurer's investment pool operates in accordance with appropriate state laws and regulations.

Changes in fair value that occur during the fiscal year are recognized as investment income reported for that fiscal year. Investment income includes interest earnings, changes in fair value, and any gains or losses realized upon the liquidation or sale of investments. Note 3 of the Notes to the Financial Statements contains additional information on permissible investments per the Water Authority's Investment Policy.

### **(d) Inventories**

The Water Authority's inventories consist of water, valves and materials in storage and are valued using the average cost method.

**I. Nature of Business and Summary of Significant Accounting Policies, (continued)**

**(e) Reserves**

The Water Authority established other designated funds in alignment with best practice guidance: the Rate Stabilization Fund (RSF), Equipment Replacement Fund, and Stored Water Fund. The RSF is established for the purpose of collecting amounts of operating revenues greater than expenses in years of strong net revenues. These funds are to be used to mitigate “rate shock” in years of weak water sales and/or to manage debt service coverage ensuring coverage remains above the legally required minimum. During the fiscal years ended June 30, 2015 and 2014, the Water Authority transferred \$28,500,000 and \$22,000,000 to the RSF, respectively.

The Equipment Replacement Fund is funded by scheduled draws from the Operating Fund per the Board approved budget for small capital equipment, such as computers, vehicles, the Supervisory Control and Data Acquisition (SCADA) system, etc., to ensure funding is available to replace equipment that has reached the end of its useful life. The Stored Water Fund was established to support the purchase of water to fill the various Water Authority reservoirs. The majority of funds will be used to fill San Vicente Reservoir for the Emergency and Carryover Storage project.

**(f) Capital Assets**

Capital assets are valued at cost where historical records are available and at an estimated historical cost where no historical records exist. Donated assets are valued at their estimated fair value on the date received. The Water Authority capitalizes all assets with a historical cost of at least \$5,000 and a useful life of at least three years as the Water Authority does not have any capital assets with less than a three year useful life. The cost of normal maintenance and repairs that do not add to the value of the assets or materially extend asset lives are not capitalized.

Non-depreciable capital assets include Land, Easements, Mitigation Bank, Storage Rights, and Construction in Progress. Depreciable capital assets include Pipelines and Dams, Facilities, Equipment, Computer Systems Software, and Participation and Capacity Rights.

Depreciation and amortization is computed utilizing the straight-line method over the following estimated useful lives:

<b><i>Pipelines and Dams</i></b>	<b><i>60 to 100 years</i></b>
<b><i>Facilities</i></b>	<b><i>5 to 50 years</i></b>
<b><i>Equipment</i></b>	<b><i>3 to 8 years</i></b>
<b><i>Computer Systems Software</i></b>	<b><i>4 years</i></b>
<b><i>Participation and Capacity Rights</i></b>	<b><i>10 to 110 years</i></b>

**Intangible Assets** – In addition to computer systems software intangible assets, the Water Authority also participates in various storage and water management programs, or builds capital assets that by agreement entitle it to certain participation or capacity rights that are included in capital assets as intangible assets. Some projects also require payments for on-going maintenance, which are charged to expense as incurred. Amortization is computed utilizing the straight-line method over the estimated useful life for capacity rights, software, and permits. Amortization of participation rights is computed over the life of the agreement.

**Capitalized Interest** – The Water Authority capitalizes interest based on the criteria outlined in GASB Statement No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements*, which applies to taxable borrowings and tax-exempt non-project specific debt. The objective is to obtain a measure of the acquisition cost that more closely reflects the Water Authority’s total investment in the asset and to charge a cost that relates to the acquisition of a resource that will benefit future periods against revenues of the periods benefited. The amount to be capitalized is the amount of interest expense that would have been avoided during the asset’s acquisition period if the asset had not been acquired, whether or not the asset had been acquired through incurring debt. GASB Statement No. 62 requires a pooled calculation of average interest expense and a weighted average project allocation of interest expense with no offset for interest earnings.

## **I. Nature of Business and Summary of Significant Accounting Policies, (continued)**

### **(g) Compensated Absences**

It is the Water Authority's policy to permit employees to accumulate earned but unused vacation benefits up to a maximum of 50 days (75 days for management). Sick leave hours accrue at the rate of one day per month. The sick leave policy restricts unused sick leave conversion to vacation at a 50 percent hourly conversion rate for employees with more than 1,000 hours of accrued sick leave. Employees that terminated employment prior to retirement or death were paid zero percent of the unused sick leave. Employees that attained the age of 50, were vested with five years of service, and terminated employment due to retirement, layoff, or death, were paid 100 percent of unused vacation and 100 percent of unused sick leave (up to 1,000 hours), and 50 percent of any amount over 1,000 hours. Employees were required to transfer 100 percent of all accrued but unused vacation leave and up to 1,000 hours of sick leave (50 percent of any amount over 1,000 hours) into the Terminal Pay Plan if they retired, or separated employment due to death, after reaching the age of 55.

All accumulated and unused vacation and sick leave pay is recorded as an expense and as compensated absences liability at the time the benefit is earned. At the end of each fiscal year, the Water Authority conducts an analysis of historical annual leave payouts. Based on this analysis in Fiscal Years 2015 and 2014, the Water Authority recognizes 66 percent of the accrued but unused leave balances at June 30 as a current liability with the remaining 34 percent of the balance recorded as a long-term liability.

### **(h) Arbitrage Rebate**

Arbitrage is the difference between the interest paid on tax-exempt bonds and the interest earned by investing the proceeds in higher yielding taxable securities. Federal income tax laws generally restrict the ability to earn arbitrage and such amounts are accumulated in order to make arbitrage rebate payments to the federal government under the Internal Revenue Code. At the end of each fifth year computation period, the amount to be paid to the United States Treasury is equal to 90 percent of the Cumulative Rebate Liability amount (reduced by applicable computation date credits and any previous rebate payments made in connection with previous installment computation periods) and will be due not later than 60 days after the end of each fifth year computation period. The long-term liability amount represents ten percent of the Cumulative Rebate Liability amount and will be due not later than 60 days after the final maturity date of the debt issuance. Should the debt be retired prior to the next five year rebate installment date, 100 percent of the Cumulative Rebate Liability amount (reduced by applicable computation date credits and any previous rebate payments made in connection with previous installment computation periods) as of such retirement date will become due and payable within 60 days.

## I. Nature of Business and Summary of Significant Accounting Policies, (continued)

### (i) Net Position

The financial statements utilize a net position presentation. Net position is categorized as follows:

**Net investment in capital assets** – This component of net position consists of capital assets, net of accumulated depreciation and reduced by any debt outstanding, net of unspent proceeds, related to the acquisition, construction, or improvement of those assets and deferred outflows and inflows of resources related to debt.

**Restricted for construction projects** – This component of net position consists of external constraints placed on net position use imposed by creditors, grantors, contributors, or laws or regulations of other governments, or constraints imposed by law through constitutional provisions or enabling legislation, less outstanding debt associated with restricted assets.

**Restricted for debt service** – This component of net position consists of amounts required by bond covenants to be set aside in reserve to be used to pay debt service in the event pledged revenues are insufficient to cover the debt service requirements, less outstanding debt associated with restricted assets.

**Unrestricted** – This component of net position consists of net position that does not meet the definition of net investment in capital assets, restricted for construction projects, or restricted for debt service.

When both restricted and unrestricted resources are available, it is the Water Authority's policy to use restricted resources first followed by unrestricted resources as they are needed.

### (j) Infrastructure Access Charges

In June 1998, the Infrastructure Access Charge (IAC) was adopted by the Board as an additional source of fixed revenue to provide better coverage of the Water Authority's projected fixed expenses. The IAC is levied on each Water Authority member agency based on the number and size of retail water meters within the agencies and the Water Authority's service area. The fixed charge levied against each member agency together with the water standby charge and property tax revenue all combine for the purpose of maintaining a minimum ratio of projected fixed revenue to projected fixed expenses of at least 25 percent. The IAC is adjusted each calendar year as part of the regular rate-setting process and was \$2.76 and \$2.68 per meter equivalent per month for the Calendar Years 2015 and 2014, respectively.

### (k) Property Taxes

The Water Authority is authorized under the Act to levy taxes on all taxable property within its boundaries for the purposes of carrying on its operations and paying its obligations subject to certain limitations in the Act, the Revenue and Taxation Code, and the California Constitution.

Property taxes are billed and collected by the County of San Diego and are remitted to the Water Authority throughout the year. The tax rate is based upon the San Diego County Assessor's valuation of taxable property within the Water Authority's service area. In addition, the Water Authority collects an in-lieu charge from the City of San Diego.

### (l) In-Lieu Charges

Member agencies of the Water Authority may elect to pay in-lieu charges instead of the tax levy. Presently, only the City of San Diego pays the in-lieu charge directly to the Water Authority.

## **I. Nature of Business and Summary of Significant Accounting Policies, (continued)**

### **(m) Classification of Revenues**

Enterprise funds distinguish operating revenues and expenses from nonoperating items. Operating revenues and expenses generally result from providing services, and producing and delivering goods in connection with an enterprise fund's principal operations. The principal operating revenues of the Water Authority consist of sales of water. Nonoperating revenues consist of property taxes, in-lieu charges, IAC, investment income, intergovernmental, and other miscellaneous income.

### **(n) Capital Contributions**

Capital contributions include capacity charges, water standby availability charges, and contributions in aid of capital assets that are reflected in the accompanying Statements of Revenues, Expenses, and Changes in Net Position. Capital contributions consist of contributed capital assets and special charges that are legally restricted for capital expenses by state law or by the Board action that established those charges.

The Water Authority has two separate revenue sources to fund the CIP. A water standby availability charge was put into effect in Fiscal Year 1990 and is intended to recover some of the capital costs associated with maintaining the system. In Fiscal Year 1991, a capacity charge on all new or larger retail water meters installed within the boundaries of the Water Authority was implemented. This charge, based on meter size, is designed to recover a proportionate share of the capital costs associated with providing services to new connections.

Federal, state, and private grants used for capital purposes are included in contributions in aid of capital assets. These grants are typically of a reimbursable nature, that is the Water Authority first pays for the project and then the granting agency reimburses the Water Authority for its eligible expenses.

### **(o) Classification of Expenses**

Operating expenses for the Water Authority include the cost of sales, operations and maintenance, planning, general and administrative expenses, depreciation on capital assets, and amortization of intangible assets. Expenses not meeting this definition are reported as nonoperating expenses and include interest expense, debt issuance costs, amortization of bond premiums, amortization of deferred loss on refunding, and other miscellaneous expenses.

### **(p) Estimates**

The preparation of financial statements in conformity with Generally Accepted Accounting Principles (GAAP) requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Actual results could differ from estimates. Management believes that all estimates in the financial statements are reasonable.

### **(q) Pensions**

For purposes of measuring the net pension liability and deferred outflows/inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Water Authority's plans (Plan), which is administered by California Public Employees' Retirement System (CalPERS) and additions to/deductions from the Plans' 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.

## 2. Implementation of New Governmental Accounting Standards Board Statements

The Water Authority implemented, effective for Fiscal Year 2015 as required, GASB Statements Nos. 68, 69, and 71. The financial statements included herein apply the requirements and provisions of these statements. A summary of each implemented GASB statement and the impact on the Water Authority financial statements is included below.

### (a) Required Implementation in Fiscal Year 2015

#### ***GASB Statement No. 68 – Accounting and Financial Reporting for Pensions - An Amendment of GASB Statement No. 27 (Issued June 2012)***

GASB issued this Statement to improve the usefulness of information in government entity financial reports. Implementation of this Statement impacts the Water Authority financial reporting as follows:

- ◆ Beginning Net Position for Fiscal Year 2015 was reduced by \$61,177,953 upon implementation of Statement No. 68. See Note 18 for additional detail.
- ◆ Net Pension Liability is added to the Statements of Net Position. Pension obligation disclosures have previously been generally limited to the footnotes.
- ◆ Other balances are introduced as deferred outflows and deferred inflows of resources on the Statement of Net Position. The difference between the expected earnings on plan investments and actual investment earnings is recognized as deferred outflows/inflows of resources and included in expense in a systematic and rational manner over a five-year closed period rather than longer periods that were allowed under previous standards.
- ◆ Annual pension expense is no longer equal to the required contribution to the CalPER's. Under the new standard, benefits earned each year, interest on the total pension liability, changes in benefit terms, projected earnings on plan investments, and changes in plan net position from other than investments are factored into the calculation of pension expense immediately in the period in which the change occurs.

The Notes to the Financial Statements include:

- ◆ Descriptions of the plan and benefits provided
- ◆ Significant assumptions employed in the measurement of the net pension liability
- ◆ Descriptions of benefit changes and changes in assumptions
- ◆ Assumptions related to the discount rate and the impact on the total pension liability of a one percentage point increase and decrease in the discount rate
- ◆ Net pension liability and deferred outflows/inflows of resources for the current period, the beginning and ending balances of the net pension liability, and the effects of changes during the period (such as the effects of service cost, benefit changes, and actual investment earnings)

In addition, Required Supplementary Information (RSI) will be progressively enhanced to include ten years of statistical information consisting of the following:

- ◆ Beginning and ending balances of the total pension liability, the plan trust's net position, and the net pension liability, and their components
- ◆ Total pension liability, the plan's net position, the net pension liability, a ratio of the plan's net position to the total pension liability, the covered-employee payroll, and a ratio of the net pension liability as a percentage of the covered-employee payroll
- ◆ Actuarially determined annual pension contribution
- ◆ Amount of employer contribution actually made
- ◆ Payroll of employees covered by the plan

## 2. Implementation of New Governmental Accounting Standards Board Statements, (continued)

### (a) Required Implementation in Fiscal Year 2015, (continued)

#### ***GASB Statement No. 69 – Government Combinations and Disposals of Government Operations (Issued January 2013)***

This Statement establishes accounting and financial reporting standards related to government combinations and disposals of government operations. As used in this Statement, the term *government combinations* includes a variety of transactions referred to as mergers, acquisitions, and transfers of operations. A disposal of a government's operations results in the removal of specific activities of a government.

This Statement provides specific accounting and financial reporting guidance for combinations in the government environment and for disposals of government operations that have been transferred or sold. This Statement requires disclosures to be made about government combinations and disposals of government operations to enable financial statement users to evaluate the nature and financial effects of those transactions.

The requirements of this Statement are effective for government combinations and disposals of government operations occurring in financial reporting periods beginning after December 15, 2013. This Statement did not impact the Water Authority financial statements.

#### ***GASB Statement No. 71 – Pension Transition for Contributions Made Subsequent to the Measurement Date - An Amendment of GASB Statement No. 68 (Issued November 2013)***

The objective of this Statement is to address an issue regarding application of the transition provisions of Statement No. 68. This Statement amends paragraph 137 of Statement No. 68 to require that, at transition, a government recognize a beginning deferred outflow of resources for its pension contributions, if any, made subsequent to the measurement date of the beginning net pension liability. Statement No. 68, as amended, continues to require that beginning balances for other deferred outflows of resources and deferred inflows of resources related to pensions be reported at transition only if it is practical to determine all such amounts.

The requirements of this Statement will eliminate the source of a potential significant understatement of restated beginning net position and expense in the first year of implementation of Statement No. 68 in the accrual-basis financial statements of employers and nonemployer contributing entities.

This Statement is required to be applied beginning in fiscal year ended June 30, 2015, simultaneously with the provisions of Statement No. 68. As of July 1, 2014, the Water Authority restated beginning net position in the amount of \$61,177,953 to record the beginning deferred pension contributions and pension liability.

## 2. Implementation of New Governmental Accounting Standards Board Statements, (continued)

### (b) Upcoming Governmental Accounting Standards Implementation

#### ***GASB Statement No. 72 – Fair Value Measurement and Application (Issued February 2015)***

The objective of this Statement is to improve financial reporting by clarifying the definition of fair value for financial reporting purposes, establishing general principles for measuring fair value, providing additional fair value application guidance, and enhancing disclosures about fair value measurements. These improvements are based in part on the concepts and definitions established in Concepts Statement No. 6, *Measurement of Elements of Financial Statements*, and other relevant literature.

The requirements of this Statement will enhance comparability of financial statements among governments by requiring measurement of certain assets and liabilities at fair value using a consistent and more detailed definition of fair value and accepted valuation techniques. This Statement also will enhance fair value application guidance and related disclosures in order to provide information to financial statement users about the impact of fair value measurements on a government's financial position.

The requirements of this Statement are effective for financial statements for periods beginning after June 15, 2015.

#### ***GASB Statement No. 73 – Accounting and Financial Reporting for Pensions and Related Assets That Are Not Within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68 (Issued June 2015)***

The objective of this Statement is to improve the usefulness of information about pensions included in the general purpose external financial reports of state and local governments for making decisions and assessing accountability.

The requirements of this Statement will improve financial reporting by establishing a single framework for the presentation of information about pensions, which will enhance the comparability of pension-related information reported by employers and nonemployer contributing entities.

Provisions outlined in this Statement that address accounting and financial reporting by employers and governmental nonemployer contributing entities for pensions that are not within the scope of Statement No. 68 are effective for financial statements for fiscal years beginning after June 15, 2016. Provisions of this Statement that address financial reporting for assets accumulated for purposes of providing those pensions are effective for fiscal years beginning after June 15, 2015.

#### ***GASB Statement No. 74 – Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans (Issued June 2015)***

The objective of this Statement is to improve the usefulness of information about postemployment benefits other than pensions (other postemployment benefits or OPEB) included in the general purpose external financial reports of state and local governmental OPEB plans for making decisions and assessing accountability.

This Statement replaces Statement No. 43, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, as amended, and Statement No. 57, *OPEB Measurements by Agent Employers and Agent Multiple-Employer Plans*.

The requirements of this Statement will improve financial reporting primarily through enhanced note disclosures and schedules of required supplementary information that will be presented by OPEB plans that are administered through trusts that meet the specified criteria.

This Statement is effective for financial statements for fiscal years beginning after June 15, 2016.

## 2. Implementation of New Governmental Accounting Standards Board Statements, (continued)

### (b) Upcoming Governmental Accounting Standards Implementation, (continued)

#### ***GASB Statement No. 75 – Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions (Issued June 2015)***

The primary objective of this Statement is to improve accounting and financial reporting by state and local governments for postemployment benefits other than pensions (other postemployment benefits or OPEB). It also improves information provided by state and local government employers about financial support for OPEB that is provided by other entities.

This Statement replaces the requirements of Statements No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*, as amended, and Statement No. 57, *OPEB Measurements by Agent Employers and Agent Multiple-Employer Plans*, for OPEB.

The requirements of this Statement will improve the decision-usefulness of information in employer and governmental nonemployer contributing entity financial reports and will enhance its value for assessing accountability and interperiod equity by requiring recognition of the entire OPEB liability and a more comprehensive measure of OPEB expense.

This Statement is effective for fiscal years beginning after June 15, 2017.

#### ***GASB Statement No. 76 – The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments (Issued June 2015)***

The objective of this Statement is to identify—in the context of the current governmental financial reporting environment—the hierarchy of GAAP.

This Statement supersedes Statement No. 55, *The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments*.

The requirements in this Statement improve financial reporting with less variation between governments, which will improve the usefulness of financial statement information for making decisions and assessing accountability and enhance the comparability of financial statement information among governments.

Provisions outlined in this Statement are effective for financial statements for periods beginning after June 15, 2015.

#### ***GASB Statement No. 77 – Tax Abatement Disclosures (Issued August 2015)***

The objective of this Statement is to provide financial statement users with essential information about the nature and magnitude of the reduction in tax revenues through tax abatement programs in order to better assess (a) whether current-year revenues were sufficient to pay for current-year services, (b) compliance with finance-related legal or contractual requirements, (c) where a government's financial resources come from and how it uses them, and (d) financial position and economic condition and how they have changed over time.

The requirements of this Statement improve financial reporting by giving users of financial statements essential information that is not consistently or comprehensively reported to the public at present. Disclosure of information about the nature and magnitude of tax abatements will make these transactions more transparent to financial statement users. As a result, users will be better equipped to understand (1) how tax abatements affect a government's future ability to raise resources and meet its financial obligations and (2) the impact those abatements have on a government's financial position and economic condition.

The requirements of this Statement are effective for financial statements for periods beginning after December 15, 2015.

### 3. Cash and Investments

Cash and investments are classified in the accompanying Statements of Net Position at June 30 as follows:

	2015	2014
<b>Current assets:</b>		
Cash and investments	\$ 111,130,235	\$ 1,609,258
Restricted cash and investments	170,873,233	337,066,803
<b>Total current assets</b>	<b>282,003,468</b>	<b>338,676,061</b>
<b>Noncurrent assets:</b>		
Cash and investments	115,405,373	200,567,595
Restricted cash and investments	70,039,820	16,715,590
<b>Total noncurrent assets</b>	<b>185,445,193</b>	<b>217,283,185</b>
<b>Total cash and investments</b>	<b>\$ 467,448,661</b>	<b>\$ 555,959,246</b>

The carrying value of cash and investments held by the Water Authority at June 30 consisted of the following:

	2015	2014
Petty cash	\$ 2,500	\$ 2,500
Deposits	2,255,896	4,680,356
Investments	465,190,265	551,276,390
<b>Total cash and investments</b>	<b>\$ 467,448,661</b>	<b>\$ 555,959,246</b>

### 3. Cash and Investments, (continued)

#### (a) Investments Authorized by the California Government Code and the Water Authority's Investment Policy

The table below identifies the investment types that are authorized for the Water Authority by the California Government Code (Gov't. Code) and the Water Authority's Investment Policy (Inv. Policy). The table also identifies certain provisions of the California Government Code (or the Water Authority's Investment Policy, if more restrictive) that address interest rate risk, credit risk, and concentration of credit risk. This table does not address investments of debt proceeds held by bond trustees that are governed by the provisions of debt agreements of the Water Authority rather than the general provisions of the California Government Code Sections 53600 et seq or the Water Authority's Investment Policy.

	Maximum Maturity		Maximum Percentage of Portfolio		Maximum Investment in One Issuer		Minimum Rating	
	Gov't. Code	Inv. Policy	Gov't. Code	Inv. Policy	Gov't. Code	Inv. Policy	Gov't. Code	Inv. Policy
Local agency bonds	5 years	5 years	None	20%	None	5%	None	A
U.S. Treasury securities	5 years	5 years	None	None	None	None	None	None
Federal agency securities	5 years	5 years	None	85%	None	None	None	None
Bankers' acceptances	180 days	180 days	40%	20%	30%	5%	None	A
Commercial paper	270 days	270 days	25%	25%	10%	5%	A1/PI/FI	A1/PI/FI
Certificates of deposit	5 years	5 years	30%	15%	None	None	None	None
Placement service deposits	5 years	5 years	30% <sup>(4)</sup>	15% <sup>(5)</sup>	None	5% <sup>(6)</sup>	None	None
Negotiable certificates of deposit	5 years	5 years	30% <sup>(4)</sup>	15% <sup>(5)</sup>	None	5% <sup>(6)</sup>	None	AA <sup>(7)</sup>
Repurchase agreements	1 year	1 year	None	20%	None	None	None	A
Reverse repurchase agreements	92 days	92 days	20% of portfolio base value	20% of portfolio base value	None	None	None	None
Medium-term notes	5 years	5 years	30%	30%	None	5%	A	AA <sup>(7)</sup>
Mutual funds	n/a	<sup>(8)</sup>	20%	<sup>(8)</sup>	10%	<sup>(8)</sup>	AAA	<sup>(8)</sup>
Money market mutual funds	n/a	n/a	20%	15%	None	None	AAA	AAA
Mortgage pass-through securities	5 years	<sup>(8)</sup>	20%	<sup>(8)</sup>	None	<sup>(8)</sup>	AA	<sup>(8)</sup>
County pooled investment funds <sup>(1)</sup>	n/a	<sup>(8)</sup>	None	<sup>(8)</sup>	None	<sup>(8)</sup>	None	<sup>(8)</sup>
JPA pools (other investment pools)	n/a	n/a	None	25%	None	None	None	AAA
Supranationals <sup>(2)</sup>	5 years	5 years	30%	10%	None	5%	AA	AA
Local agency investment fund (LAIF) <sup>(3)</sup>	n/a	n/a	None	\$50M	None	None	None	None

Notes:

(1) Authorized by Gov't. Code Section 53684 (a).

(2) Authorized by Gov't Code section 53601 (q).

(3) Authorized by Gov't. Code Section 16429.1.

(4) The combined Gov't. Code maximum portfolio exposure to placement service certificates of deposit and negotiable certificates of deposit is 30 percent.

(5) The combined Inv. Policy maximum portfolio exposure to placement service certificates of deposit and negotiable certificates of deposit is 15 percent.

(6) The combined Inv. Policy maximum investment in one issuer for placement service certificates of deposit and negotiable certificates of deposit is five percent.

(7) Must have a minimum rating of "AA" by at least one of the three credit rating agencies and not rated lower than "A" by the other two.

(8) These investments are not authorized by the Investment Policy.

### 3. Cash and Investments, (continued)

#### (b) Investments Authorized by Debt Agreements

Investments of debt proceeds held by bond trustees are governed by provisions of the debt agreements rather than the general provisions of the California Government Code or the Water Authority's Investment Policy. In addition to the investments authorized in the previous table, debt proceeds held by bond trustees may be invested in guaranteed investment contracts with a maximum maturity that is limited to the final maturity of the bonds being issued.

#### (c) Disclosures Relating to Interest Rate Risk

Interest rate risk is the risk where changes in market interest rates will adversely affect the fair value of an investment. Generally, the longer the maturity of an investment, the greater the sensitivity its fair value is to changes in market interest rates. One of the ways that the Water Authority manages its exposure to interest rate risk is by purchasing a combination of shorter-term and longer-term investments, and by timing cash flows from maturities so that a portion of the portfolio is maturing or approaching maturity evenly over time as necessary to provide the cash flow and liquidity needed for operations.

Information about the sensitivity of the fair values of the Water Authority's investments (including investments held by bond trustees) to market interest rate fluctuations is provided by the following table that shows the distribution of the Water Authority's investments by terms to maturity for Fiscal Years 2015 and 2014, respectively.

Investment Type	Fair Value	Fiscal Year 2015 Remaining Term to Maturity			
		12 months or less	13 to 36 months	37 to 60 months	More than 60 months
U.S. Treasury securities	\$ 61,061,452	\$ 21,001,487	\$ 40,059,965	\$ -	\$ -
Federal agency securities	196,874,914	83,784,632	106,071,697	7,018,585	-
Medium-term notes	20,008,033	-	7,992,080	12,015,953	-
Commercial paper	34,903,938	34,903,938	-	-	-
LAIF	136,027,320	136,027,320	-	-	-
JPA pools	3,620,527	3,620,527	-	-	-
Money market mutual funds	453,306	453,306	-	-	-
<b>Held by bond trustees:</b>					
Guaranteed investment contract	12,240,775	-	-	-	12,240,775
<b>Fiscal Year 2015 Total</b>	<b>\$ 465,190,265</b>	<b>\$ 279,791,210</b>	<b>\$ 154,123,742</b>	<b>\$ 19,034,538</b>	<b>\$ 12,240,775</b>

Investment Type	Fair Value	Fiscal Year 2014 Remaining Term to Maturity			
		12 months or less	13 to 36 months	37 to 60 months	More than 60 months
U.S. Treasury securities	\$ 64,870,725	\$ 17,799,903	\$ 42,120,432	\$ 4,950,390	\$ -
Federal agency securities	243,247,149	89,752,458	136,611,991	16,882,700	-
Commercial paper	54,898,126	54,898,126	-	-	-
LAIF	164,951,847	164,951,847	-	-	-
JPA pools	6,089,678	6,089,678	-	-	-
Money market mutual funds	503,276	503,276	-	-	-
<b>Held by bond trustees:</b>					
Money market mutual funds	58,784	58,784	-	-	-
Federal agency securities	4,416,030	4,416,030	-	-	-
Guaranteed investment contract	12,240,775	-	-	-	12,240,775
<b>Fiscal Year 2014 Total</b>	<b>\$ 551,276,390</b>	<b>\$ 338,470,102</b>	<b>\$ 178,732,423</b>	<b>\$ 21,833,090</b>	<b>\$ 12,240,775</b>

### 3. Cash and Investments, (continued)

#### (d) Disclosures Relating to Credit Risk

Generally, credit risk is the risk that an issuer of an investment will not 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. Presented in the tables on the following page for Fiscal Years 2015 and 2014, respectively, is the minimum rating required (where applicable) by the California Government Code, the Water Authority's Investment Policy, or debt agreements, and the actual rating as of year-end for each investment type.

