



## For the Fiscal Year Ended June 30, 2019





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# COMPREHENSIVE ANNUAL FINANCIAL REPORT

For the Fiscal Year Ended June 30, 2019

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# Introductory Section

1944 - 2019







October 16, 2019

**MEMBER AGENCIES**

Carlsbad  
Municipal Water District  
City of Del Mar  
City of Escondido  
City of National City  
City of Oceanside  
City of Poway  
City of San Diego  
Fallbrook  
Public Utility District  
Helix Water District  
Lakeside Water District  
Olivenhain  
Municipal Water District  
Otay Water District  
Padre Dam  
Municipal Water District  
Camp Pendleton  
Marine Corps Base  
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

**OTHER  
REPRESENTATIVE**

County of San Diego

The Honorable Board of Directors  
San Diego County Water Authority  
4677 Overland Avenue  
San Diego, CA 92123

We are pleased to submit the Comprehensive Annual Financial Report (CAFR) for the San Diego County Water Authority (Water Authority) for the fiscal year ended June 30, 2019 in accordance with Section 25253 of the California Government Code. The purpose of this report is to provide the Board of Directors (Board), member agencies, investors, the public, and other interested parties with reliable financial information about the Water Authority.

Management assumes full responsibility for the completeness and reliability of the information contained in the CAFR, which is based upon a comprehensive framework of internal controls that were established for this purpose. Because