Investment Type	Fair Value	Minimum Legal Rating	Exempt From Disclosure	Rating as of Fiscal Year Ended June 30, 2015		
				AAA/AA+	AI	Not Rated
U.S. Treasury securities	\$ 61,061,452	n/a	\$ 61,061,452	\$ -	\$ -	\$ -
Federal agency securities	196,874,914	n/a	-	196,874,914	-	-
Medium-term notes	20,008,033	AA	-	20,008,033	-	-
Commercial paper	34,903,938	AI	-	-	34,903,938	-
LAIF	136,027,320	n/a	-	-	-	136,027,320
JPA pools	3,620,527	AAA	-	3,620,527	-	-
Money market mutual funds	453,306	AAA	-	453,306	-	-
<b>Held by bond trustees:</b>						
Guaranteed investment contract	12,240,775	n/a	-	-	-	12,240,775
<b>Total</b>	<b>\$465,190,265</b>		<b>\$ 61,061,452</b>	<b>\$ 220,956,780</b>	<b>\$ 34,903,938</b>	<b>\$ 148,268,095</b>

Investment Type	Fair Value	Minimum Legal Rating	Exempt From Disclosure	Rating as of Fiscal Year Ended June 30, 2014		
				AAA/AA+	AI	Not Rated
U.S. Treasury securities	\$ 64,870,725	n/a	\$ 64,870,725	\$ -	\$ -	\$ -
Federal agency securities	243,247,149	n/a	-	243,247,149	-	-
Commercial paper	54,898,126	AI	-	-	54,898,126	-
LAIF	164,951,847	n/a	-	-	-	164,951,847
JPA pools	6,089,678	AAA	-	6,089,678	-	-
Money market mutual funds	503,276	AAA	-	503,276	-	-
<b>Held by bond trustees:</b>						
Money market mutual funds	58,784	AAA	-	58,784	-	-
Federal agency securities	4,416,030	n/a	-	4,416,030	-	-
Guaranteed investment contract	12,240,775	n/a	-	-	-	12,240,775
<b>Total</b>	<b>\$ 551,276,390</b>		<b>\$ 64,870,725</b>	<b>\$ 254,314,917</b>	<b>\$ 54,898,126</b>	<b>\$ 177,192,622</b>

### 3. Cash and Investments, (continued)

#### (e) Concentration of Credit Risk

Investments in any one issuer (other than U.S. Treasury securities, money market mutual funds, and external investment pools) that represent five percent or more of total Water Authority investments are as follows for Fiscal Years 2015 and 2014, respectively.

#### Fiscal Year 2015

Issuer	Investment Type	Reported Amount	% of Total Investments
Federal National Mortgage Association	Federal agency securities	\$ 98,952,380	21.3%
Federal Home Loan Mortgage Corporation	Federal agency securities	44,289,325	9.5%
Federal Home Loan Bank	Federal agency securities	26,981,808	5.8%
Federal Farm Credit Bank	Federal agency securities	26,651,401	5.7%

#### Fiscal Year 2014

Issuer	Investment Type	Reported Amount	% of Total Investments
Federal National Mortgage Association	Federal agency securities	\$ 113,330,690	20.6%
Federal Home Loan Mortgage Corporation	Federal agency securities	91,834,145	16.7%
Federal Farm Credit Bank	Federal agency securities	33,075,670	6.0%

#### (f) Custodial Credit Risk

Custodial credit risk for deposits is the risk 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 (for example, broker-dealer) 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 and the Water Authority's Investment Policy do 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 (unless so waived by the governmental unit). The market value of the pledged securities in the collateral pool must equal at least 110 percent 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 percent of the secured public deposits. The Water Authority was not exposed to custodial credit risk as of June 30, 2015 and 2014.

### 3. Cash and Investments, (continued)

#### (g) Investment in State Investment Pool

The Water Authority is a voluntary participant in the Local Agency Investment Fund (LAIF) that is regulated by California Government Code Section 16429 under the oversight of the Treasurer of the State of California. The fair value of the Water Authority's investment in the pool is reported in the accompanying financial statements at amounts based upon the Water Authority's pro-rata share of the fair value provided by LAIF for the entire LAIF portfolio. The balance available for withdrawal is based on the accounting records maintained by LAIF, which is recorded on an amortized cost basis.

The total amount invested by all public agencies in LAIF as of June 30, 2015 and 2014 was \$21.5 billion and \$21.1 billion, respectively. LAIF is part of the California Pooled Money Investment Account (PMIA), which as of June 30, 2015 and 2014 had a balance of \$69.6 billion and \$64.8 billion, respectively, and of those amounts, 2.08 percent and 1.86 percent were invested in medium-term and short-term structured notes, and asset-backed securities as of June 30, 2015 and 2014, respectively. The average maturity of PMIA investments as of June 30, 2015 and 2014 was 239 days and 232 days, respectively.

#### (h) JPA Pools

The Water Authority is a voluntary participant in California Asset Management Program (CAMP), a California Joint Powers Authority that falls under California Government Code Section 53601(p), which is directed by a Board of Trustees that is made up of experienced local government finance directors and treasurers. CAMP had a balance of \$1.6 billion and \$1.7 billion at June 30, 2015 and 2014, respectively, with a weighted average maturity of 32 days and 41 days, respectively. The value of the pool shares in CAMP, which may be withdrawn, is determined on an amortized cost basis, the same as the fair value of the Water Authority's position in the pool.

### 4. Inventories

Components of inventories at June 30, 2015 and 2014 are as follows:

	<b>2015</b>	<b>2014</b>
Water in storage	\$ 52,013,650	\$ 27,158,674
Valves in storage	255,735	276,656
Materials in storage	159,237	154,574
<b>Total inventories</b>	<b>\$ 52,428,622</b>	<b>\$ 27,589,904</b>

## 5. Prepaid Expenses

In March 2008, the Water Authority purchased 10,006 and 13,071 acre-feet of transfer water from the Butte Water District and Sutter Extension Water District, respectively, for a total of 23,077 acre-feet. As part of the transfer, the Water Authority incurred a Delta carriage loss of 20 percent, a conveyance loss of three percent and evaporative and aquifer losses of ten percent. After the adjustments, the total acre-feet for Butte Water District and Sutter Extension Water District are 6,930 and 9,187, respectively, a total of 16,117 acre-feet. This water is currently stored outside the Water Authority's service area pursuant to a long-term groundwater storage agreement as outlined in Note 9d. As such, it is classified as prepaid expenses on the Statements of Net Position in the amount of \$4,620,500 as of June 30, 2015 and 2014.

Also included in prepaid expenses are payments to the Water Authority's benefits administrator for Fiscal Years 2015 and 2014 in the amount of \$16,315 and \$17,093, respectively. The total prepaid expenses balance as of June 30, 2015 and 2014 was \$4,636,815 and \$4,637,593, respectively.

## 6. Long-Term Loan Receivables

### Imperial Irrigation District

In October 2003, the Water Authority amended its Transfer Agreement with IID. As part of this amendment, the Water Authority made initial socioeconomic impact payments of \$10.0 million in four installments. These funds will be used to pay for the initial administrative costs, and estimated and annual cumulative socioeconomic impact costs.

Beginning in Calendar Year 2019, the Water Authority will begin receiving credits from IID to be applied against any payments due and shall continue until Calendar Year 2048 or until the agreement is terminated, whichever comes first. If the agreement terminates before Calendar Year 2048, IID is under no obligation to pay the Water Authority the remaining balance of the loan.

Under the terms of the amended agreement, in December 2007, the Water Authority paid IID \$10.0 million for future deliveries of water. Interest on the prepayment shall begin to accrue on December 31, 2019 using the Water Authority's weighted average cost of funds for its short-term and long-term debt outstanding as shown in the Water Authority's annual financial report for each fiscal year ending June 30. If not repaid sooner, beginning on December 31, 2019 through December 31, 2033, IID shall credit the Water Authority's monthly invoice for conserved water in 180 equal monthly installments of \$55,556 plus accrued interest. As of June 30, 2015 and 2014, the total long-term loan receivables balance was \$20,000,000.

## 7. Capital Assets

Capital Asset activity for the fiscal years ended June 30, 2015 and 2014:

	Balance at June 30, 2013	Additions	Deletions	Transfers
<b>Capital assets not depreciated:</b>				
Land	\$ 22,333,982	\$ 910,690	\$ -	\$ -
Easements	7,610,124	321,168	-	2,077
Mitigation Bank (Note 8)	5,017,023	-	-	-
Storage rights	41,016,383	-	-	-
Construction in progress	451,716,143	122,126,546 <sup>(1)</sup>	(38,885) <sup>(2)</sup>	(17,905,451)
<b>Total capital assets not depreciated</b>	<b>527,693,655</b>	<b>123,358,404</b>	<b>(38,885)</b>	<b>(17,903,374)</b>
<b>Capital assets being depreciated:</b>				
Pipelines and dams	1,786,130,985	-	-	4,595,730
Facilities	744,832,423	610,184	(27,291,589) <sup>(3)</sup>	13,011,839
Equipment	34,751,465	595,560	(162,885)	18,002
Computer systems software	7,644,109	-	-	273,611
Participation and capacity rights (Note 9)	503,001,729	5,777,071	-	4,192
<b>Total capital assets being depreciated</b>	<b>3,076,360,711</b>	<b>6,982,815</b>	<b>(27,454,474)</b>	<b>17,903,374</b>
<b>Accumulated depreciation and amortization (Note 1e):</b>				
Pipelines and dams	(251,959,640)	(21,314,582)	-	-
Facilities	(107,928,665)	(20,750,651)	5,669	-
Equipment	(27,336,025)	(2,590,375)	162,885	-
Computer systems software	(4,379,433)	(1,091,718)	-	-
Participation and capacity rights (Note 9)	(45,078,026)	(10,842,292)	-	-
<b>Total accumulated depreciation and amortization</b>	<b>(436,681,789)</b>	<b>(56,589,618)</b>	<b>168,554</b>	<b>-</b>
Capital assets, net of depreciation and amortization	2,639,678,922	(49,606,803)	(27,285,920)	17,903,374
<b>Total capital assets</b>	<b>\$ 3,167,372,577</b>	<b>\$ 73,751,601</b>	<b>\$ (27,324,805)</b>	<b>\$ -</b>

Notes:

(1) Additions include capitalized interest of \$14.8 million and \$20.6 million for Fiscal Years 2015 and 2014, respectively.

(2) Construction in progress deletions are for write off of Tijuana River Valley Mitigation and demolition of Otay 9 Flow Control Facility.

(3) Includes \$27,285,920 asset adjustment related to the Lake Hodges settlement agreement.

7. Capital Assets, (continued)

	Balance at June 30, 2014	Additions	Deletions	Transfers	Balance at June 30, 2015
\$	23,244,672	\$ -	\$ -	\$ 808,635	\$ 24,053,307
	7,933,369	4,650	-	3,920,772	11,858,791
	5,017,023		-	312,975	5,329,998
	41,016,383		-	370,735,521	411,751,904
	555,898,353	99,062,559 <sup>(1)</sup>	(2,930,335) <sup>(2)</sup>	(464,915,062)	187,115,515
	<b>633,109,800</b>	<b>99,067,209</b>	<b>(2,930,335)</b>	<b>(89,137,159)</b>	<b>640,109,515</b>
	1,790,726,715	-	-	80,579,077	1,871,305,792
	731,162,857	369,803	(161,862)	8,406,441	739,777,239
	35,202,142	1,637,477	(649,688)	151,641	36,341,572
	7,917,720	-	-	-	7,917,720
	508,782,992	3,149,478	-	-	511,932,470
	<b>3,073,792,426</b>	<b>5,156,758</b>	<b>(811,550)</b>	<b>89,137,159</b>	<b>3,167,274,793</b>
	(273,274,222)	(21,971,489)	-	-	(295,245,711)
	(128,673,647)	(21,284,446)	109,356	-	(149,848,737)
	(29,763,515)	(2,565,098)	649,688	-	(31,678,925)
	(5,471,151)	(1,000,584)	-	-	(6,471,735)
	(55,920,318)	(10,929,667)	-	-	(66,849,985)
	<b>(493,102,853)</b>	<b>(57,751,284)</b>	<b>759,044</b>	<b>-</b>	<b>(550,095,093)</b>
	2,580,689,573	(52,594,526)	(52,506)	89,137,159	2,617,179,700
\$	<b>3,213,799,373</b>	<b>\$ 46,472,683</b>	<b>\$ (2,982,841)</b>	<b>\$ -</b>	<b>\$ 3,257,289,215</b>

## 8. Mitigation Bank

The Mitigation Bank contains purchased rights to designate the future use of land in which title is held by another entity. This acreage includes wetland, stream, or other open space areas that have been restored, established, enhanced, or preserved for the purpose of providing compensation to the public for unavoidable impacts to the environment permitted under Section 404 of the Federal Clean Water Act or other state or local regulation. The Water Authority transfers a proportionate share of the cost of the Mitigation Bank to the capital project at the time the acreage is identified to mitigate the impacts from a specific project. These costs are then amortized over the estimated useful life of the related asset. As of June 30, 2015 and 2014, the value of acreage remaining was \$5,329,998 and \$5,017,023, respectively.

Mitigation Sites	Acres	
	Total	Remaining
Crestridge Habitat Management Area (HMA)	258.45	16.93
San Miguel Conservation	820.85	820.85
<b>Mitigation Bank Total</b>	<b>1,079.30</b>	<b>837.78</b>

## 9. Participation and Capacity Rights

The Water Authority builds capital assets that, by agreement, entitle it to certain participation and capacity rights. The total participation and capacity rights, net of amortization, were \$445,082,485 and \$452,862,674 as of June 30, 2015 and 2014, respectively.

### (a) Quantification Settlement Agreement Joint Powers Authority Participation Rights

Pursuant to the Quantification Settlement Agreement Joint Powers Authority (QSA JPA) Creation and Funding Agreement (Agreement), the Water Authority agreed with IID, Coachella Valley Water District (CVWD), and the State of California, to accept responsibility for certain environmental mitigation requirements.

Under Article IX of the Agreement, the environmental mitigation contribution required by the Water Authority net of amortization was \$49,180,048 and \$49,585,489 as of June 30, 2015 and 2014, respectively. Amortization is computed using the acre-feet assigned per calendar year over the 75-year life of the Agreement.

In addition, the Agreement required the Water Authority to pay, net of amortization, \$8,703,476 and \$8,965,235 as of June 30, 2015 and 2014, respectively, as a contribution to the Salton Sea Restoration Fund. Amortization is computed utilizing the straight-line method over the 75-year life of the Agreement.

Legal expenses associated with the right to purchase water capitalized due to the MWD litigation for June 30, 2015 and 2014, net of amortization, totaled \$14,927,934 and \$11,971,174, respectively, and are amortized utilizing the straight-line method over the life of the Agreement of 75 years. The QSA JPA is not a named party to the Water Authority litigation challenging MWD's rate structure.

### (b) Imperial Irrigation District Socioeconomic Participation Rights

IID and the Water Authority resolved a dispute concerning the nature and extent of the obligations and covenants under Section 14.5 of the Revised Fourth Amendment to the Agreement between IID and the Water Authority for the Transfer of Conserved Water by agreeing to additional annual payments to be made to IID. Participation rights, net of amortization, totaled \$5,904,000 and \$8,856,000 as of June 30, 2015 and 2014, respectively, and are being amortized using the straight-line method over ten years.

## 9. Participation and Capacity Rights, (continued)

### (c) Canal Lining Participation Rights

On October 10, 2003 the Water Authority assumed MWD's rights and obligations for the All-American Canal and Coachella Canal Lining Projects under Article 4A of the Colorado River Water Delivery Settlement Allocation agreement between the United States, MWD, IID, CVWD, and the San Luis Rey Indian Water Authority (SLR). The agreement, net of amortization, required payment of \$3,644,176 and \$3,701,791 as of June 30, 2015 and 2014, respectively, to IID for MWD's outstanding obligations.

The agreement specifically assigned the project of lining the Coachella Canal, which is a branch from the Colorado River and is owned by the U.S. Bureau of Reclamation (BOR), to the Water Authority. The lining of the canal was in order to control water seepage through the previous unlined canal. The Coachella Canal now provides a firm supply of 21,500 acre-feet per year to the Water Authority. The cost of the project was offset by a funding agreement with the Department of Water Resources for \$79,447,974. Participation rights for this project, net of amortization, totaled \$116,023,221 and \$117,128,205 as of June 30, 2015 and 2014, respectively, and are amortized utilizing the straight-line method over the life of the agreement, which is 110 years.

The agreement executed January 13, 2006 between BOR, IID, and the Water Authority for the construction of the All-American Canal Lining Project provides for the construction of the canal by IID with oversight by the Water Authority and the BOR. The All-American Canal provides 56,200 acre-feet per year to the Water Authority annually for 110 years. The Department of Water Resources funded \$135.7 million for construction of the All-American Canal Lining Project, and the Water Authority funded the amount over the state subsidy. Participation rights for this project, net of amortization, totaled \$146,781,643 and \$148,170,742 as of June 30, 2015 and 2014, respectively, and are amortized utilizing the straight-line method over the life of the agreement of 110 years.

### (d) Vidler and Semitropic Participation Rights

In July 2008, the Water Authority entered into agreements with Vidler Water Company (Vidler) and Semitropic-Rosamond Water Bank (Semitropic) that entitles the Water Authority to storage, withdrawal, and exchange rights within the Semitropic Water Banking and Exchange Program, the Semitropic Water Bank Recovery Unit, and the Antelope Valley Water Bank.

The Water Authority bought Vidler's 30,000 acre-feet of storage and recovery rights in the Semitropic Water Storage District's underground basin in Kern County. The Water Authority also invested in Semitropic, which will provide a total of 40,000 acre-feet of storage rights, for a total amount of 70,000 acre-feet.

Storage and recovery rights for this program totaled, net of amortization, \$8,759,016 and \$9,186,285 for Vidler and \$11,250,000 and \$11,798,780 for Semitropic as of June 30, 2015 and 2014, respectively. These rights are amortized using the straight-line method over the life of the agreements, which end in 2035.

## **9. Participation and Capacity Rights, (continued)**

### **(e) Levy Treatment Plant Capacity Rights**

In April 1997, the Water Authority entered into a capacity agreement with Helix Water District (Helix) for installation of an untreated water transmission pipeline, a flow control facility, and expansion of the R.M. Levy Water Treatment Plant (Levy Plant). Helix owns, operates, and maintains the Levy Plant and agreed to its phased expansion to 106 million gallons per day (mgd). In accordance with the April 1997 agreement, the Water Authority has capacity rights of 26 mgd. In April 2006, a third amendment to the agreement with Helix transferred to the Water Authority an additional 10 mgd capacity in the Levy Plant, for total capacity rights of 36 mgd. The Water Authority paid \$10.6 million to Helix for 10 mgd of additional capacity in the Levy Plant, \$300,000 to Helix for 4 mgd of additional capacity in the 54-inch transmission main (for Lakeside Water District), \$1.5 million to Helix for 8 mgd of additional capacity in Helix Flume Pipeline (for Otay Water District), and \$600,000 to Helix for 12 mgd of additional capacity in Helix Flume Pipeline (for Padre Dam Municipal Water District). Capacity rights for Levy Plant Capacity Purchases, net of amortization, totaled \$11,757,364 and \$12,137,657 as of June 30, 2015 and 2014, respectively, and are being amortized using the straight-line method over 35 years.

### **(f) Los Coches Pump Station and Helix Flume Pipeline Capacity Rights**

In April 2006, the Water Authority entered into an agreement with Helix regarding implementation of the East County Regional Treated Water Improvement Program (ECRTWIP). The purpose of the ECRTWIP is to significantly improve the regional water treatment capacity in East County by maximizing utilization of the Levy Plant to provide additional capacity to Otay Water District, Lakeside Water District, and Padre Dam Municipal Water District. The Los Coches Pump Station, which pumps into the Helix Flume Pipeline, was increased from 22 mgd to 64 mgd, with the Water Authority having capacity rights to 24 mgd. A section of the Helix Flume Pipeline had to be replaced with a new 48-inch steel pipe to withstand the increased pressure, with the Water Authority having capacity rights to 12 mgd. Capacity rights for Los Coches Pump Station, net of amortization, totaled \$2,765,700 and \$3,328,215 as of June 30, 2015 and 2014, respectively, and for Helix Flume Pipeline, net of amortization, totaled \$2,474,301 and \$2,977,549 as of June 30, 2015 and 2014, respectively, and are being amortized using the straight-line method over ten years.

### **(g) Moreno-Lakeside Pipeline Capacity Rights**

In June 2001, the Water Authority and Helix executed the first amendment to the 1997 Capacity Agreement. Capacity rights for this project, net of amortization, totaled \$2,031,311 and \$2,709,043 as of June 30, 2015 and 2014, respectively, and are being amortized using the straight-line method over ten years, which began when the project was capitalized in Fiscal Year 2008. Otay Water District constructed a new pipeline from the Otay 14 Flow Control Facility location to the regulatory reservoirs in the Otay System. The Water Authority reimbursed Otay Water District for the new pipeline and Otay Water District agreed to purchase at least 10,000 acre-feet of water per calendar year from the Water Authority. The capacity rights added to the Moreno-Lakeside Pipeline, net of amortization, totaled \$2,033,252 and \$2,711,631 as of June 30, 2015 and 2014, respectively, and are being amortized using the straight-line method over ten years.

### **(h) Imperial Irrigation District Water Transfer – Base Contract Price Settlement Participation Rights**

IID and the Water Authority executed an agreement that settled all disputes related to the Base Contract Price and the Water Authority/IID Conserved Water Transfer Agreement as stated in the Fifth Amendment to the agreement. Participation rights for this agreement, net of amortization, totaled \$50,021,879 and \$50,496,770 as of June 30, 2015 and 2014, respectively, and are being amortized utilizing the straight-line method over the 75-year life of the agreement.

## **9. Participation and Capacity Rights, (continued)**

### **(i) Rancho Canada Permit for Endangered Species**

The Water Authority funded property in the amount of, net of amortization, \$5,488,229 and \$5,593,941 as of June 30, 2015 and 2014, respectively, owned by the Department of Fish and Game for permits for endangered species for 55 years. The Water Authority will be allowed to count the property as mitigation to satisfy any permit requirements issued for Emergency Storage Projects (ESP) and Carryover Storage Projects (CSP) pursuant to the Federal and State Endangered Species Acts, Federal Clean Water Act, California Porter-Cologne Act, and California Fish and Game Code Section 1602 to the extent the agency issuing the permit agrees the property provides suitable mitigation for impacts. Any acreage not applied as mitigation for ESP or CSP will be available to the Water Authority to be credited toward Water Authority mitigation and conservation obligations for future Water Authority CIP projects, maintenance and operation activities, urgent repairs, and emergency actions as described in the Water Authority Natural Communities Conservation Plan.

### **(j) Lake Hodges Pumped Storage Inlet/Outlet Storage Rights**

The Lake Hodges Projects are part of the Water Authority's ESP, which consists of a system of reservoirs, interconnected pipelines, and pumping stations designed to make water available to the San Diego region in the event of an interruption in imported water deliveries. The Lake Hodges Projects connect the City of San Diego's Hodges Reservoir, also called Lake Hodges, to the Water Authority's Olivenhain Reservoir. The connection provides the ability to store 20,000 acre-feet of water in Hodges Reservoir for emergency use. Storage Rights for Lake Hodges Pumped Storage, net of amortization, totaled \$3,336,935 and \$3,544,167 as of June 30, 2015 and 2014, respectively. These storage rights are being amortized over 20 years.

## **10. Short-Term Liabilities**

The Water Authority has a Tax-Exempt Commercial Paper (TECP) program through which it can borrow funds on a tax-exempt basis for periods up to 270 days to provide financing for the Water Authority's CIP. The Water Authority has remarketing agreements with five separate broker-dealers: Bank of America Securities LLC/Merrill Lynch, Citigroup Global Markets Inc., Goldman Sachs and Co., JPMorgan Chase & Co., and Morgan Stanley and Co. LLC. The remarketing fees for the various dealer agreements range from 0.05 percent to 0.10 percent per annum on the par amount of TECP outstanding. No advances have been made under any of the revolving credit and term loan agreements during the fiscal years ended June 30, 2015 and 2014.

In Fiscal Year 2014, the Water Authority added an Extendable Commercial Paper (ECP) program to provide financing for the Water Authority's CIP. ECP offers a lower cost of funds than TECP, but is only available to highly rated agencies like the Water Authority. The Water Authority has the ability to access the capital markets and redeem the notes before the end of the 150 day extension period. ECP maturities are limited to between 1 and 120 days to allow a 150 day extension period and maintain a maximum maturity of 270 days. There is no bank support associated with ECP; therefore, the dealers play a more central role. This moderately sized program provides the Water Authority significant cost savings and the opportunity to add a new debt instrument to enable the debt portfolio to be better optimized.

The TECP and ECP notes are secured and payable on a parity basis solely from net water revenues and are subordinate to the Water Revenue Certificates of Participation (COP), Water Revenue Bonds, and Water Revenue Refunding Bonds. At June 30, 2015 and 2014, the Water Authority had short-term debt outstanding of \$360,000,000.

## 10. Short-Term Liabilities, (continued)

### (a) Commercial Paper Notes, Series 1

The Commercial Paper Notes, Series 1 (the Series 1 Notes) were issued for a total maximum authorized amount of \$110,000,000. The Series 1 Notes have liquidity support in the form of a revolving credit and term loan agreement with Bayerische Landesbank and, unless otherwise extended, will terminate on November 30, 2015. During the term of the agreement, the Water Authority paid annual commitment fees of 0.50 percent based on the par amount of the commitment. The Water Authority terminated this agreement on April 2, 2014. At June 30, 2015 and 2014, the balance outstanding was \$0.

### (b) Commercial Paper Notes, Series 5

On June 29, 2011, the Commercial Paper Notes, Series 5 (the Series 5 Notes) were issued for a total maximum authorized amount of \$100,000,000. The Series 5 Notes have liquidity support in the form of a revolving credit and term loan agreement with Wells Fargo Bank, N.A. and, unless otherwise extended, will terminate on June 27, 2016. Effective March 3, 2014, the Water Authority pays annual commitment fees of 0.33 percent based on the par amount of the commitment. At June 30, 2015 and 2014, the balance outstanding was \$100,000,000.

### (c) Commercial Paper Notes, Series 6

On June 29, 2011, the Commercial Paper Notes, Series 6 (the Series 6 Notes) were issued for a total maximum authorized amount of \$50,000,000. The Series 6 Notes have liquidity support in the form of a revolving credit and term loan agreement with Citibank, N.A. and, unless otherwise extended, will terminate on June 27, 2014. During the term of the agreement, the Water Authority paid annual commitment fees of 0.60 percent based on the par amount of the commitment. The Water Authority terminated this agreement on June 19, 2014. At June 30, 2015 and 2014, the balance outstanding was \$0.

Short-term liabilities activity for the fiscal years ended June 30, 2015 and 2014 are as follows:

	Balance at June 30, 2013	Additions	Deletions	Balance at June 30, 2014
<b>Short-term debt:</b>				
Commercial Paper Notes, Series 1	\$ 110,000,000	\$ -	\$ (110,000,000)	\$ -
Commercial Paper Notes, Series 5	100,000,000	-	-	100,000,000
Commercial Paper Notes, Series 6	50,000,000	-	(50,000,000)	-
Commercial Paper Notes, Series 7	100,000,000	-	-	100,000,000
Commercial Paper Notes, Series 8	-	110,000,000	-	110,000,000
Extendable Commercial Paper Notes, Series 1	-	50,000,000	-	50,000,000
<b>Total short-term debt</b>	<b>\$ 360,000,000</b>	<b>\$ 160,000,000</b>	<b>\$ (160,000,000)</b>	<b>\$ 360,000,000</b>

**10. Short-Term Liabilities, (continued)**

**(d) Commercial Paper Notes, Series 7**

On June 26, 2013, the Commercial Paper Notes, Series 7 (the Series 7 Notes) were issued for a total maximum authorized amount of \$100,000,000. The Series 7 Notes have liquidity support in the form of a revolving credit and term loan agreement with JPMorgan Chase Bank, N.A. and, unless otherwise extended, will terminate on June 24, 2016. During the term of the agreement, the Water Authority pays annual commitment fees of 0.36 percent based on the par amount of the commitment. At June 30, 2015 and 2014, the balance outstanding was \$100,000,000.

**(e) Commercial Paper Notes, Series 8**

On April 2, 2014, the Commercial Paper Notes, Series 8 (the Series 8 Notes) were issued for a total maximum authorized amount of \$110,000,000. The Series 8 Notes have liquidity support in the form of a revolving credit and term loan agreement with Bank of Tokyo-Mitsubishi UFJ, Ltd. and, unless otherwise extended, will terminate on June 27, 2017. During the term of the agreement, the Water Authority pays annual commitment fees of 0.33 percent based on the par amount of the commitment. At June 30, 2015 and 2014, the balance outstanding was \$110,000,000.

**(f) Extendable Commercial Paper Notes, Series 1**

On June 19, 2014, the Extendable Commercial Paper Notes, Series 1 (the Series 1 ECP Notes) were issued for a total maximum authorized amount of \$50,000,000. The Water Authority has appointed Merrill Lynch, Pierce, Fenner & Smith Inc. and Morgan Stanley & Co. LLC as co-dealers for the Series 1 ECP Notes. ECP does not have bank liquidity support. At June 30, 2015 and 2014, the balance outstanding was \$50,000,000.

Additions		Deletions		Balance at June 30, 2015
\$	-	\$	-	\$ -
	-		-	100,000,000
	-		-	-
	-		-	100,000,000
	-		-	110,000,000
	-		-	50,000,000
<u>\$</u>	<u>-</u>	<u>\$</u>	<u>-</u>	<u>\$ 360,000,000</u>

## II. Long-Term Liabilities<sup>(2)</sup>

Long-term liabilities activities for the fiscal years ended June 30, 2015 and 2014 are as follows:

	Balance at June 30, 2013	Additions	Deletions	Balance at June 30, 2014
<b>Long-term debt:</b>				
Water Revenue COP, 1998A (Note 11a)	\$ 11,685,000	\$ -	\$ -	\$ 11,685,000
Water Revenue COP, Series 2004A (Note 11b)	43,925,000	-	-	43,925,000
Water Revenue Refunding COP, Series 2005A (Note 11c)	83,490,000	-	(12,605,000)	70,885,000
Water Revenue COP, Series 2008A (Note 11d)	547,030,000	-	(10,920,000)	536,110,000
Water Revenue Bonds, Series 2010A (Non-AMT Tax-Exempt) (Note 11e)	98,495,000	-	(1,570,000)	96,925,000
Water Revenue Bonds, Series 2010B (Taxable Build America Bonds) (Note 11f)	526,135,000	-	-	526,135,000
Subordinate Lien Water Revenue Refunding Bonds, Series 2011S-I (Note 11g)	86,630,000	-	-	86,630,000
Water Revenue Refunding Bonds, Series 2011A (Note 11h)	133,130,000	-	(6,845,000)	126,285,000
Water Revenue Refunding Bonds, Series 2011B (Note 11i)	94,540,000	-	-	94,540,000
Water Revenue Refunding Bonds, Series 2013A (Note 11j)	299,105,000	-	-	299,105,000
<b>Total long-term debt</b>	<b>1,924,165,000</b>	<b>-</b>	<b>(31,940,000)</b>	<b>1,892,225,000</b>
<b>Other long-term liabilities:</b>				
Contributions payable (Note 11k)	58,047,827	-	(5,407,932)	52,639,895
Compensated absences (Note 1g)	5,931,077	3,586,894	(3,382,643)	6,135,328
OPEB liability (Note 13)	1,471,000	597,000	(256,000)	1,812,000
Arbitrage rebate (Note 1h)	466,528	139,909	-	600,437
Unamortized bond premiums	114,716,832	-	(8,854,032)	105,862,800
Net Pension Liability-California Public Employees' Retirement System (Note 12a)	-	-	-	66,451,557 <sup>(1)</sup>
<b>Total long-term liabilities, net</b>	<b>\$ 2,104,798,264</b>	<b>\$ 4,317,803</b>	<b>\$ (49,840,607)</b>	<b>\$ 2,125,727,017</b>

*Notes:*

(1) Beginning net position was restated pursuant to GASB Statements No. 68 and 71 implemented in Fiscal Year 2015.

(2) Total interest expenses on long-term debt, including capitalized interest for Fiscal Year 2015 and Fiscal Year 2014 was \$96,342,241 and \$98,023,034 respectively.

II. Long-Term Liabilities, (continued)

Additions	Deletions	Balance at June 30, 2015	Fiscal Year 2015		Fiscal Year 2014	
			Amounts Due Within One Year	Amounts Due After One Year	Amounts Due Within One Year	Amounts Due After One Year
\$ -	\$ -	\$ 11,685,000	\$ -	\$ 11,685,000	\$ -	\$ 11,685,000
-	(43,925,000)	-	-	-	-	43,925,000
-	(13,510,000)	57,375,000	13,880,000	43,495,000	13,510,000	57,375,000
-	(23,460,000)	512,650,000	1,150,000	511,500,000	11,360,000	524,750,000
-	(2,560,000)	94,365,000	3,975,000	90,390,000	2,560,000	94,365,000
-	-	526,135,000	-	526,135,000	-	526,135,000
-	-	86,630,000	-	86,630,000	-	86,630,000
-	(7,185,000)	119,100,000	7,545,000	111,555,000	7,185,000	119,100,000
-	-	94,540,000	-	94,540,000	-	94,540,000
-	-	299,105,000	-	299,105,000	-	299,105,000
-	<b>(90,640,000)</b>	<b>1,801,585,000</b>	<b>26,550,000</b>	<b>1,775,035,000</b>	<b>34,615,000</b>	<b>1,857,610,000</b>
-	(5,602,795)	47,037,100	8,605,713	38,431,387	5,602,795	47,037,100
3,180,949	(3,180,387)	6,135,890	4,049,687	2,086,203	4,049,316	2,086,012
-	(1,812,000)	-	-	-	-	1,812,000
-	-	600,437	-	600,437	-	600,437
-	(8,854,032)	97,008,768	-	97,008,768	-	105,862,800
-	(8,608,020)	57,843,537	-	57,843,537	-	66,451,557 <sup>(1)</sup>
<b>\$ 3,180,949</b>	<b>\$ (118,697,234)</b>	<b>\$ 2,010,210,732</b>	<b>\$ 39,205,400</b>	<b>\$ 1,971,005,332</b>	<b>\$ 44,267,111</b>	<b>\$ 2,081,459,906</b>

## II. Long-Term Liabilities, (continued)

Long-term pledged liabilities for the fiscal year ended June 30, 2015 are comprised of the following:

Type of Pledged Revenue	Fiscal Year Maturity Date	Pledged Revenue to Maturity	Debt Principal and Interest Paid	Pledged Revenue Recognized
<b>Pledged Net Water Revenue:</b>				
<b>COPs and Bonds</b>				
Water Revenue COP, Series 1998A	2028	\$ 18,900,488	\$ 555,038	\$ 555,038
Water Revenue COP, Series 2004A	2015	-	1,622,373	1,622,373
Water Revenue Refunding COP, Series 2005A	2022	66,711,338	17,231,463	17,231,463
Water Revenue COP, Series 2008A	2038	903,674,000	38,014,250	38,014,250
Water Revenue Bonds, Series 2010A (Non-AMT Tax-Exempt)	2027	131,249,700	7,219,625	7,219,625
Water Revenue Bonds, Series 2010B (Taxable Build America Bonds)	2049	1,358,311,843	32,294,166	32,294,166
Subordinate Lien Water Revenue Refunding Bonds, Series 2011S-I	2017	93,038,600	4,272,400	4,272,400
Water Revenue Refunding Bonds, Series 2011A	2027	159,496,000	13,291,650	13,291,650
Water Revenue Refunding Bonds, Series 2011B	2031	148,981,250	4,707,000	4,707,000
Water Revenue Refunding Bonds, Series 2013A	2034	481,471,006	13,981,519	13,981,519
<b>Total Pledged Net Water Revenue</b>		<b><u>\$3,361,834,225</u></b>	<b><u>\$133,189,484</u></b>	<b><u>\$133,189,484</u></b>

## II. Long-Term Liabilities, (continued)

Long-term pledged liabilities for the fiscal year ended June 30, 2014 are comprised of the following:

Type of Pledged Revenue	Fiscal Year Maturity Date	Pledged Revenue to Maturity	Debt Principal and Interest Paid	Pledged Revenue Recognized
<b>Pledged Net Water Revenue:</b>				
<b>COPs and Bonds</b>				
Water Revenue COP, Series 1998A	2028	\$ 19,455,525	\$ 555,038	\$ 555,038
Water Revenue COP, Series 2004A	2034	73,448,550	2,163,163	2,163,163
Water Revenue Refunding COP, Series 2005A	2022	83,942,800	16,956,713	16,956,713
Water Revenue COP, Series 2008A	2038	954,544,500	38,271,500	38,271,500
Water Revenue Bonds, Series 2010A (Non-AMT Tax-Exempt)	2027	138,469,325	6,292,425	6,292,425
Water Revenue Bonds, Series 2010B (Taxable Build America Bonds)	2049	1,390,606,010	32,294,166	32,294,166
Subordinate Lien Water Revenue Refunding Bonds, Series 2011S-1	2017	97,311,000	4,272,400	4,272,400
Water Revenue Refunding Bonds, Series 2011A	2027	172,787,650	13,293,900	13,293,900
Water Revenue Refunding Bonds, Series 2011B	2031	153,688,250	4,707,000	4,707,000
Water Revenue Refunding Bonds, Series 2013A	2034	495,452,525	13,981,519	13,981,519
<b>Total Pledged Net Water Revenue</b>		<b>\$ 3,579,706,135</b>	<b>\$ 132,787,824</b>	<b>\$ 132,787,824</b>

## II. Long-Term Liabilities, (continued)

### (a) Water Revenue Certificates of Participation, Series 1998A

On November 17, 1998, the Water Authority issued \$180,000,000 of Water Revenue Certificates of Participation, Series 1998A (the 1998A Certificates) for the design, acquisition, and construction of the Water Authority's ESP and other water system improvements in furtherance of the Water Authority's CIP.

On March 9, 2005, the Water Authority issued Water Revenue Refunding Certificates of Participation, Series 2005A (the 2005A Certificates) to advance refund a portion of the 1998A Certificates in the amount of \$117,310,000. At June 30, 2015, the amount of defeased debt outstanding of the 1998A Certificates was \$0.

On February 4, 2010, the San Diego County Water Authority Financing Agency issued Water Revenue Bonds, Series 2010A (Non-AMT Tax-Exempt) to refund a portion of the 1998A Certificates in the amount of \$51,005,000.

The 1998A Certificates have stated interest rates ranging from 4.50 percent to 5.25 percent payable semi-annually on May 1 and November 1. Their maturities extend to May 1, 2028.

The 1998A Certificates required that a reserve be maintained in an amount equal to the lesser of \$15,391,555 or maximum annual debt service on the 1998A Certificates. After the refunding from the 2005A Certificates, the reserve requirement was reduced to \$12,240,775. At June 30, 2015, the reserve was fully funded. The certificates are insured by Financial Guaranty Insurance Company (FGIC).

The principal balance of outstanding certificates at June 30, 2015 and 2014 was \$11,685,000. The total debt service payment requirements with respect to the 1998A Certificates are as follows:

#### Water Revenue COP, Series 1998A

Year	Principal	Interest	Total
2016	\$ -	\$ 555,038	\$ 555,038
2017	-	555,038	555,038
2018	-	555,038	555,038
2019	-	555,038	555,038
2020	-	555,038	555,038
2021-2025	-	2,775,188	2,775,188
2026-2028	11,685,000	1,665,110	13,350,110
<b>Total</b>	<b>\$ 11,685,000</b>	<b>\$ 7,215,488</b>	<b>\$ 18,900,488</b>

## II. Long-Term Liabilities, (continued)

### (b) Water Revenue Certificates of Participation, Series 2004A

On September 29, 2004, the Water Authority issued \$425,000,000 of Water Revenue Certificates of Participation, Series 2004A (the 2004A Certificates) for the design, acquisition, and construction of various capital projects in furtherance of the Water Authority's CIP. A portion of the proceeds were used to refund the Water Revenue Certificates of Participation, Series 1991B in the amount of \$56,700,000.

On September 28, 2011, the Water Authority issued Water Revenue Refunding Bonds, Series 2011B to advance refund a portion of the 2004A Certificates in the amount of \$36,290,000. At June 30, 2015, the amount of defeased debt outstanding of the 2004A Certificates was \$0.

On March 13, 2013, the Water Authority issued Water Revenue Refunding Bonds, Series 2013A to advance refund a portion of the 2004A Certificates in the amount of \$344,785,000. In addition, the Water Authority liquidated a portion of the Debt Service Reserve Fund to legally defease a portion of the 2004A Certificates in the amount of \$34,516,255. At June 30, 2015, the amount of defeased debt outstanding of the 2004A Certificates was \$0.

The 2004A Certificates have stated interest rates ranging from 4.00 percent to 5.25 percent payable semi-annually on May 1 and November 1. Their maturities extend to May 1, 2034.

The 2004A Certificates require that a reserve be maintained in an amount equal to the lesser of \$38,568,617 or maximum annual debt service on the 2004A Certificates. After the refunding from the 2013A Bonds, the reserve requirement was reduced to \$4,052,362. The certificates are insured by Financial Security Assurance, Inc, (FSA).

On February 3, 2015, the Water Authority legally defeased the 2004A Certificates outstanding balance of \$43,925,000. The Water Authority fully liquidated the Debt Service Reserve Fund and applied towards the defeasance.

The principal balance of outstanding certificates was fully paid off during the fiscal year ended June 30, 2015.

## II. Long-Term Liabilities, (continued)

### (c) Water Revenue Refunding Certificates of Participation, Series 2005A

On March 9, 2005 the Water Authority issued \$107,455,000 of Water Revenue Refunding Certificates of Participation, Series 2005A (the 2005A Certificates) to advance refund a portion of the 1998A Certificates in the amount of \$117,310,000. At June 30, 2015 and 2014, the amount of defeased debt outstanding of the Water Revenue Certificates of Participation, Series 1998A was \$0.

The 2005A Certificates have stated interest rates ranging from 5.00 percent to 5.25 percent payable semi-annually on May 1 and November 1. Their maturities extend to May 1, 2022.

The 2005A Certificates require that a reserve be maintained in an amount equal to the lesser of \$10,745,500 or maximum annual debt service on the 2005A Certificates. At June 30, 2015, the reserve requirement was fully satisfied by a Reserve Surety Policy issued by FGIC. The 2005A Certificates are also insured by FGIC.

The principal balance of outstanding certificates at June 30, 2015 was \$57,375,000, or \$63,084,412 net of unamortized premium of \$5,709,412. The principal balance of outstanding certificates at 2014 was \$70,885,000, or \$77,429,936 net of unamortized premium of \$6,544,936. The total debt service payment requirements with respect to the 2005A Certificates are as follows:

#### Water Revenue Refunding COP, Series 2005A

Year	Principal	Interest	Total
2016	\$ 13,880,000	\$ 3,012,188	\$ 16,892,188
2017	15,005,000	2,283,488	17,288,488
2018	14,690,000	1,495,725	16,185,725
2019	-	724,500	724,500
2020	-	724,500	724,500
2021-2022	13,800,000	1,095,937	14,895,937
<b>Total</b>	<b>\$ 57,375,000</b>	<b>\$ 9,336,338</b>	<b>\$ 66,711,338</b>

## **II. Long-Term Liabilities, (continued)**

### **(d) Water Revenue Certificates of Participation, Series 2008A**

On May 21, 2008, the Water Authority issued \$558,015,000 of Water Revenue Certificates of Participation, Series 2008A (the 2008A Certificates) for the design, acquisition, and construction of various capital projects in furtherance of the Water Authority's CIP. In addition, proceeds were used to refund a portion of the 1997A Certificates in the amount of \$63,165,000.

The 2008A Certificates have stated interest rates ranging from 4.00 percent to 5.00 percent payable semi-annually on May 1 and November 1. Their maturities extend to May 1, 2038.

The 2008A Certificates require that a reserve be maintained in an amount equal to the lesser of \$23,670,625 or one-half of maximum annual debt service on the 2008A Certificates. At June 30, 2015, the reserve requirement was fully satisfied by a Reserve Surety Policy issued by FSA. The 2008A Certificates are also insured by FSA.

On February 3, 2015, the Water Authority legally defeased a portion of the 2008A Certificates maturing on May 1, 2016 in the aggregate principal amount of \$12,100,000.

The principal balance of outstanding certificates at June 30, 2015 was \$512,650,000, or \$526,730,058 net of unamortized premium of \$14,080,058. The principal balance of outstanding certificates at June 30, 2014 was \$536,110,000, or \$550,804,458 net of unamortized premium of \$14,694,458. The total debt service payment requirements with respect to the 2008A Certificates are as follows:

#### **Water Revenue COP, Series 2008A**

<b>Year</b>	<b>Principal</b>	<b>Interest</b>	<b>Total</b>
2016	\$ 1,150,000	\$ 25,632,500	\$ 26,782,500
2017	14,505,000	25,575,000	40,080,000
2018	17,320,000	24,849,750	42,169,750
2019	15,885,000	23,983,750	39,868,750
2020	17,170,000	23,189,500	40,359,500
2021-2025	56,615,000	105,996,000	162,611,000
2026-2030	93,985,000	89,783,750	183,768,750
2031-2035	167,100,000	58,912,250	226,012,250
2036-2038	128,920,000	13,101,500	142,021,500
<b>Total</b>	<b>\$ 512,650,000</b>	<b>\$ 391,024,000</b>	<b>\$ 903,674,000</b>

## II. Long-Term Liabilities, (continued)

### (e) Water Revenue Bonds, Series 2010A (Non-AMT Tax-Exempt)

On February 4, 2010, the SDCWafa issued \$98,495,000 of Water Revenue Bonds, Series 2010A (Non-AMT Tax-Exempt) (the 2010A Bonds) for the design, acquisition, and construction of various capital projects in furtherance of the Water Authority's CIP. In addition, proceeds were used to refund a portion of the 1998A Certificates in the amount of \$51,005,000. The balance of proceeds were be used to finance CIP projects, including interest incurred during construction.

The 2010A Bonds have stated interest rates ranging from 4.00 percent to 5.25 percent payable semi-annually on May 1 and November 1. Their maturities extend to May 1, 2027. No debt service reserve fund was created to secure the 2010A Bonds.

The principal balance of outstanding bonds at June 30, 2015 was \$94,365,000, or \$100,115,204 net of unamortized premium of \$5,750,204. The principal balance of outstanding bonds at June 30, 2014 was \$96,925,000, or \$103,171,620 net of unamortized premium of \$6,246,620. The total debt service payment requirements with respect to 2010A Bonds are as follows:

#### Water Revenue Bonds, Series 2010A (Non-AMT Tax-Exempt)

Year	Principal	Interest	Total
2016	\$ 3,975,000	\$ 4,557,225	\$ 8,532,225
2017	4,130,000	4,398,225	8,528,225
2018	4,295,000	4,233,025	8,528,025
2019	4,470,000	4,061,225	8,531,225
2020	4,695,000	3,837,725	8,532,725
2021-2025	52,375,000	14,303,025	66,678,025
2026-2027	20,425,000	1,494,250	21,919,250
<b>Total</b>	<b>\$ 94,365,000</b>	<b>\$ 36,884,700</b>	<b>\$ 131,249,700</b>

## **II. Long-Term Liabilities, (continued)**

### **(f) Water Revenue Bonds, Series 2010B (Taxable Build America Bonds)**

On February 4, 2010, the SDCWafa issued \$526,135,000 of Water Revenue Bonds, Series 2010B (Taxable Build America Bonds) (the 2010B Bonds) for the design, acquisition, and construction of various capital projects in furtherance of the Water Authority's CIP.

The 2010B Bonds have a stated interest rate of 6.138 percent payable semi-annually on May 1 and November 1. Their maturities extend to May 1, 2049. No debt service reserve fund was created to secure the 2010B Bonds.

The 2010B Bonds were designated as Taxable Build America Bonds (BABs) under the provisions of the American Recovery and Reinvestment Act of 2009, the interest with respect to which is not excluded from gross income for federal income tax purposes, but is exempt from State of California personal income taxes. The Water Authority receives semi-annual subsidy payments from the United States Treasury equal to 35 percent of the interest payable on the 2010B Bonds.

Subsidy payments were reduced by 7.3 percent and 7.2 percent in Fiscal Years 2015 and 2014, respectively, under Congressionally-mandated sequestration. Sequestration consists of across-the-board federal budget cuts that were implemented in March 2013, triggered by Congress' failure to reach agreement over how to significantly cut the federal deficit. The sequestration reduction rate will be applied unless and until a law is enacted that cancels or otherwise impacts the sequestration, at which time the sequestration reduction rate is subject to change. Although the sequestration was effective March 2013, the Water Authority received the full amount of the subsidy during Fiscal Year 2013.

The principal balance of outstanding bonds at June 30, 2015 and 2014 was \$526,135,000. The total debt service payment requirements with respect to the 2010B Bonds are as follows:

#### **Water Revenue Bonds, Series 2010B (Taxable BABs)**

<b>Year</b>	<b>Principal</b>	<b>Interest</b>	<b>Total</b>
2016	\$ -	\$ 32,294,166	\$ 32,294,166
2017	-	32,294,166	32,294,166
2018	-	32,294,166	32,294,166
2019	-	32,294,166	32,294,166
2020	-	32,294,166	32,294,166
2021-2025	1,735,000	161,470,832	163,205,832
2026-2030	33,715,000	156,961,243	190,676,243
2031-2035	73,375,000	143,961,266	217,336,266
2036-2040	123,625,000	113,488,858	237,113,858
2041-2045	150,340,000	72,397,403	222,737,403
2046-2049	143,345,000	22,426,411	165,771,411
<b>Total</b>	<b>\$ 526,135,000</b>	<b>\$ 832,176,843</b>	<b>\$ 1,358,311,843</b>

**II. Long-Term Liabilities, (continued)**

**(g) Subordinate Lien Water Revenue Refunding Bonds, Series 2011S-1**

On July 21, 2011, the Water Authority issued \$86,630,000 of Subordinate Lien Water Revenue Refunding Bonds, Series 2011S-1 (the 2011S-1 Bonds) to refinance a portion of the design, acquisition, and construction of various capital projects of the Water Authority's CIP by refunding the Water Authority Commercial Paper Notes, Series 2 in the amount of \$100,000,000.

The 2011S-1 Bonds have stated interest rates ranging from 3.00 percent to 5.00 percent payable semi-annually on January 1 and July 1. Their maturities extend to July 1, 2016. No debt service reserve fund was created to secure the 2011S-1 Bonds.

The principal balance of outstanding bonds at June 30, 2015 was \$86,630,000, or \$89,424,701 net of unamortized premium of \$2,794,701. The principal balance of outstanding bonds at June 30, 2014 was \$86,630,000, or \$92,219,417 net of unamortized premium of \$5,589,417. The total debt service payment requirements with respect to the 2011S-1 Bonds are as follows:

**Subordinate Lien Water Revenue Refunding Bonds, Series 2011S-1**

<b>Year</b>	<b>Principal</b>	<b>Interest</b>	<b>Total</b>
2016	\$ -	\$ 4,272,400	\$ 4,272,400
2017	86,630,000	2,136,200	88,766,200
<b>Total</b>	<b>\$ 86,630,000</b>	<b>\$ 6,408,600</b>	<b>\$ 93,038,600</b>

## **II. Long-Term Liabilities, (continued)**

### **(h) Water Revenue Refunding Bonds, Series 2011A**

On August 11, 2011, the Water Authority issued \$139,945,000 of Water Revenue Refunding Bonds, Series 2011A (the 2011A Bonds) to refinance a portion of the design, acquisition, and construction of various capital projects of the Water Authority's CIP by advance refunding a portion of the 2002A Certificates in the amount of \$150,270,000.

The 2011A Bonds have stated interest rates ranging from 0.45 percent to 5.00 percent payable semi-annually on May 1 and November 1. Their maturities extend to May 1, 2027. No debt service reserve fund was created to secure the 2011A Bonds.

The principal balance of outstanding bonds at June 30, 2015 was \$119,100,000, or \$131,462,389 net of unamortized premium of \$12,362,389. The principal balance of outstanding bonds at June 30, 2014 was \$126,285,000, or \$139,684,789 net of unamortized premium of \$13,399,789. The total debt service payment requirements with respect to the 2011A Bonds are as follows:

#### **Water Revenue Refunding Bonds, Series 2011A**

<b>Year</b>	<b>Principal</b>	<b>Interest</b>	<b>Total</b>
2016	\$ 7,545,000	\$ 5,747,400	\$ 13,292,400
2017	7,920,000	5,370,150	13,290,150
2018	8,315,000	4,974,150	13,289,150
2019	8,650,000	4,641,550	13,291,550
2020	9,085,000	4,209,050	13,294,050
2021-2025	52,695,000	13,761,250	66,456,250
2026-2027	24,890,000	1,692,450	26,582,450
<b>Total</b>	<b>\$ 119,100,000</b>	<b>\$ 40,396,000</b>	<b>\$ 159,496,000</b>

## II. Long-Term Liabilities, (continued)

### (i) Water Revenue Refunding Bonds, Series 2011B

On September 28, 2011, the Water Authority issued \$94,540,000 of Water Revenue Refunding Bonds, Series 2011B (the 2011B Bonds) to refinance a portion of the design, acquisition, and construction of various capital projects of the Water Authority's CIP by advance refunding a portion of the 2002A and 2004A Certificates in the amount of \$62,085,000 and \$36,290,000, respectively.

The 2011B Bonds have stated interest rates ranging from 3.00 percent to 5.00 percent payable semi-annually on May 1 and November 1. Their maturities extend to May 1, 2031. No debt service reserve fund was created to secure the 2011B Bonds.

The principal balance of outstanding bonds at June 30, 2015 was \$94,540,000, or \$104,449,447 net of unamortized premium of \$9,909,447. The principal balance of outstanding bonds at June 30, 2014 was \$94,540,000, or \$105,072,031 net of unamortized premium of \$10,532,031. The total debt service payment requirements with respect to the 2011B Bonds are as follows:

#### Water Revenue Refunding Bonds, Series 2011B

Year	Principal	Interest	Total
2016	\$ -	\$ 4,707,000	\$ 4,707,000
2017	-	4,707,000	4,707,000
2018	-	4,707,000	4,707,000
2019	-	4,707,000	4,707,000
2020	-	4,707,000	4,707,000
2021-2025	35,405,000	17,420,500	52,825,500
2026-2030	43,250,000	12,691,500	55,941,500
2031	15,885,000	794,250	16,679,250
<b>Total</b>	<b>\$ 94,540,000</b>	<b>\$ 54,441,250</b>	<b>\$ 148,981,250</b>

## **II. Long-Term Liabilities, (continued)**

### **(j) Water Revenue Refunding Bonds, Series 2013A**

On March 13, 2013, the Water Authority issued \$299,105,000 of Water Revenue Refunding Bonds, Series 2013A (the 2013A Bonds) to refinance a portion of the design, acquisition, and construction of various capital projects of the Water Authority's CIP by advance refunding a portion of the 2004A Certificates in the amount of \$344,785,000.

The 2013A Bonds have stated interest rates ranging from 3.00 percent to 5.00 percent payable semi-annually on May 1 and November 1. Their maturities extend to May 1, 2034. No debt service reserve fund was created to secure the 2013A Bonds.

The principal balance of outstanding bonds at June 30, 2015 was \$299,105,000, or \$345,507,557 net of unamortized premium of \$46,402,557. The principal balance of outstanding bonds at June 30, 2014 was \$299,105,000, or \$347,960,549 net of unamortized premium of \$48,855,549. The total debt service payment requirements with respect to the 2013A Bonds are as follows:

#### **Water Revenue Refunding Bonds, Series 2013A**

<b>Year</b>	<b>Principal</b>	<b>Interest</b>	<b>Total</b>
2016	\$ -	\$ 13,981,519	\$ 13,981,519
2017	-	13,981,519	13,981,519
2018	-	13,981,519	13,981,519
2019	14,005,000	13,981,519	27,986,519
2020	14,625,000	13,361,369	27,986,369
2021-2025	53,870,000	61,105,744	114,975,744
2026-2030	109,135,000	40,073,844	149,208,844
2031-2034	107,470,000	11,898,973	119,368,973
<b>Total</b>	<b>\$ 299,105,000</b>	<b>\$ 182,366,006</b>	<b>\$ 481,471,006</b>

## II. Long-Term Liabilities, (continued)

### (k) Contributions Payable

Contributions Payable concern the Water Authority’s payment obligations for environmental and socioeconomic impacts related to the Quantification Settlement and other connected Agreements. These payments include contributions to the QSA JPA for environmental mitigation pursuant to the QSA JPA Creation and Funding Agreement, and payments to the IID on behalf of the Imperial Valley Socioeconomic Improvement Committee, the Local Entity, to mitigate third-party socioeconomic impacts of the Conserved Water Transfer Agreement.

(1) On April 25, 2007, the QSA JPA approved an agreement to modify the schedule of contributions payable pursuant to the QSA JPA Creation and Funding Agreement in order to more appropriately match environmental mitigation funding obligations. On May 20, 2015, the QSA JPA approved an agreement for a second modification of payment schedules pursuant to the QSA JPA Creation and Funding Agreement in order to conform to the long term financing plan. The outstanding balance of the payment obligation at June 30, 2015 and 2014 was \$41,157,100 and \$43,819,895, respectively. The total contributions payable are as follows:

#### QSA JPA Creation and Funding Agreement

Year	Principal	Interest	Total
2016	\$ 5,665,713	\$ 2,410,633	\$ 8,076,346
2017	7,977,816	2,076,570	10,054,386
2018	8,568,383	1,596,431	10,164,814
2019	7,579,399	1,085,268	8,664,667
2020	2,179,549	630,504	2,810,053
2021-2025	8,197,849	1,589,492	9,787,341
2026	988,391	59,302	1,047,693
<b>Total</b>	<b>\$ 41,157,100</b>	<b>\$ 9,448,200</b>	<b>\$ 50,605,300</b>

**II. Long-Term Liabilities, (continued)**

**(k) Contributions Payable, (continued)**

(2) On May 14, 2007, the Water Authority and the IID executed the Settlement Agreement Resolving Present and Future Disputes under Sections 14.5 and 18.1 of the Revised Fourth Amendment to the IID/Water Authority Conserved Water Transfer Agreement pursuant to which the Water Authority will pay \$40,000,000 according to a payment schedule in the Agreement for third-party socioeconomic impacts as a result of the Conserved Water Transfer Agreement by and between the two agencies. The outstanding balance of the payment obligation at June 30, 2015 and 2014 was \$5,880,000 and \$8,820,000, respectively. This obligation is non-interest bearing. The total contributions payable are as follows:

**IID Third Party Socioeconomic Impacts Agreement**

<b>Year</b>	<b>Principal</b>	<b>Interest</b>	<b>Total</b>
2016	\$ 2,940,000	\$ -	\$ 2,940,000
2017	2,940,000	-	2,940,000
<b>Total</b>	<b>\$ 5,880,000</b>	<b>\$ -</b>	<b>\$ 5,880,000</b>

**(l) Rate Covenants**

Under the Water Authority Act, the Board sets water rates and charges that are sufficient to meet its operation expenses and payment obligations. The Board has established that, exclusive of the tax revenue and debt servicing costs associated with voter-approved general obligation bonds and other voter-approved debt, net water revenues will equal or exceed 120 percent of senior lien debt service costs (principal and interest). The Water Authority was in compliance with its rate obligations for Fiscal Years 2015 and 2014.

## 12. Defined Benefit Pension Plan

### California Public Employees' Retirement System

#### **Plan Description**

All qualified full-time Water Authority employees are required to participate in the Water Authority's Miscellaneous Plan with the California Public Employees' Retirement System (CalPERS), an agent multiple-employer public employee defined benefit pension plan. CalPERS provides retirement, disability benefits, and death benefits to plan members and beneficiaries. CalPERS acts as a common investment and administrative agent for participating public entities within the State of California. A menu of benefit provisions as well as other requirements is established by state statutes within the Public Employees' Retirement Law. The Water Authority selects optional benefit provisions from the benefit menu by contract with CalPERS and adopts those benefits through Board approval. Benefit provisions and all other requirements are established by state statute, Water Authority resolution, and contracts with employee bargaining groups.

Effective January 1, 2013, Water Authority new hires who meet the definition of "new employee" and "new member" accrue and receive defined benefit pension plan benefits in accordance with the California Public Employees' Pension Reform Act (PEPRA) of 2013.

Financial statements for the Water Authority's plan is not separately issued. Requests for detailed plan provisions and copies of CalPERS' annual financial report can be obtained from CalPERS Fiscal Services Division, P.O. Box 942703, Sacramento, CA, 94229-2703 or <http://www.calpers.ca.gov>

#### **Benefits Provided**

CalPERS provides service retirement and disability benefits, annual cost of living adjustments and death benefits to plan members, who must be public employees and beneficiaries. Benefits are based on years of credited service, equal to one year of full time employment. Members with five years of total service are eligible to retire at age 50 with statutorily reduced benefits. All members are eligible for non-duty disability benefits after 10 years of service. The death benefit is the Optional Settlement 2W Death Benefit. The cost of living adjustments are applied as specified by the Public Employees' Retirement Law.

The Plans' provisions and benefits in effect at June 30, 2015, are summarized as follows:

	<b>Miscellaneous Plan</b>	
	Prior to January 1, 2013	On or after January 1, 2013
Hire date		
Benefit formula	2.5% @ 55	2% @ 62
Benefit vesting schedule	5 years of service	5 years of service
Benefit payments	monthly for life	monthly for life
Retirement age	50 - 55	52 - 67
Monthly benefits, as a % of eligible compensation	2.0% to 2.5%	1.0% to 2.5%
Required employee contribution rates	8.0%	6.5%
Required employer contribution rates	19.74%	19.74%

## **12. Defined Benefit Pension Plan, (continued)**

### **California Public Employees' Retirement System, (continued)**

#### ***Benefits Provided, (continued)***

Employees Covered – At June 30, 2015, the following employees were covered by the benefit terms under the Miscellaneous Plan:

	<b>Miscellaneous Plan</b>
Inactive employees or beneficiaries currently receiving benefits	166
Inactive employees entitled to but not yet receiving benefits	152
Active employees	243
<b>Total</b>	<b>561</b>

#### ***Contributions***

Current participants are required to contribute eight percent of their annual covered salary to fund the Plan. The Water Authority pays seven percent of the employees' required contribution and the employee pays the remaining one percent required contribution. For the fiscal years ended June 30, 2015 and 2014, the amount contributed by the Water Authority on behalf of the employees (the seven percent contribution) was \$1,732,011 and \$1,802,194, respectively.

The Water Authority is required to contribute the remaining amounts, the required employer contribution rate multiplied by the covered salary, necessary to fund the benefits for its members, using the actuarial basis recommended by CalPERS actuaries and actuarial consultants, and adopted by the CalPERS Board of Administration.

For "classic" employees, effective July 1, 2013, Technical/Support, Professional/Administrative, Managerial/Supervisory, and Confidential employees increased the amount they pay toward CalPERS by 1.25 percent for a total contribution of seven percent, increasing to eight percent by July 2014. Executive and Senior Management employees increased the amount they pay toward CalPERS by 1.75 percent for a total contribution of eight percent as of July 1, 2013.

The terms of The California Public Employees' Pension Reform Act mandate that a "new member" contribution rate be the greater of 50 percent of the total normal cost rate for their defined benefit plan or the current contribution rate of similarly situated employees. The current employee contribution rate of PEPRA members and similarly situated employees at the Water Authority is 6.5 percent.

Section 20814(c) of the California Public Employees' Retirement Law 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. Funding contributions for the Plan are determined annually on an actuarial basis as of June 30 by CalPERS. The actuarially determined rate (ADC) 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 Water Authority is required to contribute the difference between the actuarially determined rate and the contribution rate of employees.

## 12. Defined Benefit Pension Plan, (continued)

### California Public Employees' Retirement System, (continued)

#### Actuarial Methods and Assumptions Used to Determine Total Pension Liability

For the measurement period ended June 30, 2014 (the measurement date), the total pension liability was determined by rolling forward the June 30, 2013 total pension liability. The June 30, 2013 and the June 30, 2014 total pension liabilities were based on the following actuarial methods and assumptions:

<b>Actuarial Cost Method:</b>	Entry age normal
<b>Actuarial Assumptions:</b>	
Discount rate	7.50%
Inflation	2.75%
Salary increases	Varies by entry age and service
Investment rate of return	7.50% net of pension plan investment and administrative expenses; includes inflation
Mortality rate table <sup>(1)</sup>	Derived using CalPERS membership date for all funds
Post Retirement Benefit Increase	Contract COLA up to 2.75% until purchasing power protection allowance floor on purchasing power applies, 2.75% thereafter

*Note:*

(1) The mortality table used was developed based on CalPERS' specific data. The table includes 20 years of mortality improvements using Society of Actuaries Scale BB.

All other actuarial assumptions used in the June 30, 2013 valuation were based on the results of an actuarial experience study for the period from 1997 to 2011, including updates to salary increase, mortality and retirement rates. The Experience Study report can be obtained at CalPERS' website under Forms and Publications

#### Discount Rate

The discount rate used to measure the total pension liability was 7.5 percent. To determine whether the municipal bond rate should be used in the calculation of a discount rate for the plan, CalPERS stress tested plans that would most likely result in a discount rate that would be different from the actuarially assumed discount rate. Based on the testing, none of the tested plans ran out of assets. Therefore, the current 7.5 percent discount rate is adequate and the use of the municipal bond rate calculation is not necessary. The long-term expected discount rate of 7.5 percent will be applied to all plans in the Public Employees Retirement Fund. The stress test results are presented in a detailed report that can be obtained from the CalPERS website.

According to Paragraph 30 of Statement No. 68, the long-term discount rate should be determined without reduction for pension plan administrative expense. The 7.5 percent investment return assumption used in this accounting valuation is net of administrative expenses. Administrative expenses are assumed to be 15 basis points. An investment return excluding administrative expenses would have been 7.65 percent. Using this lower discount rate has resulted in a slightly higher Total Pension Liability and Net Pension Liability. The difference in calculation is not material to the Water Authority's financial statements.

## 12. Defined Benefit Pension Plan, (continued)

### California Public Employees' Retirement System, (continued)

#### Discount Rate, (continued)

CalPERS is scheduled to review all actuarial assumptions as part of its regular Asset Liability Management review cycle that is scheduled to be completed in February 2018. Any changes to the discount rate will require CalPERS Board action and proper stakeholder outreach. For these reasons, CalPERS expects to continue using a discount rate net of administrative expenses for GASB 67 and GASB 68 calculations through at least the fiscal year 2017 and 2018. CalPERS will continue to check the materiality of the difference in calculation until such time as we have changed our methodology.

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

In determining the long-term expected 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. Using historical returns of all the funds' asset classes, expected compound returns were calculated over the short-term (first ten years) and the long-term (11-60 years) using a building-block approach. Using the expected nominal returns for both short-term and long-term, the present value of benefits was calculated for each fund. The expected rate of return was set by calculating the single equivalent expected return that arrived at the same present value of benefits for cash flows as the one calculated using both short-term and long-term returns. The expected rate of return was then set equivalent to the single equivalent rate calculated above and rounded down to the nearest one quarter of one percent.

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

Asset Class	New Strategic Allocation	Real Return Years I - 10 <sup>(1)</sup>	Real Return Years 11 + <sup>(2)</sup>
Global Equity	47.0%	5.25%	5.71%
Global Fixed Income	19.0%	0.99%	2.43%
Inflation Sensitive	6.0%	0.45%	3.36%
Private Equity	12.0%	6.83%	6.95%
Real Estate	11.0%	4.50%	5.13%
Infrastructure and Forestland	3.0%	4.50%	5.09%
Liquidity	2.0%	-0.55%	-1.05%
<b>Total</b>	<b>100%</b>		

Notes:

(1) An expected inflation of 2.5% used for this period.

(2) An expected inflation of 3.0% used for this period.

## 12. Defined Benefit Pension Plan, (continued)

### California Public Employees' Retirement System, (continued)

#### Net Pension Liability

The Water Authority's net pension liability for the Plan is measured as the total pension liability, less the pension plan's fiduciary net position. The net pension liability of the Plan is measured as of June 30, 2014, using an annual actuarial valuation as of June 30, 2013, rolled forward to June 30, 2014, using standard update procedures.

#### Changes in the Net Pension Liability

The following presents the net pension liability of the Water Authority, calculated using the discount rate of 7.5 percent:

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability/(Asset) (c) = (a) - (b)
<b>Balance at June 30, 2013</b>	<b>\$ 188,133,902</b>	<b>\$ 121,682,345</b>	<b>\$ 66,451,557</b>
Changes in the year:			
Service cost	4,921,587	-	4,921,587
Interest on the Total Pension Liability	14,066,260	-	14,066,260
Actual and expected experience difference	-	-	-
Changes of assumptions	-	-	-
Changes of benefit terms	-	-	-
Contribution-employer	-	5,273,604	(5,273,604)
Contribution-employee	-	878,031	(878,031)
Net investment income <sup>(1)</sup>			
Projected earnings on pension plan investments	-	9,180,824	(9,180,824)
Difference between projected and actual earnings on pension plan investments	-	12,263,408	(12,263,408)
Benefit payments including refunds of employee contributions	(6,089,127)	(6,089,127)	-
<b>Net Changes</b>	<b>12,898,720</b>	<b>21,506,740</b>	<b>(8,608,020)</b>
<b>Balance at June 30, 2014</b>	<b>\$ 201,032,622</b>	<b>\$ 143,189,085</b>	<b>\$ 57,843,537</b>

Note:

(1) Net of administrative expenses.

## **12. Defined Benefit Pension Plan, (continued)**

### **California Public Employees' Retirement System, (continued)**

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

The following presents the net pension liability of the Water Authority if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate:

<b>Miscellaneous Plan</b>	
1% Decrease	6.50%
Net Pension Liability	\$79,872,627
Current Discount Rate	7.50%
Net Pension Liability	\$57,843,537
1% Increase	8.50%
Net Pension Liability	\$40,997,762

#### ***Pension Plan Fiduciary Net Position***

Detailed information about the plan's fiduciary net position is available in the separately issued CalPERS financial report.

#### ***Pension Expenses and Deferred Outflows/Inflows of Resources Related to Pensions***

For the fiscal year ended June 30, 2015, the Water Authority recognized pension expense of \$2,333,797. As of Fiscal Year ended June 30, 2015, the Water Authority has deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Pension contributions subsequent to measurement date	\$ 4,142,513	\$ -
Net difference between projected and actual earnings on plan investments	-	(9,810,726)
<b>Total</b>	<b>\$ 4,142,513</b>	<b>\$ (9,810,726)</b>

## 12. Defined Benefit Pension Plan, (continued)

### California Public Employees' Retirement System, (continued)

#### *Pension Expenses and Deferred Outflows/Inflows of Resources Related to Pensions, (continued)*

The \$4,142,513 as deferred outflows of resources related to contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the fiscal year ended June 30, 2016. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized as pension expense as follows:

Measurement Year Ending June 30:	Deferred Outflows/(Inflows) of Resources
2015	\$ (2,452,682)
2016	(2,452,682)
2017	(2,452,682)
2018	(2,452,680)
2019	-
Thereafter	-

#### *Fiscal Year 2014 Pension Disclosures – Reporting under GASB Statement No. 27*

##### **Annual Pension Cost and Net Pension Obligation**

For Fiscal Year 2014 the Water Authority's annual pension cost was equal to the annual required contribution (ARC) plus an adjustment for the cumulative difference between the Annual Pension Cost (APC) and the actual plan contributions for the year. The cumulative difference is called the net pension obligation (NPO). The ARC for the period July 1, 2013 to June 30, 2014 was determined by the actuarial valuation of the plan as of June 30, 2011. In order to calculate the dollar value of the ARC for inclusion in the financial statements as of June 30, 2014 the fiscal year 2014 contribution rate of 19.735 is multiplied by the payroll of covered employees paid during the year.

#### **Three-Year Trend Information for CalPERS**

Fiscal Year	% of APC Contribution	APC	NPO
6/30/14	100%	\$ 5,253,134	\$ -
6/30/13	100%	5,184,944	-
6/30/12	100%	5,190,542	-

## 12. Defined Benefit Pension Plan, (continued)

### California Public Employees' Retirement System, (continued)

#### Annual Pension Cost and Net Pension Obligation, (continued)

Description	Methods/Assumptions for the Valuation Ended	
	June 30, 2012	June 30, 2011
<b>Actuarial Cost Method</b>	Entry Age Normal Cost	Entry Age Normal Cost
<b>Amortization Method</b>	Level percent of payroll on a closed basis	Level percent of payroll on a closed basis
<b>Average Remaining Period</b>	22 years as of the valuation date	23 years as of the valuation date
<b>Asset Valuation Method</b>	15-year smoothed market	15-year smoothed market
<b>Discount Rate</b>	7.50% (net of administrative expenses)	7.50% (net of administrative expenses)
<b>Projected Salary Increases</b>	3.30% to 14.20% depending on age, service, and type of employment	3.30% to 14.20% depending on age, service, and type of employment
<b>Inflation</b>	2.75%	2.75%
<b>Payroll Growth</b>	3.00%	3.00%
<b>Individual Salary Growth</b>	A merit scale varying by duration of employment coupled with an assumed annual inflation growth of 2.75% and an annual production growth of 0.25%	A merit scale varying by duration of employment coupled with an assumed annual inflation growth of 2.75% and an annual production growth of 0.25%

#### Funded Status and Funding Progress

Under GASB Statement No. 27, initial unfunded liabilities were amortized over a closed period that depended on the plan's date of entry into CalPERS. Subsequent plan amendments were amortized as a level percentage of pay over a closed 20-year period. Gains and losses that occurred in the operation of the plan were amortized over a 30-year rolling period, which resulted in an amortization of about six percent of unamortized gains and losses each year. If the plan's accrued liability exceeded the actual value of plan assets, then the amortization payment on the total unfunded liability may not be lower than the payment calculated over a 30-year period.

As of prior June 30, 2013 actuarial valuation date, the Plan was 68 percent funded with an unfunded actuarial accrued liability (UAAL) of \$57,807,723. The UAAL resulted from an actuarial accrued liability for benefits of \$179,228,681 and actuarial value of assets of \$121,420,958. The covered annual payroll was \$26,049,390. The ratio of UAAL to covered payroll was 222.0 percent.

The schedule of funding progress, presented as required supplementary information (RSI) following the notes to the financial statements, presents multi-year trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liability for benefits.

### 13. Other Post-Employment Benefits (OPEB)

#### (a) Terminal Pay Plan

##### **Plan Description**

The Water Authority established a Terminal Pay Plan (TPP), effective December 10, 2007, which is administered by the Water Authority's Controller who also serves as the administrator and trustee. The TPP was established and governed under the Internal Revenue Code Section 414(d), that provides benefits to participants. The benefit is the accumulated balance of the retiring employee's (or a separated employee due to death) earned but unpaid vacation and sick leave on the date of retirement. Each employee of the Water Authority who is entitled to vacation-leave pay or sick-leave pay (under the applicable rules, regulations, and policies) is required to participate in the TPP if the participant retires, or separates employment due to death, from the Water Authority after reaching the age of 55.

Pursuant to GASB Statement No. 67, the definition of pensions does not include postemployment healthcare benefits and termination benefits. As such, the TPP is not subject to the requirements of GASB Statement No. 68, as the liability is related to earned, but unpaid sick and vacation benefits, and is recorded in the financial statements as compensated absences.

Employees may elect benefits be disbursed from the TPP in a lump sum or in monthly installments over a 60-month period (with no interest). As an alternative, an employee has the right to elect that all or a portion of benefits be immediately rolled over or transferred to an individual retirement account (IRA), a tax sheltered annuity, another tax-qualified retirement plan, or an eligible deferred compensation plan such as a Section 457 deferred compensation plan. A separate financial report is not prepared for the TPP.

##### **Benefits Provided**

Contributions equal to the accumulated balance in the employee's earned but unpaid vacation and sick leave accounts are made by the Water Authority to the TPP for eligible employees who retire, or separate due to death, from the Water Authority after reaching the age of 55, and are made as soon as administratively practicable after termination of employment. Amounts held on behalf of participants are fully vested and held in trust at all times. TPP benefits for a participant who retires, or separates due to death, from Water Authority service are fully vested once they are accrued and the value of TPP benefits is the amount of an employee's earned but unpaid vacation and sick leave on the date of retirement. No additional employee contributions are permitted. Benefits earned are accrued as compensated absences.

##### **Distribution**

If the value of benefits is over \$5,000, a distribution will only be made if the employee consents before April 1st following the calendar year in which they reach age 70½. If the value of an employee's vested benefit is \$5,000 or less on the date of retirement, or separation due to death, benefits will be distributed in a single lump sum.

##### **Changes or Termination of Plan**

The Water Authority reserves the right to amend the TPP at any time and for any reason. In the event the TPP is terminated, no additional contributions will be made, but the persons affected will continue to be entitled to the entire benefits under the TPP. Benefits under the TPP are not insured by the Pension Benefit Guaranty Corporation or any other government agency.

### 13. Other Post-Employment Benefits (OPEB), (continued)

#### (b) Retiree Health Benefit

##### Plan Description

The Water Authority has established a Retiree Healthcare Plan (Plan), a single-employer defined benefit retiree healthcare plan. The Plan, administered by the Water Authority, provides employees who retire directly from the Water Authority, at a minimum age of 55, with a minimum of five years of service, a cash subsidy for monthly medical insurance premiums up to a cap of \$200 per employee or \$320 for employee plus spouse. Payments cease at age 65 when the retiree or spouse is eligible for Medicare. If applicable, a cash subsidy for the monthly medical premium continues up to a cap of \$160 for a spouse until age 65 is attained. Surviving spouses are also eligible for this benefit. The Plan and its contribution requirements are established by Memoranda of Understanding with the applicable employee bargaining units and may be amended by agreements between the Water Authority and the bargaining units.

Employees who retire directly from the Water Authority at a minimum age of 55 with a minimum of five years of CalPERS service are eligible to continue medical coverage as a participant with active employees at a blended premium rate until eligible for Medicare at age 65 as an implied subsidy. A separate financial report is not prepared for the Plan.

##### Funding Policy

The annual contribution is based on projected pay-as-you-go financing requirements. For the fiscal years ended June 30, 2015 and 2014, the Water Authority's cash contributions were \$127,116 and \$110,650 in current premiums, which covered 65 and 61 retirees and their spouses, respectively. The estimated implied subsidy for the fiscal years ended June 30, 2015 and 2014 was \$167,648 and \$145,350, resulting in total payments of \$294,764 and \$256,000, respectively. A payment of \$4,300,000 was made by the Water Authority to fully fund California Employers' Retiree Benefit Trust (CERBT), an OPEB trust administrator and affiliate program of CalPERS, for the purpose of prefunding obligations. The total contribution of \$4,594,764 is the total fiscal year 2015 contribution for the liability of current and past services.

##### Annual OPEB Cost and Net OPEB Obligation

The Water Authority's annual OPEB cost is calculated based on the ARC of the employer, an amount actuarially determined in accordance with the parameters of GASB Statement No. 45. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost each year and amortize any unfunded actuarial liabilities over a period not to exceed 30 years.

The annual OPEB cost and the net OPEB obligation (asset) at June 30, 2015 and 2014 are as follows:

	2015	2014
Annual required contribution	\$ 627,000	\$ 609,000
Interest on net OPEB obligation	72,000	59,000
Adjustment to annual required contribution	(73,000)	(71,000)
Annual OPEB cost	626,000	597,000
Contributions made	(4,595,000)	(256,000)
Increase in net OPEB (asset) obligation	(3,969,000)	341,000
Net OPEB obligation, beginning of year	1,812,000	1,471,000
<b>Net OPEB (asset) obligation, end of year</b>	<b>\$ (2,157,000)</b>	<b>\$ 1,812,000</b>

### 13. Other Post-Employment Benefits (OPEB), (continued)

#### (b) Retiree Health Benefit, (continued)

##### Funded Status and Funding Progress

The following table summarizes the Plan's funding status as reported in the Water Authority's most recent actuarial valuation. Because of the prefunding that occurred in Fiscal Year 2015, the Water Authority's most recent actuarial valuation as of June 30, 2015, reflects an actuarial accrued surplus of \$92,104, representing the difference between the actuarial value of plan assets and the actuarial accrued liability.

Schedule of Funding Progress for OPEB

Actuarial Valuation Date	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability (Surplus)	Funded Status	Annual Covered Payroll	UAAL as a % of Covered Payroll
6/30/15	\$ 4,275,266	\$ 4,367,370	\$ (92,104)	102%	\$ 24,720,000	N/A
6/30/13	5,532,080	-	5,532,080	0%	24,962,000	22%

The Water Authority's annual OPEB cost, the annual OPEB cost contributed, the percentage of annual OPEB cost contributed and the net OPEB obligation (asset) as of and for the fiscal year ended June 30, 2015 and the two preceding fiscal years were as follows:

Three-Year Trend Information

Fiscal Year	Annual OPEB Cost	Annual OPEB Cost Contributed	Percentage of Annual OPEB Cost Contributed	Net OPEB Obligation (Asset)
6/30/15	\$ 626,000	\$ 4,595,000	734.0%	\$ (2,157,000)
6/30/14	597,000	256,000	42.9%	1,812,000
6/30/13	528,000	230,000	43.6%	1,471,000

Actuarial valuations of an ongoing plan involve estimates of the values of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trends. Amounts determined regarding the funded status of the Plan and the annual required contributions of the employer are subject to continual revisions as actual results are compared with past expectations and new estimates are made about the future.

The schedule of funding progress, presented as RSI, immediately following the Notes to the Financial Statements, presents multi-year trend information about whether the actuarial value of Plan assets is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

### 13. Other Post-Employment Benefits (OPEB), (continued)

#### (b) Retiree Health Benefit, (continued)

##### Actuarial Methods and Assumptions

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and the plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

A summary of principal assumptions and methods is shown below.

Description	Actuarial Valuation Date	
	June 30, 2015	June 30, 2013
<b>Actuarial Cost Method</b>	Entry Age Normal Cost	Entry Age Normal Cost
<b>Amortization Method</b>	Level percent of payroll over 30 years on a closed basis effective June 30, 2007	Level percent of payroll over 30 years on a closed basis effective June 30, 2007
<b>Average Remaining Period</b>	22 years as of the valuation date	24 years as of the valuation date
<b>Method and Plan Changes</b>	Amortized as level percentage of pay over fixed 20 years	Amortized as level percentage of pay over fixed 20 years
<b>Assumption Changes and Experience Gains/Losses</b>	Amortized as a level percentage of pay over a fixed 15 years	Amortized as a level percentage of pay over a fixed 15 years
<b>Funding Policy</b>	Pay-as-you-go benefit payments	Pay-as-you-go benefit payments
<b>Discount Rate</b>	7.28% per annum	4.00% per annum
<b>Projected Salary Increases</b>	3.00% per annum, in aggregate	3.00% per annum, in aggregate
<b>Inflation</b>	2.75%	2.75%
<b>Number of Active Plan Participants</b>	237	242
<b>Annual Healthcare Cost Trend Rates:</b>		
HMO	7.0% reduced by increments to an ultimate rate of 4.5% per year at 2021 and later years	7.0% reduced by increments to an ultimate rate of 4.5% per year at 2019 and later years
PPO	7.5% reduced by increments to an ultimate rate of 4.5% per year at 2022 and later years	7.5% reduced by increments to an ultimate rate of 4.5% per year at 2020 and later years

#### **14. Deferred Compensation Plans and Defined Contribution Plans**

The Water Authority Board of Directors has adopted deferred compensation plans and defined contribution plans (the Plans) in accordance with Sections 457(f) and 401(a), respectively, of the Internal Revenue Code. The Water Authority Board of Directors has discretion to amend the Plans. These plans permit all eligible employees to defer, either pre-tax or post-tax, a portion of their salary until future years. The plan administrators for the Water Authority at June 30, 2015 and June 30, 2014 were TIAA-CREF and ICMA.

Participation in the 457 plan is not required and employee contributions may be modified from time to time at the employee's direction. Employees eligible for the 401A plan must contribute an irrevocable mandatory minimum of three percent up to a maximum of 20 percent of salary to the plan. The Water Authority makes an annual contribution to the 401A plan on behalf of Senior and Executive Managers as specified in the compensation plans. Contributions to the Plans and interest earnings are 100 percent vested immediately. Benefits depend solely on the amounts contributed to the Plans plus investment earnings.

Plan contributions and earnings are not available to employees until termination, retirement, death, disability, or an unforeseeable emergency. All assets and income of the Plans are held in trust for the exclusive benefit of plan participants and their beneficiaries. The deferred compensation plans are not considered part of the Water Authority's financial reporting entity. Employee contributions to the 457(f) plan were \$1,331,278 and \$1,287,988 for Fiscal Years 2015 and 2014, respectively. Employee contributions to the 401(a) plan were \$410,143 and \$433,039 for Fiscal Years 2015 and 2014, respectively. Employer 401(a) matching contributions were \$45,300 and \$51,887 for Fiscal Years 2015 and 2014, respectively.

#### **15. Insurance**

The Water Authority is exposed to various risks of loss related to torts, including theft of, damage to, and destruction of assets, errors and omissions, injuries to employees, and natural disasters. The Water Authority obtains coverage for general liability, errors and omissions, employment practices liability, and crime coverage from Alteris – Allied World Assurance Company, and coverage for auto, property, boiler and machinery from Travelers Property Casualty Company of America (Travelers). Liability coverage is \$46 million per occurrence with a \$75,000 deductible per occurrence. Property coverage is provided with a \$400 million per occurrence and aggregate coverage limit and a sub-limit of \$100 million per occurrence for boiler and machinery coverage. Property and boiler and machinery coverage have a \$25,000 deductible per occurrence. A \$600 million reduction in property coverage limits over the prior year is due to a change from a shared pooled type of policy requiring higher limits to a comparable coverage dedicated policy with Travelers. The current property policy limit of \$400 million exceeds the current \$300 million valuation of scheduled property. The Water Authority is a participant in the Special District Risk Management Authority (SDRMA) pooled insurance program and obtains Workers' compensation coverage through the program. Workers' compensation coverage is per California statutory limits with \$5 million per occurrence employer's liability coverage. There is no deductible per occurrence.

The amount of claims settlements did not exceed insurance coverage for the past three fiscal years for all coverage types, individually and collectively.

In 1999, the Water Authority entered into an Owner Controlled Insurance Program (OCIP) to provide workers' compensation and general liability insurance to the contractors, and professional liability, pollution liability, and builders risk for the Emergency Storage Project. In Fiscal Year 2009, the Water Authority obtained an extension of the OCIP at a cost of approximately \$15.0 million to cover the construction of Emergency Storage Projects through 2014, with an additional extension obtained for coverage through 2015. The OCIP also maintains a loss deductible account that is adjusted annually based upon loss experience and is capped at \$9.1 million, with the final amount to be determined by contractor's payroll audit. Payments to the loss account are adjusted annually based on loss experience. The general liability deductible is \$250,000 per occurrence. The primary policy coverage limit is \$2.0 million per occurrence and \$4.0 million in aggregate with excess liability coverage to \$100.0 million aggregate and total coverage limit. The workers' compensation program provides full statutory coverage with a \$250,000 deductible for each occurrence. The builders risk insurance has a variable deductible depending on the construction type and has a \$50.0 million per occurrence maximum coverage limit.

## 16. Jointly Governed Organization

The Water Authority's payment of specific environmental mitigation costs are being made to the QSA JPA, which reviews and approves actual expenses for required mitigation and environmental costs. The QSA JPA is administered by the Water Authority and is made up of the Water Authority, IID, CVWD, and the State of California's Department of Fish and Game. The QSA JPA board is comprised of one member from each participating entity.

## 17. Commitments and Contingencies

### (a) Construction Projects

The Water Authority had material commitments under construction contracts as of June 30, 2015 and 2014 as follows:

<b>Project Name</b>	<b>FY 2015</b>	<b>FY 2014</b>
San Vicente By-Pass Pipeline	\$ 9,237,983	\$ -
San Vicente Marina Facilities	-	13,660,807
Pipeline 3 Desal Relining San Marcos to Twin Oaks	-	13,286,033
Twin Oaks Valley Water Treatment Plant Desalination Modifications	3,116,739	-
<b>Total</b>	<b>\$ 12,354,722</b>	<b>\$ 26,946,840</b>

### (b) Litigation

The Water Authority is subject to lawsuits and claims, which arise out of the normal course of business. In the opinion of management, based upon the opinion of legal counsel, the disposition of such actions of which it is aware will not have a material effect on the change in financial position, or liquidity of the Water Authority.

## 17. Commitments and Contingencies, (continued)

### c) Carlsbad Desalination Project

#### **Description and Nature of Project**

On December 20, 2012, the Water Authority entered into a 30-year Water Purchase Agreement with Poseidon Resources (Channelside) LP (Company) to purchase a minimum of 48,000 acre-feet and up to 56,000 acre-feet annually from the Carlsbad Desalination Project (Project) starting as early as the fall of 2015.

The Project comprises a 50 million gallon per day (mgd) reverse osmosis desalination plant (Plant) and an approximately 10-mile pipeline (Pipeline) that will connect the Plant to the Water Authority's existing distribution system. The Water Authority will also add an interconnection pipeline and make related improvements to the existing water system necessary to integrate the water delivered from the Project into the distribution system.

The Project has been developed as a "public private partnership" (P3) between the Water Authority and the Company. The Company will own, construct, operate and maintain the Plant. The Company will also construct the Pipeline that will be owned, operated, and maintained by the Water Authority. The Water Authority will be the sole purchaser of the potable water produced by the Plant.

#### **Project Agreements**

##### Water Purchase Agreement

Pursuant to the Water Purchase Agreement, the Company will sell the potable water produced by the Plant (Product Water) to the Water Authority. The Water Authority will be the sole purchaser of Product Water. The initial term of the Water Purchase Agreement expires 30 years after the Commercial Operation Date.

The Water Purchase Agreement requires the Company to design and construct the Plant and demonstrate by performance testing that the Plant performs in accordance with the standards specified therein.

The Water Authority will have an annual obligation to purchase or pay (a take-or-pay contract) for 48,000 acre-feet, the minimum annual demand commitment by the Water Authority, of Product Water that meets the requirements of the Water Purchase Agreement and may request up to 56,000 acre-feet each year, the maximum annual supply commitment, of Product Water produced by the Company. Prior to each contract year, the Water Authority and the Company will schedule the monthly delivery of the Product Water such that the annual total will be between 48,000 acre-feet and 56,000 acre-feet, unless otherwise adjusted in accordance with the terms of the Water Purchase Agreement. The monthly payments will be based on actual units of Product Water delivered or deliverable according to the delivery schedule. The Water Authority will pay a per-acre-foot charge for delivered or deliverable water calculated to be sufficient to pay debt service on the Series 2012 Plant Bonds (described in the Project Financing section), an equity return, and variable and fixed Project operating costs. The Company will be obligated to make shortfall payments to the Water Authority for the failure to deliver Product Water as required under the Water Purchase Agreement (Operating Period Shortfall Payments). To secure its performance obligations under the Water Purchase Agreement, the Company was required to post a \$5.125 million letter of credit.

The Water Authority has an option to purchase the Plant at any time following the tenth anniversary of the Commercial Operation Date for a price sufficient to redeem or defease the Series 2012 Plant Bonds and any additional plant senior debt incurred for the construction and modification of the Plant and which constitutes permitted approved debt under the Water Purchase Agreement plus a return to equity. The Water Authority will also have an option to purchase the Plant for the same price if financing is unavailable to pay for modifying or reinstating the Plant under the circumstances. The Water Authority may also purchase the Plant for the aggregate outstanding principal and accrued interest on the Series 2012 Plant Bonds and any additional plant senior debt under the Plant Loan Agreement (described in the Project Financing section) incurred for the construction and modification of the Plant and which constitutes permitted approved debt under the Water Purchase Agreement upon a termination of the Water Purchase Agreement for the Company's default.

## **17. Commitments and Contingencies, (continued)**

### **(c) Carlsbad Desalination Project, (continued)**

#### ***Project Agreements, (continued)***

##### Plant Engineering, Procurement and Construction Contract

The Water Purchase Agreement obligates the Company to design, construct, and test the Plant in accordance with the standards and design requirements therein. The Company entered into a Desalination Facility Engineering, Procurement and Construction Agreement (Plant EPC Contract) dated December 20, 2012 with Kiewit Shea Desalination, a joint venture of Kiewit Infrastructure West Co. and J.F. Shea Construction Company, in a joint and several capacity (EPC Contractor). Pursuant to the Plant EPC Contract, the EPC Contractor will design, construct, and test the Plant.

##### Pipeline Design-Build Agreement and Pipeline Engineering, Procurement and Construction Contract

The Water Purchase Agreement specifies that the Company will own the Plant and undertake efforts to permit, design, construct, finance, operate, maintain, and manage the Plant. In addition, the Company agrees to design and construct the new Pipeline pursuant to a Design-Build Agreement (Pipeline DBA) entered into with the Water Authority. The Company also entered into a Product Water Delivery System Engineering, Procurement and Construction Contract (Pipeline EPC Contract) dated December 20, 2012 with the EPC Contractor for the design, engineering, procurement, construction, start-up, commissioning, and testing of the Pipeline. The ownership of the Pipeline is transferred to the Water Authority as construction progresses.

#### ***Project Financing***

On December 24, 2012, the California Pollution Control Financing Authority (CPCFA) issued \$530,345,000 of five percent fixed rate tax-exempt, subject to Alternative Minimum Tax (AMT), revenue bonds (Series 2012 Plant Bonds) at a premium of \$15,393,338, for an All-In True Interest Cost (TIC) of 4.9 percent, to pay a portion of the costs of developing, designing, acquiring, and constructing the Plant. The cost of the Plant will also be funded by equity contributions made by Poseidon Resources Channelside Holdings LLC, the limited partner in the Company (Limited Partner) of up to \$172,623,000 to the Company. To secure such obligation, on December 24, 2012, the Limited Partner delivered a letter of credit issued by Wells Fargo in the maximum available amount of \$172,623,000 (Equity Security) to the Collateral Agent.

On December 24, 2012, the CPCFA also issued \$203,215,000 of five percent fixed rate tax-exempt revenue bonds (Series 2012 Pipeline Bonds - and together with Series 2012 Plant Bonds, the Project Bonds) at a premium of \$6,904,610, for an All-In TIC of 4.9 percent, to pay the cost of constructing the Pipeline.

The SDCWAFA, a blended component unit, will make such proceeds available to the Water Authority pursuant to an Installment Sale and Assignment Agreement dated as of December 24, 2012 (Installment Sale and Assignment Agreement) to pay the costs of developing, designing, acquiring, and constructing the Pipeline. The Company has agreed to design and build the Pipeline pursuant to the Pipeline DBA. In certain circumstances, as described herein, the Company may be obligated to pay amounts to the Water Authority to satisfy its obligations under the Pipeline Loan Agreement with the SDCWAFA related to the Series 2012 Pipeline Bonds.

In the Installment Sale and Assignment Agreement, the Water Authority will assign its rights to receive contracted shortfall payments to the SDCWAFA which, in turn, will assign them to the CPCFA which will assign them to the Pipeline Trustee.

## 17. Commitments and Contingencies, (continued)

### (c) Carlsbad Desalination Project, (continued)

#### **Sources of Payment to and Security for Bondholders of Project Bonds**

##### Prior to the Commercial Operation Date

During the period prior to the date on which the provisional acceptance conditions have been satisfied as described in the Water Purchase Agreement (Commercial Operation Date), the Company is solely responsible for completing the construction of the Project, and for any payment obligations with respect to the Project Bonds arising from construction delay or default by the Company on its construction or payment obligations.

The Series 2012 Pipeline Bond proceeds on deposit with the Pipeline Trustee are sufficient to pay the fixed price of constructing the Pipeline and interest on the Pipeline Bonds for the guaranteed construction period plus an additional six months. In addition the Pipeline Trustee holds funds in the Pipeline Debt Service Reserve Fund under the Pipeline Indenture in an amount equal to the current annual debt service on the Pipeline Bonds.

The Series 2012 Plant Bond proceeds on deposit with Union Bank, N.A. (in such capacity, the Collateral Agent), together with the Equity Security, are sufficient to pay the fixed price of constructing the Plant and interest on the Plant Bonds for the guaranteed construction period plus an additional six months, and certain direct obligations of the Company during the construction period. The amounts on deposit (or available to be drawn on the Equity Security) also include a \$20 million owner's construction contingency.

If there is a delay in achieving the Commercial Operation Date, and amounts on deposit in capitalized interest accounts for the Project Bonds are insufficient to pay debt service on the related Project Bonds, the Company is required to pay delay construction period shortfall payments under the Pipeline DBA that will cover debt service payments on the Series 2012 Pipeline Bonds and is obligated under the Plant Loan Agreement to pay debt service on the Plant Bonds.

If the Commercial Operation Date is not achieved by the date that is 1,430 days following the Series 2012 Project Bonds closing date (as such period may be extended pursuant to the terms of the Water Purchase Agreement) or the Company defaults on its obligations to make Contracted Shortfall Payments under the Pipeline DBA, the Water Authority may terminate the Pipeline DBA and the Water Purchase Agreement, and the Company would be obligated to pay the entire debt service on the Project Bonds.

In accordance with the Plant EPC Contract and the Pipeline EPC Contract, the EPC Contractor is obligated to timely achieve the Commercial Operation Date. It will pay delay damages for unexcused delay and is obligated to continue to work to achieve the Commercial Operation Date. The EPC Contractor and the Operating Contractor, IDE Americas Inc. (IDE Americas), have provided certain guarantees and performance and payment bonds, to assure that their obligations are met and the Collateral Agent is the assignee or beneficiary of those third party assurances. However, the liabilities of the EPC Contractor and IDE Americas are subject to overall limitations and they are excused from performance in certain circumstances where the Company is not entitled to relief under the Water Purchase Agreement or the Pipeline DBA.

##### After Achieving the Commercial Operation Date

Once the Commercial Operation Date is achieved, the Water Authority will commence payments under the Installment Sale and Assignment Agreement for the benefit of the holders of the Series 2012 Pipeline Bonds and commence the purchase of Product Water under the Water Purchase Agreement. The Collateral Agent will receive all revenues under the Water Purchase Agreement, and any damages payments from IDE Americas, in its capacity as operator of the Plant, and any amounts drawn on the Equity Security and certain other funds will be applied to fund operating reserves. Amounts held by the Collateral Agent will secure the payment of Plant senior debt and operating period shortfall payments related to the Series 2012 Pipeline Bonds under the Water Purchase Agreement on a parity basis.

## **17. Commitments and Contingencies, (continued)**

### **(c) Carlsbad Desalination Project, (continued)**

#### ***Project Risk Bearing***

Since the inception of this public-private partnership, the Water Authority and the Company have recognized and acknowledged the significant risks inherent in the Project of such nature and magnitude. The Project can only serve the intended commercial purpose of providing reliable Product Water to the public if and when construction is complete and meets specified standards at appropriate cost. The Water Authority has the fiduciary responsibility to protect the interests of member agencies and the public from Project risks.

The Water Authority and the Company have agreed unequivocally, in principle and in substance that, during the construction period prior to the Commercial Operation Date, the Company bears the entire risk of the Project and is solely responsible for all liabilities. The Water Authority only commences payments if and when the Commercial Operation Date is achieved within the timeframe as defined in the Water Purchase Agreement (WPA). Additionally, once commercial operation is achieved, the Water Authority only pays for water delivered at the quality and quantity as provided for in the WPA.

Protection of public interests extends to and through Qualified Institutional Buyers (QIBs), the primary providers of Project financing. Like the Water Authority, QIBs have fiduciary responsibilities toward member constituents, the general public, whose funds are held and invested by QIBs.

This overarching risk objective of protecting public interests from Project risks has provided clear guidance for structuring Project financing and for developing related agreements towards meeting the goal.

#### ***Water Authority Accounting for Series 2012 Pipeline Bonds***

##### Prior to Achieving the Commercial Operation Date

GASB Concepts Statement No. 4 defines assets as resources with present service capacity that the government presently controls. Concepts Statement No. 4 also defines liabilities as present obligations to sacrifice resources that the government has little or no discretion to avoid.

Prior to achieving the Commercial Operation Date, while the Water Authority has legal title to Pipeline construction in progress, the Pipeline provides no present service capacity to the Water Authority. Proceeds from Series 2012 Pipeline Bonds are held by the Pipeline Trustee, which disburses funds monthly to pay for the costs of Pipeline construction. The disbursement requests are subject to approvals by the Company and the Independent Engineer. The Water Authority has the right to review and comment on, but not approve, such requests. As such, during the construction period, the Water Authority does not own resources related to the Pipeline that meet the definition of assets as defined in GASB Concepts Statement No. 4.

The obligation of the Water Authority to make any payments for the Project commences after the Project achieves the Commercial Operation Date under the terms of the Water Purchase Agreement. Therefore, during the construction period, the Water Authority does not have present obligations to sacrifice resources that it has little or no discretion to avoid.

##### After Achieving the Commercial Operation Date

Once the Commercial Operation Date is achieved pursuant to the terms under the Water Purchase Agreement, the Water Authority will record the Pipeline as a capital asset, following existing measurement, recognition, and disclosure guidance for capital assets. The Water Authority will also record the Series 2012 Pipeline Bonds as a liability, following existing measurement, recognition, and disclosure guidance for liabilities.

**18. Restatement of Net Position**

As a result of the implementation of GASB Statements No. 68 and 71 in Fiscal Year 2015, the beginning net position was restated by a decrease of \$61,177,953. The GASB Statement No. 68 adjustment was an increase of \$66,451,557 in net pension liability and GASB Statement No. 71 resulted in a decrease of \$5,273,604 in deferred outflows of resources - employer contributions 2014, resulting in an overall decrease in beginning net position.

<b>Net Position as of June 30, 2014, as previously reported</b>	<b>\$ 1,471,607,340</b>
<b>Change in accounting principle: GASB 68 Adjustment</b>	<b>( 61,177,953)</b>
<b>Net Position as of June 30, 2014, as restated</b>	<b><u>\$ 1,410,429,387</u></b>

Financial Statements for the Fiscal Year 2014 were not restated because the necessary actuarial information from the California Public Employees' Retirement System was not provided for the year presented.

**19. Subsequent Events**

**(a) Metropolitan Water District of Southern California Litigation**

In August 2015, Judge Karnow issued a final Statement of Decision in Phase 2 of the litigation awarding the Water Authority \$188,295,602, plus interest, as damages and also determining that the Water Authority is entitled to greater preferential rights to MWD water. The decision came in lawsuits filed in 2010 and 2012 by the Water Authority challenging rates imposed by MWD for 2011-2014. The Water Authority successfully argued MWD's transportation rates are illegal because they improperly include unrelated expenses, thus artificially inflate the price MWD charges for transporting the Water Authority's independent Colorado River water supplies through MWD's pipelines. Numerous California statutes, the California Constitution, and common law require that public water agencies, such as MWD, set rates based on the actual costs of the services they provide.

In October 2015, Judge Karnow ruled MWD owes the Water Authority \$43.4 million in pre-judgement interest bringing the total judgement owed to \$231.7 million.

**(b) Bond Refunding Series 2008A and Series 2010A**

On September 22, 2015, following the guidelines set forth in the Water Authority's Debt Management Policy, the Water Authority issued \$184,795,000 of Senior Lien Water Revenue Refunding Bonds, Series 2015A to refund a portion of the outstanding Water Revenue Certificates of Participation, Series 2008A and a portion of the outstanding Water Revenue Bonds, Series 2010A (Non-AMT Tax-Exempt).

**ECONOMY OF SAN DIEGO COUNTY**

The Water Authority serves the foothill and coastal areas of the westerly third of San Diego County, sometimes referred to herein as “the County.” Approximately 97% of the total population of the County lives within the service area of the Water Authority. Due to the close correspondence between the Water Authority service area and the County, a brief description of the economy of San Diego County is provided below.

**General**

San Diego County covers 4,255 square miles, extending 70 miles along the Pacific Coast from the California-Mexico border north to Orange County, and inland 75 miles east to Imperial County. Riverside and Orange Counties form the northern boundary. The County is approximately the size of the State of Connecticut.

Topography of the County varies from broad coastal plains to fertile inland valleys and mountain ranges to the east, rising to an elevation of 6,500 feet. Eastern slopes of these mountains form the rim of the Anza-Borrego Desert and the Imperial Valley. The Cleveland National Forest occupies much of the interior portion of the County. The climate is equable in the coastal and valley regions where most of the population and resources are located. Average annual rainfall in the coastal region is approximately ten inches.

There are 18 incorporated cities and a number of unincorporated communities in the County. The City of San Diego is the largest city in the County. Other cities are Carlsbad, Chula Vista, Coronado, Del Mar, El Cajon, Encinitas, Escondido, Imperial Beach, La Mesa, Lemon Grove, National City, Oceanside, Poway, San Marcos, Santee, Solano Beach and Vista. Most County residents live within 20 miles of the coast. Farther inland are agricultural areas, principally planted with avocados and tomatoes, while the easternmost portion of the County has a dry, desert-like topography.

**Population**

The County’s population was estimated to be 3,230,669 as of June 30, 2015.

The following table shows changes in the population in the County, the State of California and the United States for the years 2004 to 2015.

**POPULATION ESTIMATES<sup>(1)</sup>**  
(In Thousands)

<u>Year</u>	<u>San Diego County</u>	<u>Percent Change</u>	<u>State of California</u>	<u>Percent Change</u>	<u>United States</u>	<u>Percent Change</u>
2004	2,963	--	35,753	--	293,046	--
2005	2,970	.23	35,986	.65	295,753	.92
2006	2,983	.43	36,247	.73	298,593	.96
2007	3,014	1.05	36,553	.84	301,580	1.00
2008	3,051	1.23	36,856	.83	304,375	.93
2009	3,078	.86	38,077	.60	307,007	.86
2010	3,103 <sup>(2)</sup>	-- <sup>(2)</sup>	37,339 <sup>(2)</sup>	-- <sup>(2)</sup>	309,347 <sup>(2)</sup>	-- <sup>(2)</sup>
2011	3,137	1.11	37,676	.90	311,719	.77
2012	3,175	1.20	38,038	.96	314,103	.76
2013	3,209	1.08	38,367	.86	316,427	.74
2014	3,248	1.19	38,725	.93	318,907	.78
2015 <sup>(3)</sup>	3,276	.86	39,071	.89	321,419	.79

Sources: State of California Department of Finance for County and State; U.S. Bureau of the Census for United States.

<sup>(1)</sup> As of July 1 of the year shown.

<sup>(2)</sup> 2010 Census result; percent change not shown as data are not directly comparable.

<sup>(3)</sup> County and State Data – Preliminary.

**Employment**

The County's total labor force, the number of persons who work or are available for work, averaged approximately 1,563,800 in 2015, while the number of employed workers in the labor force averaged approximately 1,482,500. The following table sets forth information regarding the size of the labor force, employment and unemployment rates for the County, the State and the United States for the years 2011 through 2015.

**LABOR FORCE - EMPLOYMENT AND UNEMPLOYMENT\***  
**ANNUAL AVERAGES 2011-2015**  
**By Place of Residence**  
(In Thousands)

	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
<b>County of San Diego</b>					
Labor Force	1,526.0	1,544.6	1,546.2	1,546.4	1,563.8
Employment	1,368.7	1,403.6	1,425.8	1,447.1	1,482.5
Unemployment Rate	10.3%	9.1%	7.8%	6.4%	5.2%
<b>State of California</b>					
Labor Force	18,419.5	18,554.8	18,671.6	18,811.4	18,981.8
Employment	16,260.1	16,630.1	17,002.9	17,397.1	17,798.6
Unemployment Rate	11.7%	10.4%	8.9%	7.5%	6.2%
<b>United States</b>					
Labor Force	153,617.0	154,975.0	155,389.0	155,922.0	157,130.0
Employment	139,869.0	142,469.0	143,929.0	146,305.0	148,834.0
Unemployment Rate	8.9%	8.1%	7.4%	6.2%	5.3%

Sources: State Data - California Employment Development Department; National Data - U.S. Department of Labor, Bureau of Labor Statistics.

\* Data not seasonally adjusted.

The following table sets forth the annual average employment within the County, by employment sector, for Fiscal Year 2008-09 through Fiscal Year 2014-15.

**SAN DIEGO COUNTY**  
**NON-AGRICULTURAL LABOR FORCE AND INDUSTRY EMPLOYMENT**  
**FISCAL YEAR ANNUAL AVERAGES<sup>(1)</sup>**  
**2009-2015**  
**(In Thousands)**

<b><u>Employment Sector</u></b>	<b>Fiscal Year Ended June 30,</b>						
	<b><u>2009</u></b>	<b><u>2010</u></b>	<b><u>2011</u></b>	<b><u>2012</u></b>	<b><u>2013</u></b>	<b><u>2014</u></b>	<b><u>2015</u></b>
Natural Resources and Mining	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Construction	61.1	55.4	55.2	57.0	60.9	63.8	69.5
Manufacturing	96.9	95.3	96.0	97.8	99.0	101.6	105.3
Wholesale and Retail Trade	172.3	170.9	174.9	180.7	185.2	188.0	190.8
Transportation, Warehousing and Utilities	27.3	26.5	26.1	27.3	27.2	27.0	28.2
Services							
Information	28.2	25.1	24.2	24.5	24.3	24.4	23.9
Financial	69.7	67.1	67.4	69.7	70.8	69.4	71.4
Activities							
Professional and Business	205.6	205.8	207.7	213.9	221.6	224.9	230.9
Services							
Educational and Health	162.8	164.5	167.9	174.5	181.0	186.0	193.2
Services							
Leisure and Hospitality	154.8	154.5	155.6	161.7	168.6	177.0	184.0
Other	46.8	46.1	47.7	49.2	49.3	52.0	53.0
Services							
Government	<u>224.5</u>	<u>230.5</u>	<u>229.0</u>	<u>227.8</u>	<u>229.5</u>	<u>231.9</u>	<u>235.9</u>
Total, All Non-Farm Industries	<u>1,250.4</u>	<u>1,242.0</u>	<u>1,252.0</u>	<u>1,284.5</u>	<u>1,317.7</u>	<u>1,346.5</u>	<u>1,386.4</u>

<sup>(1)</sup> March 2015 Benchmark.

Source: California Employment Development Department.

### **Regional Economy**

In recent years, the County has enjoyed economic stability, outpacing the State economy. Much of this strength was evidenced by and due to outstanding employment gains, population growth, personal income increases, and high levels of commercial and industrial development.

The County Gross Domestic Product (“GDP”) for 2015 was estimated at \$213.7 billion and is projected to be \$221.8 billion in 2016. The GDP is an estimate of the value for all goods and services produced in the region. The following table presents the County’s GDP from 2010 through 2016.

**COUNTY OF SAN DIEGO  
GROSS DOMESTIC PRODUCT  
2010-2016**

<u>Year</u>	<u>Gross Domestic Product (In Billions)</u>	<u>Annual Percent Change</u>
2010	\$176.5	-
2011	183.5	4.0%
2012	193.1	5.3
2013	200.2	3.7
2014	206.8	3.3
2015 <sup>(1)</sup>	213.7	3.3
2016 <sup>(2)</sup>	221.8	3.8

<sup>(1)</sup> Estimated

<sup>(2)</sup> Projected

Source: National University System Institute for Policy Research.

Economic activity and population growth in the local economy are closely related. Helping to sustain the County's economy is the performance of three basic industries of the region, which consist of manufacturing, the military, and tourism. According to a Military Economic Impact Study by the San Diego Military Advisory Council, defense and military-related activities remain an important economic driver of San Diego County despite recent budget cutbacks. An estimated \$24.8 billion in direct spending related to defense was sent to San Diego County during fiscal year 2015. Further actions taken by the federal government to reduce expenditures for U.S. Department of Defense activities or failure by the United States Congress to take action prior to scheduled reductions in expenditures for U.S. Department of Defense activities could result in reduced military expenditures in the County and could adversely affect the County's economy.

The following table presents the top ten employers in the County in 2015.

**COUNTY OF SAN DIEGO  
TOP TEN EMPLOYERS  
2015<sup>(1)(2)</sup>**

<u>Employer</u>	<u>Rank</u>	<u>Number of Employees</u>
University of California, San Diego	1	29,287
Sharp HealthCare	2	16,896
Scripps Health	3	14,644
Qualcomm Inc.	4	13,500
Kaiser Permanente	5	7,535
UC San Diego Health System	6	7,229
YMCA of San Diego County	7	5,487
Rady Children's Hospital-San Diego	8	5,122
General Atomics Aeronautical Systems Inc.	9	5,088
San Diego State University	10	5,064

<sup>(1)</sup> As of July 1, 2015.

<sup>(2)</sup> Source only reports businesses responding to their survey and did not receive a response from the following employers: U.S. government, which employed over 45,000 workers in 2014 according to San Diego Sourcebook; State of California which was ranked No. 1 with a total of 40,100 employees for 2014; City of San Diego which was ranked No. 6 with a total of 10,584 employees for 2014.

Source: San Diego Business Journal 2015 Book of Lists

## Building Activity

In recent years, building activity in the County has generally displayed an upward trend since declining in 2008 and 2009 due to general economic conditions and measures limiting new housing in effect in areas throughout the County. Building permit valuation for Single Family and Multifamily construction in the County in 2015 increased from 2014 levels by approximately 38% and surpassed 2007 levels by approximately 47%.

Annual total construction costs and the annual unit total of new residential permits from 2011 through 2015 are shown in the following table.

### COUNTY OF SAN DIEGO BUILDING PERMIT ACTIVITY

	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
Construction Costs (In Thousands)					
Single Family	\$707,672	\$748,144	\$916,834	\$900,063	\$1,064,597
Multifamily	<u>380,977</u>	<u>536,359</u>	<u>871,608</u>	<u>603,504</u>	<u>1,015,100</u>
Total	<u>\$1,088,649</u>	<u>\$1,284,504</u>	<u>\$1,788,442</u>	<u>\$1,503,567</u>	<u>\$2,079,697</u>
New Housing Units					
Single Family	2,242	2,197	2,565	2,486	3,202
Multiple Family	<u>3,125</u>	<u>3,469</u>	<u>5,699</u>	<u>4,388</u>	<u>6,570</u>
Total	<u>5,367</u>	<u>5,666</u>	<u>8,264</u>	<u>6,874</u>	<u>9,772</u>

Source: U.S. Bureau of the Census for United States

## Commercial Activity

Consumer spending for 2013 resulted in approximately \$50,297,331 in taxable sales in the County. The following table sets forth information regarding taxable sales in the County from 2009 to 2013.

### COUNTY OF SAN DIEGO TAXABLE SALES 2009-2013 (In Thousands)

	Taxable Sales (\$000)				
	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013<sup>(1)</sup></u>
Apparel	\$ 2,560,683	\$ 2,769,897	\$ 2,988,756	\$ 3,208,810	\$ 3,425,325
General Merchandise	4,254,037	4,381,526	4,528,053	4,695,436	4,784,812
Drug Stores	732,221	789,760	869,965	876,663	915,651
Food Stores	1,667,243	1,657,119	1,707,963	2,087,821	1,834,883
Packaged Liquor Stores	267,569	286,850	302,441	324,249	344,928
Eating and Drinking Places	4,717,292	4,873,578	5,214,419	5,665,929	5,954,220
Home Furnishings & Appliances	2,024,448	2,101,996	2,210,069	962,420	2,312,941
Building Materials and Farm Implements	1,841,740	1,945,310	2,072,358	2,204,608	2,376,043
Auto Dealers & Supplies	4,196,256	4,486,375	5,059,516	5,851,723	6,355,973
Service Stations	3,153,090	3,663,149	4,437,173	4,595,421	4,515,941
Other Retail Stores	<u>2,543,941</u>	<u>2,519,928</u>	<u>2,594,579</u>	<u>1,473,767</u>	<u>3,127,875</u>
Total Retail Stores	<u>\$27,958,518</u>	<u>\$29,475,489</u>	<u>\$31,985,292</u>	<u>\$34,153,236</u>	<u>\$35,948,594</u>
All Other Outlets	<u>11,770,139</u>	<u>12,148,147</u>	<u>13,105,090</u>	<u>13,793,799</u>	<u>14,348,737</u>
Total All Outlets	<u>\$39,728,657</u>	<u>\$41,623,636</u>	<u>\$45,090,382</u>	<u>\$47,947,035</u>	<u>\$50,297,331</u>

<sup>(1)</sup> Most recent full year information available.

Source: California Board of Equalization.

## **Transportation**

Surface, sea, and air transportation facilities serve County residents and businesses. Interstate 5 parallels the coast from Mexico to the Los Angeles area and points north. Interstate 15 runs inland, leading to Riverside-San Bernardino, Las Vegas, and Salt Lake City. Interstate 8 runs eastward through the southern United States.

San Diego International Airport (Lindbergh Field) is located approximately one mile west of the downtown area at the edge of San Diego Bay. The facilities are owned and maintained by the San Diego Regional Airport Authority and are leased to commercial airlines and other tenants. The airport is California's third most active commercial airport, served by 20 major airlines. In addition to San Diego International Airport there are two naval air stations and eight general aviation airports located in the County.

Public transit in the metropolitan area is provided by the Metropolitan Transit Development Board. The San Diego Trolley, developed by the Metropolitan Transit Development Board beginning in 1979, has been expanded. A total of 17.6 miles were added to the original 108 miles; construction was completed in 1990.

San Diego is the terminus of the Santa Fe Railway's main line from Los Angeles. Amtrak passenger service is available at San Diego, with stops at Solana Beach and Oceanside in the North County.

San Diego's harbor is one of the world's largest natural harbors. The Port of San Diego is administered by the San Diego Unified Port District, which includes the cities of San Diego, National City, Chula Vista, Imperial Beach, and Coronado.

## **Visitor and Convention Activity**

An excellent climate, proximity to Mexico, extensive maritime facilities, and such attractions as the San Diego Zoo and Wild Animal Park, Sea World, Cabrillo National Monument, and Palomar Observatory allow San Diego to attract a high level of visitor and convention business each year. Contributing to the growth of visitor business has been the development of the 4,600-acre Mission Bay Park at San Diego and the construction of meeting and convention facilities at the San Diego Community Concourse.

San Diego's visitor industry is a major sector of the region's economy. Visitor revenues in San Diego County reached approximately \$9.9 billion in 2015, according to an estimate by the San Diego Tourism Authority, an increase of approximately \$9.2 billion from the prior year. San Diego County hosted 71 out-of-town conventions and trade shows in 2015, attended by an estimated 553,283 delegates.

## **Education**

Forty-two independent school districts provide educational programs for the elementary and secondary public school children in the County. Each school system is governed by a locally elected board of education and administered by a superintendent or other chief administrative officer appointed by the board. In the County there are five types of school districts: elementary, union high, unified, county office of education and statewide benefit charter. Elementary school districts educate elementary students, union high school districts educate for the most part secondary students, and unified school districts educate both elementary and secondary students. There are currently 13 unified, 23 elementary and 6 union high school districts, one county office of education and one statewide benefit charter in the County.

Community colleges in California are locally operated and administered two-year institutions of higher education. They offer Associates in Arts and Associates in Science degrees and have extensive vocational curricula. There are five community college districts in the County with students at eleven campuses and numerous adult and community centers.

Among the institutions of higher education offering bachelors and graduate programs in metropolitan San Diego are San Diego State University, the University of California at San Diego, National University, the University of San Diego, Point Loma College, California State University – San Marcos, Alliant International University, and the University of Phoenix.

**SUMMARY OF PRINCIPAL LEGAL DOCUMENTS**

CERTAIN DEFINITIONS

The following are definitions of certain terms as used in this Official Statement.

“Accreted Value” means, with respect to any Capital Appreciation Bonds or Capital Appreciation Certificates, as of the date of calculation, the initial amount thereof plus the interest owed thereon to such date of calculation, compounded from the date of initial delivery at the appropriate interest rate thereof on each semiannual date specified with respect thereto, as determined in accordance with the table of accreted values for any Capital Appreciation Bonds or Capital Appreciation Certificates prepared by the Water Authority at the time of sale thereof, assuming in any year that such Accreted Value increases in equal daily amounts on the basis of a year of three hundred sixty (360) days composed of twelve (12) months of thirty (30) days each.

“Accreted Value Payment Date” means any Installment Payment Date on which Accreted Value is payable.

“Bond or Contract Reserve Fund” means any debt service reserve fund established to secure the payment of Bond Payments or Installment Payments.

“Bond Payments” means the principal and interest payments scheduled to be paid by the Water Authority on Bonds.

“Bonds” means all revenue bonds of the Water Authority authorized, executed, issued and delivered by the Water Authority under and pursuant to applicable law, the interest and principal and redemption premium, if any, payments under and pursuant to which are payable from Net Water Revenues on a parity with all other Bonds and Contracts.

“Business Day” means any day (other than a Saturday or a Sunday) on which banks in New York, New York, are open for business and on which the Trustee is open for business at its Principal Corporate Trust Office.

“Capital Appreciation Bonds” means any Bonds described as such when issued.

“Capital Appreciation Certificates” means any certificates of participation in Installment Payments described as such when issued.

“Certificate of the Water Authority” means an instrument in writing signed by the Chair, the Vice Chair, the General Manager or the Director of Finance/Treasurer of the Water Authority, or by any other officer of the Water Authority duly authorized by the Board of Directors for that purpose.

“Code” means the Internal Revenue Code of 1986 and all then applicable regulations of the United States Department of the Treasury issued thereunder, and in this regard reference to any particular section of the Code shall include reference to all successors to such section of the Code.

“Contracts” means Installment Sale Agreements, Leases and Contracts of Indebtedness.

“Contracts of Indebtedness” means contracts of indebtedness or similar obligations of the Water Authority authorized and executed by the Water Authority under and pursuant to applicable law, the interest and principal payments under and pursuant to which are payable from Net Water Revenues on a parity with all other Contracts and Bonds.

“Current Water Revenues” means all gross income and revenue received or receivable by the Water Authority from the ownership or operation of the Water System, determined in accordance with Generally Accepted Accounting Principles, including all rates, fees and charges (including connection fees and charges and standby charges) received by the Water Authority for the Water Service and the other services of the Water System and all other income and revenue howsoever derived by the Water Authority from the ownership or operation of the Water System or arising from the Water System, and also including (1) all income from the deposit or investment of any money in the Water Revenue Fund, the General Reserve Fund and the Rate Stabilization Fund, and (2) all income from the deposit or investment of money held in the Installment Payment Fund, the Subordinate Obligation Fund or any Bond or Contract Reserve Fund or other fund established pursuant to a Trust Agreement to the extent such income will be available to pay Bond Payments or Installment Payments, but excluding any proceeds of taxes and any refundable deposits made to establish credit and advances or contributions in aid of construction.

“Debt Service” means, for any Fiscal Year or other period, the sum of (1) the interest accruing during such Fiscal Year or period on all outstanding Bonds, assuming that all outstanding serial Bonds are retired as scheduled and that all outstanding term Bonds are redeemed or paid from sinking fund payments as scheduled, (2) that portion of the principal amount of all outstanding serial Bonds maturing on the next succeeding principal payment date that would have accrued during such Fiscal Year or period if such principal amount were deemed to accrue daily in equal amounts from the next preceding principal payment date or during the year preceding the first principal payment date, as the case may be, (3) that portion of the principal amount of all outstanding term Bonds required to be redeemed or paid on the next succeeding redemption date (together with the redemption premiums, if any, thereon) that would have accrued during such Fiscal Year or period if such principal amount (and redemption premiums) were deemed to accrue daily in equal amounts from the next preceding redemption date or during the year preceding the first redemption date, as the case may be, and (4) that portion of the Installment Payments required to be made at the times provided in the Contracts that would have accrued during such Fiscal Year or period if such Installment Payments were deemed to accrue daily in equal amounts from, in each case, the next preceding Installment Payment Date of interest or principal or the date of the pertinent Contract, as the case may be; *provided*, that (a) if any of such Bonds are Capital Appreciation Bonds or if the Installment Payments due under any of such Contracts are evidenced by Capital Appreciation Certificates, then the Accreted Value payment shall be deemed due on the scheduled redemption or payment date of such Capital Appreciation Bond or Capital Appreciation Certificate; (b) if any of such Bonds or if the Installment Payments due under such Contracts bear interest payable pursuant to a variable interest rate formula, the interest rate on such Bonds or such Contracts for periods when the actual interest rate cannot yet be determined, shall be assumed to be equal to the greater of (1) the current interest rate calculated pursuant to the provisions of the terms of such Bonds or Contracts (with respect to the issuance of Bonds or the execution of Contracts pursuant to the General Resolution, the initial interest rate on such Bonds or Contracts), or, (2) if available, the average interest rate on such Bonds or Contracts during the thirty-six (36) months preceding the date of calculation or, (3) if such Bonds or Contracts have not been outstanding for such thirty-six month period (or with respect to the issuance of Bonds or the execution of Contracts pursuant to the General Resolution), such average interest rate on comparable debt of a state or political subdivision of a state which debt is then rated by the rating agencies rating such Bonds or Contracts in a rating category equivalent to the rating on such Bonds or Contracts; and (c) if 20% or more of the original principal of such Bonds or the Installment Payments due under such Contracts is not due until the final stated maturity of such Bonds or the Installment Payments due under such Contracts, such principal may, at the option of the Water Authority, be treated as if it were due based upon a level amortization of such principal over the term of such Bonds or Contracts or twenty (20) years, whichever is greater; *provided further*, that “Debt Service” shall not include (1) payments due on voter-approved general obligation bonds and other voter-approved general obligation debts for which taxes are then being levied and collected, or (2) interest on Bonds or Contracts which is to be paid from amounts constituting capitalized interest held pursuant to a Trust Agreement.

“Defeasance Securities” means (i) Federal Securities and (ii) obligations described in clause (2) of the definition of Permitted Investments and rated in one of the two highest long-term rating categories by Moody’s and Standard & Poor’s.

“Federal Securities” means non-callable direct obligations of the United States of America (“Treasuries”) or evidences of ownership of proportionate interests in future interest and principal payments on Treasuries held by a bank or trust company as custodian, under which the owner of the investment is the real party in interest and has

the right to proceed directly and individually against the obligor and the underlying Treasuries are not available to any person claiming through the custodian or to whom the custodian may be obligated.

“Generally Accepted Accounting Principles” means the uniform accounting and reporting procedures set forth in publications of the American Institute of Certified Public Accountants or its successor, or by any other generally accepted authority on such procedures, and includes, as applicable, the standards set forth by the Governmental Accounting Standards Board or its successor.

“Independent Certified Public Accountant” means any firm of certified public accountants duly licensed and entitled to practice and practicing as such under the laws of the State, appointed and paid by the Water Authority, and each of whom --

- (1) is in fact independent and not under the domination of the Water Authority;
- (2) does not have a substantial financial interest, direct or indirect, in the operations of the Water Authority; and
- (3) is not connected with the Water Authority as a member of the Board of Directors or an officer or employee of the Water Authority, but may be regularly retained to audit the accounting records of and make reports thereon to the Water Authority.

“Installment Payment Date” means any date on which Bond Payments or Installment Payments are scheduled to be paid by the Water Authority under and pursuant to any Contract or Bonds.

“Installment Payments” means Contract Payments, Installment Sale Payments or Lease Payments.

“Interest Subsidy Payments” means cash subsidy payments entitled to be received by the Water Authority from the United States Treasury with respect to Bonds issued and Contracts executed by the Water Authority, including, but not limited to, “Build America Bonds” issued as contemplated by the American Recovery and Reinvestment Act of 2009.

“Law” means the County Water Authority Act, being California Water Code Appendix, Sections 45-1 *et seq.*, and all laws amendatory thereof or supplemental thereto.

“Lease Payments” means the rental payments scheduled to be paid by the Water Authority under and pursuant to Leases.

“Leases” means capital leases or similar obligations of the Water Authority authorized and executed by the Water Authority under and pursuant to applicable law, the interest and principal payments under and pursuant to which are payable from Net Water Revenues on a parity with the payment of all other Contracts and Bonds.

“Maintenance and Operation Costs” means all costs paid or incurred by the Water Authority for maintaining and operating the Water System, determined in accordance with Generally Accepted Accounting Principles, including all costs of water purchased by the Water Authority for resale, and including all expenses of management and repair and other expenses necessary to maintain and preserve the Water System in good repair and working order, and including all administrative costs of the Water Authority, such as salaries and wages of employees, overhead, taxes (if any) and insurance premiums, and including all other costs of the Water Authority or charges required to be paid by it to comply with the terms of the General Resolution or of any resolution authorizing the execution of any Contract or of such Contract or of any resolution authorizing the issuance of any Bonds or of such Bonds, such as compensation, reimbursement and indemnification of the trustee, seller, lender or lessor for any such Contracts or Bonds and fees and expenses of independent certified public accountants, but excluding in all cases (1) depreciation, replacement and obsolescence charges or reserves therefor and amortization of intangibles, premiums and discounts, (2) interest expense and (3) amounts paid from other than Water Revenues (including, but not limited to, amounts paid from the proceeds of *ad valorem* property taxes).

“Monthly Accrued Debt Service” means, with respect to any month, an amount equal to the sum of Debt Service with respect to all Bonds and Contracts accrued and to accrue to the end of such month; provided, in calculating the amount of Monthly Accrued Debt Service (i) Accreted Value with respect to Capital Appreciation Bonds and Capital Appreciation Certificates shall be deemed to accrue over the twelve-month period immediately preceding the scheduled redemption or prepayment date of such Capital Appreciation Bond or Capital Appreciation Certificate, (ii) the adjustment to principal described in provision (c) of the definition of Debt Service shall not be made and (iii) if the interest on any Bonds or Installment Payments due under any Contract bear interest payable pursuant to a variable rate formula, the amount of interest deemed to accrue during any period shall be the actual interest borne by such Bonds or Installment Payments during such period.

“Moody’s” means Moody’s Investors Service, Inc., or its successors or assigns.

“Net Water Revenues” means, for any Fiscal Year or other period, the Water Revenues during such Fiscal Year or period less the Maintenance and Operation Costs during such Fiscal Year or period.

“Obligation” means any contract or lease for the purchase of any facilities, properties, structures, or works, or any loan of credit to or guaranty of debts, claims or liabilities of any other person for the purpose of obtaining any facilities, properties, structures or works, the final payments under which are due more than five years following the effective date thereof, so long as in each case the payments thereunder are to constitute Maintenance and Operations Costs.

“Opinion of Counsel” means a written opinion of counsel of recognized national standing in the field of law relating to municipal bonds, appointed and paid by the Water Authority.

“Outstanding,” when used as of any particular time with reference to 2016AB Bonds, means (subject to the provisions of respecting disqualified bonds) all 2016AB Bonds executed, authenticated and delivered under the Indenture except --

- (1) 2016AB Bonds theretofore cancelled by the Trustee or surrendered to the Trustee for cancellation;
- (2) 2016AB Bonds paid or deemed to have been paid; and
- (3) 2016AB Bonds in lieu of or in substitution for which other 2016AB Bonds shall have been executed by the Water Authority and authenticated and delivered by the Trustee.

“Owner” means the registered owner of any Outstanding 2016AB Bond, as shown in the registration books maintained by the Trustee.

“Permitted Investments” means any of the following to the extent then permitted by law:

- (1) Federal Securities;
- (2) Obligations issued by banks for cooperatives, federal land banks, federal intermediate credit banks, federal home loan banks, the Federal Home Loan Bank Board or the Tennessee Valley Authority, or obligations, participations or other instruments of or issued by, or fully guaranteed as to interest and principal by, the Federal National Mortgage Association or the Federal Home Loan Mortgage Corporation or guaranteed portions of Small Business Administration notes, or obligations, participations or other instruments of or issued by a federal agency or a United States of America government-sponsored enterprise;
- (3) Any obligations which are then legal investments for moneys of the Water Authority under the laws of the State; provided, that if such investments are not required to be collateralized or insured such investments shall be issued by entities the debt securities of which are rated in one of the three highest short-term or long-term rating categories by Moody’s and Standard & Poor’s; provided further, that any repurchase agreements must be fully secured by collateral security described in clauses (1) and (2) of this definition, which collateral (a) is held by the Trustee or a third party agent during the term of such repurchase agreement and in which collateral the Trustee has a

perfected first security interest, (b) has a market value determined on a daily basis at least equal to 102% of the amount so invested, and (c) which collateral may be liquidated within seven days if the market value of such collateral is at any time less than the amount so invested;

(4) Guaranteed investment contracts with entities the long-term, unsecured debt obligations of which are rated (1) in one of the two highest long-term rating categories by Moody's and Standard & Poor's (or whose payment obligations under such guaranteed investment contract are insured or guaranteed by an entity the unsecured obligations of which are so rated) or (2) in one of the three highest long-term rating categories by Moody's and Standard & Poor's (or whose payment obligations under such guaranteed investment contract are insured or guaranteed by an entity the unsecured obligations of which are so rated) if fully collateralized by collateral described in clauses (1) and (2) marked to market at least weekly;

(5) Units of a money-market fund portfolio composed of or collateralized by obligations guaranteed by the full faith and credit of the United States of America, and, with respect to investments of less than one hundred thousand dollars (\$100,000), money market funds which are maintained by a banking department of the Trustee so long as the Trustee or its parent has a combined capital and surplus of at least fifty million dollars (\$50,000,000);

(6) Tax-exempt obligations of a state or a political subdivision thereof which are rated in one of the two highest short-term or long-term rating categories by Moody's and Standard & Poor's;

(7) Tax-exempt obligations of a state or a political subdivision thereof which have been defeased under irrevocable escrow instructions with Federal Securities and which are rated Aaa by Moody's and at least AA+ by Standard & Poor's;

(8) The Local Agency Investment Fund administered by the State of California; and

(9) Shares in the California Asset Management Program (CAMP).

"Principal Corporate Trust Office" means the corporate trust office of the Trustee in Los Angeles, California; provided, that for the purposes of the transfer, registration, exchange, payment and surrender of the 2016AB Bonds, the term "Principal Corporate Trust Office" shall mean the corporate trust office of the Trustee in St. Paul, Minnesota, or such other office designated by the Trustee from time to time.

"Reimbursement Agreement" means an agreement between the Water Authority and a bank or financial institution providing for the issuance of a letter of credit, reserve fund insurance policy, guaranty or surety bond for the purpose of making Bond Payments or Installment Payments and requiring the Water Authority to make payments to reimburse or compensate such bank or financial institution for draws under such instruments from Net Water Revenues on a parity with all Contracts and Bonds.

"Reimbursement Payments" means amounts payable by the Water Authority as compensation or reimbursement for a draw on a letter of credit, reserve fund insurance policy, guaranty or surety bond for the purpose of making Bond Payments or Installment Payments in accordance with any Reimbursement Agreement.

"Standard & Poor's" means Standard & Poor's Rating Services, a Standard & Poor's Financial Services LLC business, or its successors or assigns.

"State" means the State of California.

"Subordinate Obligations" means obligations of the Water Authority authorized and executed by the Water Authority under applicable law, the interest and principal payments under and pursuant to which are payable from Net Water Revenues, from the Subordinate Obligation Payment Fund, subject and subordinate to Bond Payments and Installment Payments.

“Supplemental Indenture” means any indenture then in full force and effect which has been executed by the Water Authority and the Trustee, amendatory of the Indenture or supplemental to the Indenture; but only if and to the extent that such Supplemental Indenture is specifically authorized hereunder.

“Tax Certificate” means the Tax Certificate delivered by the Water Authority at the time of the issuance and delivery of the 2016AB Bonds, as the same may be amended or supplemented in accordance with its terms.

“Trust Agreement” means any indenture or trust agreement providing for the issuance of Bonds or Certificates.

“Water Service” means the water service furnished, made available or provided by the Water System.

“Water System” means all property rights, contractual rights and facilities of the Water Authority, including all facilities for the conservation, storage, transmission and distribution of water and the generation and delivery of hydroelectric power in connection therewith now owned by the Water Authority and all other properties, structures or works for the conservation, storage, transmission and distribution of water and the generation and delivery of hydroelectric power in connection therewith hereafter acquired and constructed by or for the Water Authority and determined by the Water Authority to be a part of the Water System; together with all additions, betterments, extensions or improvements to such facilities, properties, structures or works or any part thereof hereafter acquired and constructed.

“Written Request of the Water Authority” means an instrument in writing signed by the Chair, the Vice Chair, the General Manager or the Director of Finance/Treasurer of the Water Authority, or by any other officer of the Water Authority duly authorized by the Board of Directors for that purpose.

## SUMMARY OF CERTAIN PROVISIONS OF THE GENERAL RESOLUTION

The following is a summary of certain provisions of the General Resolution. This summary does not purport to be complete or definitive and it is qualified in its entirety by reference to provisions of the General Resolution.

### **Establishment of Funds**

The Water Authority establishes and agrees to maintain, so long as any Bonds, Certificates or Subordinate Obligations remain outstanding, a Rate Stabilization Fund, a Water Revenue Fund, an Installment Payment Fund, a Subordinate Obligation Payment Fund and a General Reserve Fund. Each of these funds will be held by the Director of Finance of the Water Authority. Amounts in such funds shall be disbursed, allocated and applied solely to the uses and purposes set forth in the General Resolution and shall be accounted for separately and apart from all other accounts, funds, money or other resources of the Water Authority. The Water Authority will only have such beneficial right or interest in money as is provided in the General Resolution.

### **Deposits and Withdrawals from the Rate Stabilization Fund**

From time to time the Water Authority may deposit in the Rate Stabilization Fund from Current Water Revenues such amounts as the Water Authority shall determine. All amounts transferred by the Water Authority from the Rate Stabilization Fund to the Water Revenue Fund shall be used by the Water Authority solely to pay Maintenance and Operation Costs. All interest or other earnings upon deposits in the Rate Stabilization Fund shall be withdrawn therefrom and accounted for as Current Water Revenues.

### **Use of Other Funds**

The Water Authority may withdraw amounts from the Installment Payment Fund solely for the purpose of paying Bond Payments, Installment Payments and Reimbursement Payments at the times and in the amounts required by applicable Bonds, Contracts, Trust Agreements and Reimbursement Agreements.

The Water Authority may withdraw amounts from the Subordinate Obligation Fund solely for the purpose of paying payments to be made under or pursuant to Subordinate Obligations at times and in the amounts required by applicable Subordinate Obligations or trust agreements or indentures securing such Subordinate Obligations.

The Water Authority may withdraw money in the General Reserve Fund for any lawful purpose of the Water Authority, except to make transfers to the Rate Stabilization Fund.

### **Additional Covenants of the Water Authority**

Against Encumbrances. The Water Authority will pay or cause to be paid when due all sums of money that may become due or purporting to be due for any labor, services, materials, supplies or equipment furnished, or alleged to have been furnished, to or for the Water Authority in, upon, about or relating to the Water System and will keep the Water System free of any and all liens against any portion of the Water System. In the event any such lien attaches to or is filed against any portion of the Water System, the Water Authority will cause each such lien to be fully discharged and released at the time the performance of any obligation secured by any such lien matures or becomes due, except that if the Water Authority desires to contest any such lien it may do so. If any such lien shall be reduced to final judgment and such judgment or any process as may be issued for the enforcement thereof is not promptly stayed, or if so stayed and such stay thereafter expires, the Water Authority will forthwith pay or cause to be paid and discharged such judgment.

Against Sale or Other Disposition of Property. The Water Authority will not sell, lease or otherwise dispose of the Water System or any part thereof essential to the proper operation of the Water System or to the maintenance of the Net Water Revenues, and will not enter into any agreement or lease which would impair the operation of the Water System or any part thereof necessary to secure adequate Net Water Revenues for the payment of Bond Payments, Installment Payments or Subordinate Obligation Payments, or which would otherwise impair the

rights of the holders of Bonds or certificates of participation evidencing interests in Installment Payments with respect to the Net Water Revenues or the operation of the Water System; *provided*, that any real or personal property which has become nonoperative or which is not needed for the efficient and proper operation of the Water System, or any material or equipment which has become worn out, may be sold if such sale will not reduce the Net Water Revenues below the requirements of the Water Authority's rate covenant.

Maintenance and Operation of the Water System. The Water Authority will maintain and preserve the Water System in good repair and working order at all times and will operate the Water System in an efficient and economical manner and will pay all Maintenance and Operation Costs as they become due and payable.

Compliance with Contracts. The Water Authority will comply with, keep, observe and perform all agreements, conditions, covenants and terms, express or implied, required to be performed by it contained in all contracts for the use of the Water System and all other contracts affecting or involving the Water System to the extent that the Water Authority is a party thereto.

No Superior Liens. The Water Authority will not create or allow any lien on or payment from the Net Water Revenues or any part thereof prior or superior to the obligation to make the Bond Payments or Installment Payments as provided in the General Resolution or which might impair the security of the Bond Payments or Installment Payments other than Subordinate Obligations.

Insurance. The Water Authority will procure and maintain such insurance relating to the Water System which it shall deem advisable or necessary to protect its interests, which insurance shall afford protection in such amounts and against such risks as are usually covered in connection with facilities, properties, structures and works similar to the Water System; *provided*, the Water Authority shall not be required to procure or maintain any such insurance unless such insurance is commercially available at reasonable cost; *provided, further*, that any such insurance may be maintained under a self-insurance program so long as such self-insurance is maintained in the amounts and manner usually maintained in connection with facilities, properties, structures and works similar to the Water System.

Payment of Taxes and Compliance with Governmental Regulations. The Water Authority will pay and discharge all taxes, assessments and other governmental charges which may hereafter be lawfully imposed upon the Water System or any part thereof when the same shall become due. The Water Authority will duly observe and conform with all valid regulations and requirements of any governmental authority relative to the operation of the Water System or any part thereof, but the Water Authority shall not be required to comply with any regulations or requirements so long as the validity or application thereof shall be contested in good faith.

Collection of Rates, Fees and Charges. The Water Authority will charge and collect or cause to be collected the rates, fees and charges applicable to the Water Service and will not permit any part of the Water System or any facility thereof to be used or taken advantage of free of charge by any corporation, firm or person, or by any public agency (including the United States of America, the State of California and any city, county, district, political subdivision, public corporation or agency of any thereof); *provided*, that the Water Authority may without charge use the Water Service.

Eminent Domain and Insurance Proceeds. If all or any part of the Water System shall be taken by eminent domain proceedings, or if the Water Authority receives any insurance proceeds resulting from a casualty loss to the Water System, the proceeds thereof shall be used to substitute other components for the condemned or destroyed components of the Water System.

## SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE

The following is a summary of certain provisions of the Indenture. This summary does not purport to be complete or definitive and is qualified in its entirety by reference to the full terms of the Indenture.

### **Pledge of Net Water Revenues**

The 2016AB Bonds shall constitute “Bonds” under the General Resolution secured by a pledge of Net Water Revenues as provided therein. The Owners shall be beneficiaries of all of the obligations assumed by the Water Authority and the covenants made by the Water Authority in the General Resolution. In addition, all amounts (including proceeds of the sale of the 2016AB Bonds) held by the Trustee in any fund or account established under the Indenture (other than amounts on deposit in the Rebate Fund) are irrevocably pledged to the payment of the interest on and principal of the 2016AB Bonds as provided in the Indenture and shall not be used for any other purpose while any of the 2016AB Bonds remain Outstanding; provided, however, that out of such moneys there may be applied such sums for such purposes as are permitted under the Indenture.

### **Payment of 2016AB Bonds**

In order to carry out and effectuate the pledge and lien contained in the Indenture, the Water Authority agrees and covenants that on or before the Business Day immediately preceding May 1 and November 1 of each year, beginning November 1, 2016, the Water Authority shall, from amounts in the Installment Payment Fund (on a parity with the payment of other Bond Payments, Installment Payments and Reimbursement Payments), transfer to the Trustee for deposit in the Debt Service Fund a sum equal to the amount of interest and principal becoming due on the next succeeding May 1 or November 1, as the case may be; provided, no such transfer need be made if the amount on deposit in the Debt Service Fund is at least equal to the amount of interest and principal becoming due and payable on the 2016AB Bonds on such May 1 or November 1, as the case may be. All money on deposit in the Debt Service Fund shall be used and withdrawn by the Trustee solely for the purpose of paying the interest on and principal of the 2016AB Bonds as such interest and principal become due and payable.

The Water Authority shall, on or before the date of redemption of any 2016AB Bonds, transfer or cause to be transferred to the Trustee for deposit in the Redemption Fund, a sum equal to the redemption price of the 2016AB Bonds to be redeemed on such date. All money in the Redemption Fund shall be used and withdrawn by the Trustee solely for the purpose of paying the redemption price of 2016AB Bonds called for redemption.

### **Deposit and Investments of Money in Accounts and Funds**

Subject to the Water Authority’s tax covenants, all money held by the Trustee in any of the accounts or funds established pursuant to the Indenture shall be invested in Permitted Investments at the Written Request of the Water Authority. Such investments shall mature on or before the dates on which such money is anticipated to be needed for disbursement thereunder. Subject to the Water Authority’s tax covenants, all interest or profits received shall be deposited in the Debt Service Fund.

### **Covenants of the Water Authority**

Punctual Payment. The Water Authority will punctually pay the interest on and principal of the 2016AB Bonds in strict conformity with the terms of the Indenture and of the 2016AB Bonds, and will faithfully observe and perform all the agreements, conditions, covenants and terms contained in the Indenture and in the 2016AB Bonds required to be observed and performed by it.

Compliance with the General Resolution. The Water Authority shall perform all the obligations assumed by the Water Authority under, and shall comply with all the covenants made by the Water Authority in, the General Resolution. The Water Authority shall not modify, amend or supplement the General Resolution except with the written consent of the Trustee, which consent shall be given only if the Trustee has been furnished an Opinion of Counsel or a Certificate of the Water Authority to the effect that such amendment or supplement is not materially adverse to the interests of the Owners, including, but not limited to, modifications, amendments or supplements

(i) to add to the agreements and covenants of the Water Authority other agreements and covenants to be observed, or to surrender any right or power therein reserved to the Water Authority, or (ii) to cure, correct or supplement any ambiguous or defective provision contained therein, or (iii) to resolve questions arising thereunder as the Water Authority may deem necessary or desirable, and which do not adversely affect the interests of the Owners; provided, that the Trustee may consent to any modification or amendment of or supplement to the General Resolution if it first obtains the written consent of the Owners of at least a majority in aggregate principal amount of the 2016AB Bonds then Outstanding to such modification, amendment or supplement.

Consent to Amendment of the General Resolution.

**By its purchase of 2016AB Bonds from the Underwriters, each Owner consents to the amendment to the General Resolution proposed to be effected by Resolution 2009-23 adopted by the Board of Directors of the Water Authority on December 17, 2009.** Under such amendment, the definition of “Current Water Revenues” is amended to read in full as follows:

“Current Water Revenues” means all gross income and revenue received or receivable by the Water Authority from the ownership or operation of the Water System, determined in accordance with Generally Accepted Accounting Principles, including all rates, fees and charges (including connection fees and charges and standby charges) received by the Water Authority for the Water Service and the other services of the Water System and all other income and revenue howsoever derived by the Water Authority from the ownership or operation of the Water System or arising from the Water System, and also including (1) all income from the deposit or investment of any money in the Water Revenue Fund, the General Reserve Fund and the Rate Stabilization Fund, and (2) all income from the deposit or investment of money held in the Installment Payment Fund, the Subordinate Obligation Fund or any Bond or Contract Reserve Fund or other fund established pursuant to a Trust Agreement to the extent such income will be available to pay Bond Payments or Installment Payments, but excluding any Interest Subsidy Payments, any proceeds of taxes and any refundable deposits made to establish credit and advances or contributions in aid of construction.

In addition, under such amendment, the definition of “Debt Service” is amended to read in full as follows:

“Debt Service” means, for any Fiscal Year or other period, the sum of (1) the interest accruing during such Fiscal Year or period on all outstanding Bonds, assuming that all outstanding serial Bonds are retired as scheduled and that all outstanding term Bonds are redeemed or paid from sinking fund payments as scheduled, (2) that portion of the principal amount of all outstanding serial Bonds maturing on the next succeeding principal payment date that would have accrued during such Fiscal Year or period if such principal amount were deemed to accrue daily in equal amounts from the next preceding principal payment date or during the year preceding the first principal payment date, as the case may be, (3) that portion of the principal amount of all outstanding term Bonds required to be redeemed or paid on the next succeeding redemption date (together with the redemption premiums, if any, thereon) that would have accrued during such Fiscal Year or period if such principal amount (and redemption premiums) were deemed to accrue daily in equal amounts from the next preceding redemption date or during the year preceding the first redemption date, as the case may be, and (4) that portion of the Installment Payments required to be made at the times provided in the Contracts that would have accrued during such Fiscal Year or period if such Installment Payments were deemed to accrue daily in equal amounts from, in each case, the next preceding Installment Payment Date of interest or principal or the date of the pertinent Contract, as the case may be; *provided*, that (a) if any of such Bonds are Capital Appreciation Bonds or if the Installment Payments due under any of such Contracts are evidenced by Capital Appreciation Certificates, then the Accreted Value payment shall be deemed due on the scheduled redemption or payment date of such Capital Appreciation Bond or Capital Appreciation Certificate; (b) if any of such Bonds or if the Installment Payments due under such Contracts bear interest payable pursuant to a variable interest rate formula, the interest rate on such Bonds or such Contracts for periods when the actual interest rate cannot yet be determined, shall be assumed to be equal to the greater of (1) the current interest rate calculated pursuant to the provisions of the

terms of such Bonds or Contracts (with respect to the issuance of Bonds or the execution of Contracts pursuant to the General Resolution, the initial interest rate on such Bonds or Contracts), or, (2) if available, the average interest rate on such Bonds or Contracts during the thirty-six (36) months preceding the date of calculation or, (3) if such Bonds or Contracts have not been outstanding for such thirty-six month period (or with respect to the issuance of Bonds or the execution of Contracts pursuant to the General Resolution), such average interest rate on comparable debt of a state or political subdivision of a state which debt is then rated by the rating agencies rating such Bonds or Contracts in a rating category equivalent to the rating on such Bonds or Contracts; and (c) if 20% or more of the original principal of such Bonds or the Installment Payments due under such Contracts is not due until the final stated maturity of such Bonds or the Installment Payments due under such Contracts, such principal may, at the option of the Water Authority, be treated as if it were due based upon a level amortization of such principal over the term of such Bonds or Contracts or twenty (20) years, whichever is greater; *provided further*, that "Debt Service" shall not include (1) payments due on voter-approved general obligation bonds and other voter-approved general obligation debts for which taxes are then being levied and collected, (2) interest on Bonds or Contracts which is to be paid from amounts constituting capitalized interest held pursuant to a Trust Agreement or (3) interest on Bonds or Contracts which is to be paid from Interest Subsidy Payments.

Accounting Records and Reports. The Water Authority will keep or cause to be kept proper books of record and accounts in which complete and correct entries shall be made of all transactions relating to the receipts, disbursements, allocation and application of the Water Revenues, and such books shall be available for inspection by the Trustee, at reasonable hours and under reasonable conditions. The Water Authority shall also keep or cause to be kept such other information as required under the Tax Certificate.

Tax Covenants and Matters: Rebate Fund. The Water Authority agrees and covenants to establish and maintain with the Trustee a fund separate from any other fund established and maintained under the Indenture to be known as the Rebate Fund. Upon receipt of a Written Request of the Water Authority, there shall be deposited in the Rebate Fund such amounts furnished by the Water Authority as are required to be deposited therein pursuant to the Tax Certificate, and all money at any time deposited in the Rebate Fund shall be held by the Trustee in trust, to the extent required to satisfy the Rebate Requirement (as that term is defined in the Tax Certificate), for payment to the United States of America. All amounts required to be deposited into or on deposit in the Rebate Fund shall be governed exclusively by this section and by the Tax Certificate and by all Written Requests of the Water Authority related thereto filed with the Trustee, and the Trustee shall follow all such Written Requests of the Water Authority, and shall have no liability or responsibility to enforce compliance by the Water Authority with the terms of the Tax Certificate; *provided*, that if the Water Authority shall provide to the Trustee an Opinion of Counsel that any specified action required under this section is no longer required or that some further or different action is required to maintain the exclusion from federal income tax of interest with respect to the 2016AB Bonds, the Water Authority and the Trustee may conclusively rely on such opinion in complying with the requirements of this section, and, notwithstanding anything to the contrary contained in the Indenture, the agreements and covenants hereunder shall be deemed to be modified to that extent.

Further Assurances. The Water Authority will adopt, deliver, execute and make any and all further assurances, instruments and resolutions as may be reasonably necessary or proper to carry out the intention or to facilitate the performance of the Indenture and for the better assuring and confirming unto the Owners of the rights and benefits provided in the Indenture.

## **The Trustee**

U.S. Bank National Association shall serve as the Trustee for the 2016AB Bonds for the purpose of receiving all money which the Water Authority is required to deposit with the Trustee thereunder and for the purpose of allocating, applying and using such money as provided therein.

The Water Authority may at any time, unless there exists any Event of Default, remove the Trustee initially appointed and any successor thereto and may appoint a successor or successors thereto by an instrument in writing; provided that any such successor shall be a bank or trust company doing business and having a principal corporate

trust office in the United States of America, having a combined capital (exclusive of borrowed capital) and surplus of at least fifty million dollars (\$50,000,000) and subject to supervision or examination by federal or state agency. If such bank or trust company publishes a report of condition at least annually, pursuant to law or to the requirements of any supervising or examining agency above referred to, then for the purpose of this section the combined capital and surplus of such bank or trust company shall be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published. The Trustee may at any time resign by giving written notice of such resignation to the Water Authority and by mailing to the Owners notice of such resignation. Upon receiving such notice of resignation, the Water Authority shall promptly appoint a successor Trustee by an instrument in writing. Any removal or resignation of a Trustee and appointment of a successor Trustee shall become effective only upon the acceptance of appointment by the successor Trustee. If, within thirty (30) days after notice of the removal or resignation of the Trustee no successor Trustee shall have been appointed and shall have accepted such appointment, the removed or resigning Trustee may petition any court of competent jurisdiction for the appointment of a successor Trustee, which court may thereupon, after such notice, if any, as it may deem proper and prescribe and as may be required by law, appoint a successor Trustee having the qualifications required by the Indenture.

Any company into which the Trustee may be merged or converted or with which it may be consolidated or any company resulting from any merger, conversion or consolidation to which it shall be a party or any company for which the Trustee may sell or transfer all or substantially all of its corporate trust business, provided such company shall be eligible under the Indenture, shall be the successor to such Trustee, without the execution or filing of any paper or any further act, anything in the Indenture to the contrary notwithstanding.

The Trustee shall, prior to an Event of Default, and after the curing or waiver of all Events of Default that may have occurred, perform such duties and only such duties as are specifically set forth in the Indenture and no implied duties or obligations shall be read into this Indenture. The Trustee shall, during the existence of any Event of Default (that has not been cured or waived), exercise such of the rights and powers vested in it by the Indenture, and use the same degree of care and skill in their exercise, as a prudent person would exercise or use under the circumstances in the conduct of his or her own affairs.

### **Protection of the Trustee**

The Trustee shall be protected and indemnified by the Water Authority, and shall incur no liability in acting or proceeding in good faith upon any affidavit, bond, certificate, consent, notice, request, requisition, resolution, statement, telegram, voucher, waiver or other paper or document which it shall in good faith believe to be genuine and to have been adopted, executed or delivered by the Water Authority or pursuant to any of the provisions of the Indenture, and the Trustee shall be under no duty to make any investigation or inquiry as to any statements contained or matters referred to in any such instrument, but may accept and rely upon the same as conclusive evidence of the truth and accuracy of such statements. The Trustee may consult with counsel, who may be counsel to the Water Authority, with regard to legal questions arising under the Indenture, and the opinion of such counsel shall be full and complete authorization and protection in respect to any action taken or suffered by it under the Indenture in good faith in accordance therewith.

The Trustee shall not be responsible for the sufficiency of the Indenture, and shall not be deemed to have knowledge of any Event of Default unless and until it shall have actual knowledge thereof or have received written notice thereof at its Principal Corporate Trust Office. All recitals, warranties or representations contained therein are statements of the Water Authority, and the Trustee assumes no responsibility for their correctness, and the Trustee shall not be accountable for the use or application by the Water Authority, or any other party, of any funds which the Trustee properly releases to the Water Authority or which the Water Authority may otherwise receive from time to time. The Trustee makes no representation concerning, and has no responsibility for, the validity, genuineness, sufficiency, or performance by parties other than the Trustee of the Indenture, any 2016AB Bond, or of any other paper or document, or for taking any action on them (except as specifically and expressly stated for the Trustee in the Indenture), or with respect to any obligation of the Water Authority under the Indenture or for the sufficiency of any insurance on the Water System.

Whenever in the observance or performance of its rights and obligations under the Indenture, the Trustee shall deem it necessary or desirable that a matter be proved or established prior to taking or suffering any action thereunder, such matter (unless other evidence in respect thereof be specifically prescribed in the Indenture) may be

deemed to be conclusively proved and established by a Certificate of the Water Authority, and such certificate shall be full warrant to the Trustee for any action taken or suffered under the provisions of the Indenture upon the faith thereof, but in its discretion the Trustee may, in lieu thereof, accept other evidence of such matter or may require such additional evidence as to it may seem reasonable.

The Trustee shall not be answerable for the exercise of any of its rights under the Indenture or for the performance of any of its obligations thereunder or for anything whatsoever in connection with the funds established thereunder, except only for its own willful misconduct or negligence.

No provision of the Indenture requires the Trustee to expend or risk its own funds or otherwise incur any financial or other liability or risk in the performance of any of its obligations thereunder, or in the exercise of any of its rights thereunder, and before taking any action under the Indenture the Trustee may require that indemnity satisfactory to it be furnished for all expenses to which it may be put and to protect it from all liability thereunder.

The Trustee shall not be liable with respect to any action taken or not taken by it in accordance with the direction of the Owners of a majority (or other percentage provided for in the Indenture) in aggregate principal amount of the 2016AB Bonds at the time Outstanding relating to the exercise of any right or remedy available to the Trustee under the Indenture or any other trust or power conferred upon the Trustee.

Under no circumstances shall the Trustee be liable in its individual or personal capacity for the 2016AB Bonds.

The Trustee is not responsible for any statements in any official statement or other offering material prepared with respect to the 2016AB Bonds.

#### **Amendment of the Indenture**

The Indenture and the rights and obligations of the Water Authority, the Trustee and of the Owners may be amended at any time by a Supplemental Indenture which shall become binding when the written consents of the Owners of a majority in aggregate principal amount of the 2016AB Bonds then Outstanding, exclusive of disqualified 2016AB Bonds, are filed with the Trustee. No such amendment shall (1) extend the maturity of or reduce the interest rate on or amount of interest on or principal of any 2016AB Bond without the express written consent of the Owner of such 2016AB Bond, (2) reduce the percentage of 2016AB Bonds required for the written consent to any such amendment, or (3) modify any rights or obligations of the Trustee or the Water Authority without their prior written assent thereto, respectively.

The Indenture and the rights and obligations of the Water Authority and of the Owners may also be amended at any time by a Supplemental Indenture which shall become binding upon execution and delivery without the consent of the Owners, but only to the extent permitted by law and after receipt of an approving Opinion of Counsel, for any purpose that will not materially adversely affect the interests of the Owners, including (without limitation) for any one or more of the following purposes --

(a) to add to the agreements and covenants required in the Indenture to be performed by the Water Authority other agreements and covenants thereafter to be performed by the Water Authority or to surrender any right or power reserved herein to or conferred therein on the Water Authority;

(b) to make such provisions for the purpose of curing any ambiguity or of correcting, curing or supplementing any defective provision contained in the Indenture or in regard to questions arising under the Indenture which the Water Authority may deem desirable or necessary and not inconsistent therewith; or

(c) to add to the agreements and covenants required in the Indenture, such agreements and covenants as may be necessary to qualify the Indenture under the Trust Indenture Act of 1939.

The provisions of the Indenture shall not prevent any Owner from accepting any amendment as to the particular 2016AB Bonds held by such Owner, provided that due notation thereof is made on such 2016AB Bonds.

## Events of Default; Remedies

Events of Default. Each of the following events shall constitute an Event of Default under the Indenture:

(1) the Water Authority shall default in the due and punctual payment of the interest on or principal of any 2016AB Bonds when and as the same shall become due and payable;

(2) the Water Authority shall default in the performance of any of the agreements or covenants contained in the Indenture required to be performed by it, and such default shall have continued for a period of sixty (60) days after the Water Authority shall have been given notice in writing of such default by the Trustee; and

(3) the Water Authority shall file a petition or answer seeking arrangement or reorganization under the federal bankruptcy laws or any other applicable law of the United States of America or any state therein, or if a court of competent jurisdiction shall approve a petition filed with or without the consent of the Water Authority seeking arrangement or reorganization under the federal bankruptcy laws or any other applicable law of the United States of America or any state therein, or if under the provisions of any other law for the relief or aid of debtors any court of competent jurisdiction shall assume custody or control of the Water Authority or of the whole or any substantial part of its property.

Remedies: No Acceleration. Upon the occurrence of an Event of Default, the Trustee shall have the right

(a) by mandamus or other action or proceeding or suit at law or in equity to enforce its rights against the Water Authority or any member of the Board of Directors, officer or employee thereof, and to compel the Water Authority or any such member of the Board of Directors, officer or employee to perform and carry out its or such person's duties under law and the agreements and covenants required to be performed by it or such person contained in the Indenture;

(b) by suit in equity to enjoin any acts or things which are unlawful or violate the rights of the Trustee; or

(c) by suit in equity upon the happening of an Event of Default to require the Water Authority and its members of the Board of Directors, officers and employees to account as the trustee of an express trust.

Notwithstanding the above, the Trustee shall have no right to declare the principal or interest component of any 2016AB Bond to be due and payable immediately.

Application of Funds After Default. Subject to the provisions of the Indenture, all moneys received by the Trustee pursuant to any right given or action taken under the provisions of the Indenture relating to Events of Default shall be deposited in a segregated account and shall be applied by the Trustee in the following order and upon presentation of the several 2016AB Bonds, and the stamping thereon of the payment if only partially paid, or upon the surrender thereof if fully paid -

First, Costs and Expenses: to the payment of the fees, costs and expenses of the Trustee in declaring such Event of Default, including reasonable compensation to its agents, accountants and counsel;

Second, Interest: to the payment to the persons entitled thereto of all payments of interest on the 2016AB Bonds then due, and, if the amount available shall not be sufficient to pay in full any payment or payments of interest becoming due on the same date, then to the payment thereof ratably, according to the amounts due thereon, to the persons entitled thereto, without any discrimination or preference; and

Third, Principal: to the payment to the persons entitled thereto of the unpaid principal of the 2016AB Bonds which shall have become due, with interest on the overdue principal of the 2016AB Bonds to be paid at a rate equal to the rate or rates of interest then applicable to the 2016AB Bonds if paid in accordance with their terms, and, if the amount available shall not be sufficient to pay in full all the amounts due on the 2016AB Bonds on any date,

together with such interest, then to the payment thereof ratably, according to the amounts of principal due on such date to the persons entitled thereto, without any discrimination or preference.

Institution of Legal Proceedings by Trustee. If one or more of the Events of Default shall happen and be continuing, the Trustee may, and upon the written request of the Owners of a majority in principal amount of the 2016AB Bonds then Outstanding, and upon being indemnified to its satisfaction therefor, shall, proceed to protect or enforce its rights or the rights of the Owners of 2016AB Bonds under the Indenture by a suit in equity or action at law, either for the specific performance of any covenant or agreement contained therein, or in aid of the execution of any power therein granted, or by mandamus or other appropriate proceeding for the enforcement of any other legal or equitable remedy as the Trustee shall deem most effectual in support of any of its rights and duties thereunder.

Non-Waiver. Nothing in the Indenture, or in the 2016AB Bonds, shall affect or impair the obligation of the Water Authority, which is absolute and unconditional, to pay the interest on and the principal of the 2016AB Bonds to the respective Owners of the 2016AB Bonds at the scheduled dates of maturity or upon prior redemption as herein provided out of the funds provided herein pledged for such payment, or affect or impair the right of action, which is also absolute and unconditional, of such Owners to institute suit to enforce such payment by virtue of the contract embodied in the 2016AB Bonds and the Indenture.

A waiver of any default or breach of duty or contract by any Owner shall not affect any subsequent default or breach of duty or contract, or impair any rights or remedies on any such subsequent default or breach, and no delay or omission by any Owner to exercise any right accruing upon any default under the Indenture shall impair any such right or shall be construed to be a waiver of any such default or an acquiescence therein, and every remedy conferred upon the Owners by the Law or by the Indenture may be enforced and exercised from time to time and as often as shall be deemed expedient by the Owners.

If any suit, action or proceeding to enforce any right or exercise any remedy is abandoned or determined adversely to the Owners, the Water Authority, the Trustee and the Owners shall be restored to their former positions, rights and remedies as if such suit, action or proceeding had not been brought or taken.

Actions by Trustee as Attorney-in-Fact. Any suit, action or proceeding which any Owner shall have the right to bring to enforce any right or remedy under the Indenture may be brought by the Trustee for the equal benefit and protection of all Owners, and the Trustee is hereby appointed (and the successive respective Owners of the 2016AB Bonds, by taking and holding the same, shall be conclusively deemed so to have appointed it) the true and lawful attorney-in-fact of the Owners for the purpose of bringing any such suit, action or proceeding and to do and perform any and all acts and things for and on behalf of the Owners as a class or classes as may be necessary or advisable in the opinion of the Trustee as such attorney-in-fact; provided, that the Trustee shall have no duty or obligation to enforce any right or remedy unless it has been indemnified by the Owners from any liability or expense, including without limitation fees and expenses of its attorneys

Limitation on Owners' Right to Sue. No Owner of any 2016AB Bond issued under the Indenture shall have the right to institute any suit, action or proceeding at law or equity, for any remedy under or upon this Indenture, unless (a) such Owner shall have previously given to the Trustee written notice of the occurrence of an Event of Default; (b) the Owners of at least a majority in aggregate principal amount of all the 2016AB Bonds then Outstanding shall have made written request upon the Trustee to exercise the powers thereinbefore granted or to institute such suit, action or proceeding in its own name; (c) said Owners shall have tendered to the Trustee reasonable security or indemnity against the costs, expenses and liabilities to be incurred in compliance with such request; and (d) the Trustee shall have refused or omitted to comply with such request for a period of sixty (60) days after such request shall have been received by, and said tender of indemnity shall have been made to, the Trustee.

### **Discharge of 2016AB Bonds**

If the Water Authority shall pay or cause to be paid, or there shall otherwise be paid, to the Owners of all Outstanding 2016AB Bonds the interest thereon and the principal thereof at the times and in the manner stipulated therein and in the Indenture, then the Owners of such 2016AB Bonds shall cease to be entitled to the pledge of Net Water Revenues and the other funds provided therein, and all agreements, covenants and other obligations of the

Water Authority to the Owners of such 2016AB Bonds under the Indenture shall thereupon cease, terminate and become void and be discharged and satisfied.

Any Outstanding 2016AB Bonds shall prior to the scheduled maturity dates thereof be deemed to have been paid within the meaning of and with the effect expressed in the first paragraph of this section (except that the Water Authority shall remain liable for the payment of such 2016AB Bonds, but only from the money deposited with the Trustee as provided in the Indenture) if there shall have been deposited with the Trustee money to be held in trust by the Trustee sufficient for such payment at the maturity dates thereof or the redemption dates thereof.

Any Outstanding 2016AB Bonds shall prior to the scheduled maturity dates thereof be deemed to have been paid within the meaning of and with the effect expressed in the first paragraph of this section (except that the Water Authority shall remain liable for the payment of such 2016AB Bonds, but only from the money or Defeasance Securities deposited with the Trustee as provided in the Indenture) if (1) there shall have been deposited with the Trustee either money in an amount which shall be sufficient or Defeasance Securities which are not subject to redemption prior to maturity (including any Federal Securities issued or held in book-entry form on the books of the Department of Treasury of the United States of America) the interest on and the principal of which when paid will provide money which, together with the money, if any, deposited with the Trustee at the same time, shall be sufficient (as evidenced, except in the case of or gross defeasance, by a report of an Independent Certified Public Accountant obtained by the Water Authority and filed with the Trustee) to pay when due the interest to become due on such 2016AB Bonds on and prior to the maturity dates thereof or the redemption dates thereof and the principal of such 2016AB Bonds on the maturity dates thereof or the redemption dates thereof, and (2) the Water Authority shall have given the Trustee (in form satisfactory to the Trustee) irrevocable instructions to give, as soon as practicable, a notice to the Owners of such 2016AB Bonds that the deposit required by clause (1) of this paragraph has been made with the Trustee and that such 2016AB Bonds are deemed to have been paid in accordance with this section, and stating the maturity dates thereof or the redemption dates thereof upon which money is to be available for the payment of the principal of such 2016AB Bonds; provided, that no Defeasance Securities or money deposited with the Trustee pursuant to this section (nor any interest on or principal payments of such Defeasance Securities) shall be withdrawn or used for any purpose other than, and such Defeasance Securities and money shall be held in trust for, the payment of the interest on and the principal of such 2016AB Bonds as provided in the Indenture, except that any money received from such interest on or principal payments of such Defeasance Securities deposited with the Trustee which is not then needed for the foregoing purpose shall, to the extent practicable, be reinvested as specified in a Written Request of the Water Authority filed with the Trustee in Defeasance Securities maturing at the times and in the amounts sufficient to pay when due the interest on and the principal of such 2016AB Bonds on and prior to such maturity dates thereof or redemption dates thereof.

#### **Liability of Water Authority Limited to Net Water Revenues and Certain Other Funds**

Notwithstanding anything contained in the Indenture, the Water Authority shall not be required to advance any money derived from any source of income other than the Net Water Revenues (as “Bonds” under the General Resolution) and the other funds provided therein for the payment of the interest on or the principal of the 2016AB Bonds or for the observance or performance of any agreements, conditions, covenants or terms contained herein; *provided*, that the Water Authority may advance funds for any such payment as long as such funds are derived from a source legally available for such purpose.

The 2016AB Bonds are limited obligations of the Water Authority and are payable, as to the interest thereon and the principal thereof, solely from the Net Water Revenues and such other funds, and the Water Authority is not obligated to pay them except from the Net Water Revenues and such other funds. All of the 2016AB Bonds are equally secured by a pledge of, and charge and lien upon, the Net Water Revenues (on a parity with other Bonds, Contracts and Reimbursement Agreements) and such other funds, and the Net Water Revenues and such other funds constitute a trust fund for the security and payment of the interest on and the principal of the 2016AB Bonds as provided in the Indenture. The 2016AB Bonds are not a debt of the Water Authority, the State or any of its political subdivisions, and neither the Water Authority, the State nor any of its political subdivisions is liable therefor, nor in any event shall the 2016AB Bonds or any interest thereon payable out of any funds or properties other than those of the Water Authority. The 2016AB Bonds do not constitute an indebtedness of the Water Authority within the meaning of any constitutional or statutory limitation or restriction, and no persons executing the 2016AB Bonds shall be liable personally on the 2016AB Bonds by reason of their issuance.

## FORM OF CONTINUING DISCLOSURE AGREEMENT

This Continuing Disclosure Agreement (the “Disclosure Agreement”), dated as of June 1, 2016, is executed and delivered by the San Diego County Water Authority (the “Water Authority”) and Digital Assurance Certification, L.L.C., as dissemination agent (the “Dissemination Agent”), in connection with the issuance, sale and delivery by the Water Authority of \$98,945,000 San Diego County Water Authority Water Revenue Refunding Bonds, Series 2016A (Green Bonds) (the “Series 2016A Bonds”), and \$197,395,000 San Diego County Water Authority Water Revenue Refunding Bonds, Series 2016B (the “Series 2016B Bonds” and, together with the Series 2016A Bonds, the “Bonds”). The Bonds are being issued pursuant to an Indenture (the “Indenture”), dated as of June 1, 2016, by and between the Water Authority and U.S. Bank National Association, as Trustee. Pursuant to Section 5.07 of the Indenture, the Water Authority and the Dissemination Agent covenant and agree as follows:

SECTION 1. Purpose of the Disclosure Agreement. This Disclosure Agreement is being executed and delivered by the Water Authority and the Dissemination Agent for the benefit of the Owners and Beneficial Owners of the Bonds and in order to assist the Participating Underwriters in complying with the Rule (defined below).

SECTION 2. Definitions. In addition to the definitions set forth in the Indenture, which apply to any capitalized term used in this Disclosure Agreement unless otherwise defined in this Section, the following capitalized terms shall have the following meanings:

“Annual Disclosure Report” shall mean any Annual Disclosure Report provided by the Water Authority pursuant to, and as described in, Sections 3 and 4 of this Disclosure Agreement.

“Beneficial Owner” shall mean any person that has or shares the power, directly or indirectly, to make investment decisions concerning ownership of any Bonds (including persons holding Bonds through nominees, depositories or other intermediaries).

“Disclosure Representative” shall mean the General Manager of the Water Authority or his or her designee, or such other person as the Water Authority shall designate in writing to the Dissemination Agent from time to time.

“Dissemination Agent” shall mean Digital Assurance Certification, L.L.C., acting in its capacity as Dissemination Agent hereunder, or any successor Dissemination Agent designated in writing by the Water Authority.

“Listed Events” shall mean any of the events listed in Section 5(a) of this Disclosure Agreement.

“MSRB” shall mean the Municipal Securities Rulemaking Board or any other entity designated or authorized by the Securities and Exchange Commission to receive continuing disclosure filings pursuant to the Rule. Until otherwise designated by the MSRB or the Securities and Exchange Commission, filings with the MSRB are to be made through the Electronic Municipal Market Access (EMMA) website of the MSRB currently located at <http://emma.msrb.org>.

“Official Statement” shall mean the Official Statement, dated June 8, 2016, executed and delivered by the Water Authority in connection with the initial offering of the Bonds.

“Owner” shall mean the person in whose name any Bonds are registered.

“Participating Underwriter” shall mean any of the original underwriters of the Bonds required to comply with the Rule in connection with offering of the Bonds.

“Rule” shall mean Rule 15c2-12(b)(5) adopted by the Securities and Exchange Commission under the Securities Exchange Act of 1934, as the same may be amended from time to time.

“State” shall mean the State of California.

SECTION 3. Provision of Annual Disclosure Reports.

(a) The Water Authority shall, or upon written direction shall cause the Dissemination Agent to, not later than 270 days after the end of the Water Authority’s fiscal year (presently June 30), commencing with the report for the Fiscal Year ended June 30, 2016, provide to the MSRB an Annual Disclosure Report which is consistent with the requirements of Section 4 of this Disclosure Agreement. The Annual Disclosure Report must be submitted in electronic format and accompanied by such identifying information as is prescribed by the MSRB, and may cross-reference other information as provided in Section 4 of this Disclosure Agreement; provided that the audited financial statements of the Water Authority may be submitted separately from the balance of the Annual Disclosure Report and later than the date required above for the filing of the Annual Disclosure Report if they are not available by that date. If the Water Authority’s fiscal year changes, it shall give notice of such change in a filing with the MSRB. The Annual Disclosure Report shall be submitted on a standard form in use by industry participants or other appropriate form and shall identify the Bonds by name and CUSIP number.

(b) Not later than fifteen (15) Business Days prior to the date specified in subsection (a) for providing the Annual Disclosure Report to the MSRB, the Water Authority shall provide the Annual Disclosure Report to the Dissemination Agent. If by such date the Dissemination Agent has not received a copy of the Annual Disclosure Report, the Dissemination Agent shall contact the Water Authority to inquire if the Water Authority is in compliance with the subsection (a). The Water Authority shall provide a written certification with each Annual Disclosure Report furnished to the Dissemination Agent to the effect that such Annual Disclosure Report constitutes the Annual Disclosure Report required to be furnished by it hereunder. The Dissemination Agent may conclusively rely upon such certification of the Water Authority and shall have no duty or obligation to review such Annual Disclosure Report.

(c) If the Dissemination Agent has not received an Annual Disclosure Report by 6:00 p.m. Eastern time on the date required in subsection (a), the Dissemination Agent shall send a notice to the MSRB in substantially the form attached as Exhibit A accompanied by a cover sheet in such form as shall be required by or acceptable to the MSRB.

(d) The Dissemination Agent shall, to the extent the Annual Disclosure Report has been provided to the Dissemination Agent, file a report with the Water Authority certifying that the Annual Disclosure Report has been provided to the MSRB pursuant to this Disclosure Agreement and stating the date it was provided.

SECTION 4. Content of Annual Disclosure Reports. The Water Authority’s Annual Disclosure Report shall contain or include by reference the following:

(a) the audited financial statements of the Water Authority for the prior fiscal year, prepared in accordance with generally accepted accounting principles as promulgated from time to time by the Governmental Accounting Standards Board. If the Water Authority’s audited financial statements are not available by the time the Annual Disclosure Report is required to be filed pursuant to Section 3(a), the Annual Disclosure Report shall contain unaudited financial statements in a format similar to the financial statements contained in the final Official Statement, and the audited financial statements shall be filed in the same manner as the Annual Disclosure Report when they become available.

(b) tables setting forth the following information as of the end of such fiscal year:

- (i) the aggregate principal amount of each maturity of Bonds Outstanding;
- (ii) an update of the information contained in the following tables in the Official

Statement:

- (A) “Calendar Year 2016 Member Agency Voting Entitlement” on page 16;

- (B) “Water Use of Member Agencies – Fiscal Years ended June 30, 2011 to June 30, 2015 on page 48;
- (C) “Gross Receipts From Water Authority Water Sales” on page 71; and
- (D) “Historical Operating Results” on page 74.

(c) Any or all of the items listed in paragraphs (a) and (b) above may be included by specific reference to other documents, including official statements of debt issues with respect to which the Water Authority is an “obligated person” (as defined by the Rule), which are available to the public on the MSRB website. If the document included by reference is a final official statement, it must be available from the MSRB. The Water Authority shall clearly identify each such other document so included by reference.

SECTION 5. Reporting of Significant Events.

(a) The Water Authority shall give, or cause to be given, notice of the occurrence of any of the following events with respect to the Bonds in a timely manner not later than ten business days after the occurrence of the event:

1. Principal and interest payment delinquencies;
2. Unscheduled draws on debt service reserves reflecting financial difficulties;
3. Unscheduled draws on credit enhancements reflecting financial difficulties;
4. Substitution of credit or liquidity providers, or their failure to perform;
5. Adverse tax opinions or issuance by the Internal Revenue Service of proposed or final determination of taxability or of a Notice of Proposed Issue (IRS Form 5701-TEB);
6. Tender offers;
7. Defeasances;
8. Rating changes; or
9. Bankruptcy, insolvency, receivership or similar event of the Water Authority.

Note: for the purposes of the event identified in subparagraph (9), the event is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent or similar officer for the Water Authority in a proceeding under the U.S. Bankruptcy Code or in any other proceeding under State or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the Water Authority, or if such jurisdiction has been assumed by leaving the existing governmental body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the Water Authority.

(b) The Water Authority shall give, or cause to be given, notice of the occurrence of any of the following events with respect to the Bonds, if material, in a timely manner not later than ten business days after the occurrence of the event:

1. Unless described in Section 5(a)(5), other material notices or determinations by the Internal Revenue Service with respect to the tax status of the Bonds or other material events affecting the tax status of the Bonds;

2. Modifications to rights of Bond holders;
3. Optional, unscheduled or contingent Bond calls;
4. Release, substitution, or sale of property securing repayment of the Bonds;
5. Non-payment related defaults;
6. The consummation of a merger, consolidation, or acquisition involving the Water Authority or the sale of all or substantially all of the assets of the Water Authority, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms; or
7. Appointment of a successor or additional trustee or the change of name of a trustee for the Bonds.

(c) Whenever (i) the Water Authority obtains knowledge of the occurrence of a Listed Event described in Section 5(a) or (ii) the Water Authority obtains knowledge of the occurrence of a Listed Event described in Section 5(b) and has determined that knowledge of the occurrence of such a Listed Event would be material under applicable federal securities laws, the Water Authority shall promptly notify the Dissemination Agent in writing. Such notice shall instruct the Dissemination Agent to report the occurrence pursuant to subsection (d) of this Section 5.

(d) If the Dissemination Agent has been instructed by the Water Authority to report the occurrence of a Listed Event, the Dissemination Agent shall file a notice of such occurrence with the MSRB in electronic format, accompanied by such identifying information as is prescribed by the MSRB, with a copy to the Water Authority.

SECTION 6. Format for Filings with MSRB. Any report or filing with the MSRB pursuant to this Disclosure Agreement must be submitted in electronic format, accompanied by such identifying information as is prescribed by the MSRB.

SECTION 7. Additional Disclosure Obligations. The Water Authority acknowledges and understands that other State and federal laws, including but not limited to the Securities Act of 1933 and Rule 10b-5 promulgated under the Securities Exchange Act of 1934, may apply to the Water Authority, and that the failure of the Dissemination Agent to so advise the Water Authority shall not constitute a breach by the Dissemination Agent of any of its duties and responsibilities under this Disclosure Agreement. The Water Authority acknowledges and understands that the duties of the Dissemination Agent relate exclusively to execution of the mechanical tasks of disseminating information as described in this Disclosure Agreement.

SECTION 8. Termination of Obligations. The Water Authority's and the Dissemination Agent's obligations under this Disclosure Agreement shall terminate upon the legal defeasance, prior redemption or payment in full of all of the Bonds. If such termination occurs prior to the final maturity of the Bonds, the Water Authority shall give notice of such termination in a filing with the MSRB.

SECTION 9. Dissemination Agent. The Water Authority hereby appoints Digital Assurance Certification, L.L.C., as the initial Dissemination Agent. The Water Authority may, from time to time, appoint or engage one or more Dissemination Agents to assist it in carrying out its obligations under this Disclosure Agreement, and may discharge any such Dissemination Agent, with or without appointing a successor Dissemination Agent. The Dissemination Agent shall not be responsible in any manner for the content of any notice or report prepared by the Water Authority pursuant to this Disclosure Agreement. The Dissemination Agent may resign by providing thirty (30) days written notice to the Water Authority. The Dissemination Agent shall have no duty to prepare any information report or event notice nor shall the Dissemination Agent be responsible for filing any report or event notice not provided to it by the Water Authority in a timely manner.

SECTION 10. Amendment; Waiver. Notwithstanding any other provision of this Disclosure Agreement, the Water Authority and the Dissemination Agent may amend this Disclosure Agreement (and the Dissemination Agent shall agree to any amendment so requested by the Water Authority, provided that the Dissemination Agent shall not be obligated to enter into any such amendment that modifies or increases its duties or obligations hereunder) and any provision of this Disclosure Agreement may be waived, provided that the following conditions are satisfied:

(a) If the amendment or waiver relates to the provisions of Sections 3(a), 4, or 5(a) or (b), it may only be made in connection with a change in circumstances that arises from a change in legal requirements, change in law, or change in the identity, nature or status of an obligated person with respect to the Bonds, or the type of business conducted;

(b) The undertaking, as amended or taking into account such waiver, would, in the opinion of nationally recognized bond counsel, have complied with the requirements of the Rule at the time of the original issuance, sale and delivery of the Bonds, after taking into account any amendments or interpretations of the Rule, as well as any change in circumstances; and

(c) The amendment or waiver either (i) is approved by the Owners of the Bonds in the same manner as provided in the Indenture for amendments to the Indenture with the consent of Owners, or (ii) does not, in the opinion of nationally recognized bond counsel, materially impair the interests of the Owners or Beneficial Owners of the Bonds.

In the event of any amendment or waiver of a provision of this Disclosure Agreement, the Water Authority shall describe such amendment in the next Annual Disclosure Report, and shall include, as applicable, a narrative explanation of the reason for the amendment or waiver and its impact on the type (or, in the case of a change of accounting principles, on the presentation) of financial information or operating data being presented by the Water Authority. In addition, if the amendment relates to the accounting principles to be followed in preparing financial statements, (i) notice of such change shall be given in a filing with the MSRB and (ii) the Annual Disclosure Report for the year in which the change is made should present a comparison (in narrative form and also, if feasible, in quantitative form) between the financial statements as prepared on the basis of the new accounting principles and those prepared on the basis of the former accounting principles.

SECTION 11. Additional Information. Nothing in this Disclosure Agreement shall be deemed to prevent the Water Authority from disseminating any other information, using the means of dissemination set forth in this Disclosure Agreement or any other means of communication, or including any other information in any Annual Disclosure Report or notice of occurrence of a Listed Event, in addition to that which is required by this Disclosure Agreement. If the Water Authority chooses to include any information in any Annual Disclosure Report or notice of occurrence of a Listed Event, in addition to that which is specifically required by this Disclosure Agreement, the Water Authority shall have no obligation under this Disclosure Agreement to update such information or include it in any future Annual Disclosure Report or notice of occurrence of a Listed Event.

SECTION 12. Default. In the event of a failure of the Water Authority to comply with any provision of this Disclosure Agreement, any Participating Underwriter or any Owner or Beneficial Owner of the Bonds may take such actions as may be necessary and appropriate, including seeking mandate or specific performance by court order, to cause the Water Authority to comply with its obligations under this Disclosure Agreement. A default under this Disclosure Agreement shall not be deemed an event of default under the Indenture, and the sole remedy under this Disclosure Agreement in the event of any failure of the Water Authority to comply with this Disclosure Agreement shall be an action to compel performance.

SECTION 13. Duties, Immunities and Liabilities of Dissemination Agent.

(a) The Dissemination Agent shall have only such duties as are specifically set forth in this Disclosure Agreement. The Dissemination Agent's obligation to deliver the information at the times and with the contents described herein shall be limited to the extent the Water Authority has provided such information to the Dissemination Agent as required by this Disclosure Agreement. The Dissemination Agent shall have no duty with respect to the content of any disclosures or notice made pursuant to the terms hereof. The Dissemination Agent

shall have no duty or obligation to review or verify any information, disclosures or notices provided to it by the Water Authority and shall not be deemed to be acting in any fiduciary capacity for the Water Authority, the Owners, the Beneficial Owners of the Bonds or any other party. The Dissemination Agent shall have no responsibility for the Water Authority's failure to report to the Dissemination Agent any event described in Sections 5(a) and 5(b) or a duty to determine the materiality thereof. The Dissemination Agent shall have no duty to determine, or liability for failing to determine, whether the Water Authority has complied with this Disclosure Agreement. The Dissemination Agent may conclusively rely on certifications of the Water Authority at all times.

THE WATER AUTHORITY AGREES TO INDEMNIFY AND SAVE THE DISSEMINATION AGENT AND ITS RESPECTIVE OFFICERS, DIRECTORS, EMPLOYEES AND AGENTS, HARMLESS AGAINST ANY LOSS, EXPENSE AND LIABILITIES WHICH THEY MAY INCUR ARISING OUT OF OR IN THE EXERCISE OR PERFORMANCE OF THEIR POWERS AND DUTIES HEREUNDER, INCLUDING THE COSTS AND EXPENSES (INCLUDING ATTORNEYS' FEES) OF DEFENDING AGAINST ANY CLAIM OF LIABILITY, BUT EXCLUDING LIABILITIES DUE TO THE DISSEMINATION AGENT'S NEGLIGENCE OR WILLFUL MISCONDUCT.

The obligations of the Water Authority under this Section shall survive resignation or removal of the Dissemination Agent and defeasance, redemption or payment of the Bonds.

(b) The Dissemination Agent may, from time to time, consult with legal counsel (either in-house or external) of its own choosing in the event of any disagreement or controversy, or question or doubt as to the construction of any of the provisions hereof or its respective duties hereunder, and neither of them shall incur any liability and shall be fully protected in acting in good faith upon the advice of such legal counsel.

SECTION 14. Notices. Any notices or communications to or among any of the parties to this Disclosure Agreement may be given as follows:

To the Water Authority: San Diego County Water Authority  
4677 Overland Avenue  
San Diego, CA 92123  
Attention: Director of Finance/Treasurer

To the Dissemination Agent: Digital Assurance Certification, L.L.C.  
390 North Orange Ave., Suite 1750  
Orlando, FL 32801  
Attention: Client Service Manager

Any person may, by written notice to the other persons listed above, designate a different address or telephone number(s) to which subsequent notices or communications should be sent.

SECTION 15. Beneficiaries. This Disclosure Agreement shall inure solely to the benefit of the Water Authority, the Dissemination Agent, the Participating Underwriters, and Owners and Beneficial Owners from time to time of the Bonds, and shall create no rights in any other person or entity.

SECTION 16. Counterparts. This Disclosure Agreement may be executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

SAN DIEGO COUNTY WATER AUTHORITY

By \_\_\_\_\_  
Chair of the Board of Directors

Attest:

\_\_\_\_\_  
Clerk of the Board of Directors

DIGITAL ASSURANCE CERTIFICATION, L.L.C., as  
Dissemination Agent

By \_\_\_\_\_  
Authorized Officer

**EXHIBIT A**

**FORM OF NOTICE TO THE  
MUNICIPAL SECURITIES RULEMAKING BOARD  
OF FAILURE TO FILE ANNUAL DISCLOSURE REPORT**

Name of Issuer: San Diego County Water Authority

Name of Bond Issue: San Diego County Water Authority Water Revenue Refunding Bonds, Series 2016A (Green Bonds)  
San Diego County Water Authority Water Revenue Refunding Bonds, Series 2016B

Date of Issuance: June 23, 2016

Name of Obligated Party: San Diego County Water Authority

NOTICE IS HEREBY GIVEN that the Water Authority has not provided an Annual Disclosure Report with respect to the above-named Bonds as required by the Continuing Disclosure Agreement, dated as of June 1, 2016, by and between the San Diego County Water Authority and Digital Assurance Certification, L.L.C. [The Water Authority anticipates that the Annual Disclosure Report will be filed by \_\_\_\_\_.]

Dated: \_\_\_\_\_

DIGITAL ASSURANCE CERTIFICATION, L.L.C., on  
behalf of the San Diego County Water Authority

By: \_\_\_\_\_

cc: San Diego County Water Authority

\* To be included only if the Water Authority has advised Digital Assurance Certification, L.L.C. of such date.

## BOOK-ENTRY SYSTEM

*The following description of The Depository Trust Company (“DTC”), the procedures and record keeping with respect to beneficial ownership interests in the 2016AB Bonds, payment of principal, interest and other payments on the 2016AB Bonds to DTC Participants or Beneficial Owners, confirmation and transfer of beneficial ownership interest in the 2016AB Bonds and other related transactions by and between DTC, the DTC 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 DTC 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 DTC Participants, as the case may be. Neither the Water Authority nor the Trustee take any responsibility for the information contained in this Appendix.*

*No assurances can be given that DTC, DTC Participants or Indirect Participants will distribute to the Beneficial Owners (a) payments of interest, principal or premium, if any, with respect to the 2016AB Bonds, (b) certificates representing ownership interest in or other confirmation or ownership interest in the 2016AB Bonds, or (c) redemption or other notices sent to DTC or Cede & Co., its nominee, as the registered owner of the 2016AB Bonds, or that they will so do on a timely basis, or that DTC, DTC Participants or DTC Indirect Participants will act in the manner described in this Appendix. The current Rules applicable to DTC are on file with the Securities and Exchange Commission and the current Procedures of DTC to be followed in dealing with DTC Participants are on file with DTC.*

The Depository Trust Company (“DTC”), New York, New York, will act as securities depository for the securities (the “2016AB Bonds”). The 2016AB Bonds will be issued as fully-registered 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 2016A Bond certificate will be issued for each maturity of the 2016AB Bonds, in the aggregate principal amount of such maturity, and will be deposited with DTC.

DTC, one of the world’s largest securities depository, 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](http://www.dtcc.com).

Purchases of 2016AB Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the 2016AB Bonds on DTC’s records. The ownership interest of each actual purchaser of each 2016AB Bond (“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 2016AB Bonds 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 2016AB Bonds, except in the event that use of the book-entry system for the 2016AB Bonds is discontinued.

To facilitate subsequent transfers, all 2016AB Bonds 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 2016AB Bonds 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 2016AB Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such 2016AB Bonds 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.

Redemption notices shall be sent to DTC. If less than all of the 2016AB Bonds within a maturity are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such maturity to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to 2016AB Bonds unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the Water Authority 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 2016AB Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Redemption proceeds, distributions, and dividend payments on the 2016AB Bonds 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 Water Authority or Trustee, on payable date 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, Trustee, or Water Authority, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of redemption proceeds, distributions, and dividend payments to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of Water Authority or Trustee, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of Direct and Indirect Participants.

DTC may discontinue providing its services as depository with respect to the 2016AB Bonds at any time by giving reasonable notice to Water Authority or Trustee. Under such circumstances, in the event that a successor depository is not obtained, 2016AB Bond certificates are required to be printed and delivered.

Water Authority may decide to discontinue use of the system of book-entry-only transfers through DTC (or a successor securities depository). In that event, 2016AB Bond certificates will be printed and delivered to DTC.

FORM OF APPROVING OPINION OF BOND COUNSEL

Board of Directors  
San Diego County Water Authority  
San Diego, California

Re: San Diego County Water Authority Water Revenue Refunding Bonds, Series 2016A  
(Green Bonds); San Diego County Water Authority Water Revenue Refunding Bonds,  
Series 2016B

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(Final Opinion)

Ladies and Gentlemen:

We have acted as bond counsel to the San Diego County Water Authority (the "Water Authority") in connection with the issuance of \$98,945,000 aggregate principal amount of San Diego County Water Authority Water Revenue Refunding Bonds, Series 2016A (Green Bonds) (the "Series 2016A Bonds"), and \$197,395,000 aggregate principal amount of San Diego County Water Authority Water Revenue Refunding Bonds, Series 2016B (the "Series 2016B Bonds" and, together with the Series 2016A Bonds, the "Bonds"), issued pursuant to an Indenture, dated as of June 1, 2016 (the "Indenture"), between the Water Authority and U.S. Bank National Association, as trustee (the "Trustee"). Capitalized terms not otherwise defined herein shall have the meanings ascribed thereto in the Indenture.

In such connection, we have reviewed San Diego County Water Authority Resolution No. 89-21, adopted on May 11, 1989, entitled "A Resolution of the Board of Directors of the San Diego County Water Authority Providing for the Allocation of Water System Revenues and Establishing Covenants to Secure the Payment of Obligations Payable from Net Water Revenues", as supplemented by San Diego County Water Authority Resolution No. 97-52, adopted on December 11, 1997, and by San Diego County Water Authority Resolution No. 09-23, adopted on December 17, 2009 (the "General Resolution"), the Indenture, the Tax Certificate of the Water Authority dated the date hereof (the "Tax Certificate"), opinions of counsel to the Water Authority and the Trustee, certificates of the Water Authority, the Trustee and others, and such other documents, opinions 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. 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 opinion speaks only as of its date and is not intended to, and may not, be relied upon 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 Water Authority. We have assumed, without undertaking to verify, the accuracy of the factual matters represented, warranted or certified in the documents, and of the legal conclusions contained in the opinions, referred to in the second paragraph hereof. Furthermore, we have assumed compliance with all covenants and agreements contained in the Indenture 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 Bonds to be included in gross income for federal income tax purposes. We call attention to the fact that the rights and obligations under the Bonds, the Indenture 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 county water authorities in the State

of California. We express no opinion with respect to any indemnification, contribution, liquidated damages, penalty (including any remedy deemed to constitute 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, nor do we express any opinion with respect to the state or quality of title to or interest in any of the assets described in or as subject to the lien of the Indenture or the accuracy or sufficiency of the description contained therein of, or the remedies available to enforce liens on, any such assets. Our services did not include financial or other non-legal advice. Finally, we undertake no responsibility for the accuracy, completeness or fairness of the Official Statement or other offering material relating to the Bonds and express no 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 Bonds constitute valid and binding limited obligations of the Water Authority, and are payable solely from the Net Water Revenues and certain other funds held under the Indenture.

2. The General Resolution has been duly adopted by the Board of Directors of the Water Authority and is in full force and effect.

3. The Indenture has been duly executed and delivered by, and constitutes the valid and binding obligation of, the Water Authority.

4. The General Resolution and the Indenture create a valid pledge of Net Water Revenues to secure the payment of the principal of and interest on the Bonds.

5. Interest on the Bonds is 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. Interest on the Bonds is not a specific preference item for purposes of the federal individual or corporate alternative minimum taxes, although we observe that it is included in adjusted current earnings when calculating corporate alternative minimum taxable income. 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 Bonds.

Faithfully yours,

ORRICK, HERRINGTON & SUTCLIFFE LLP



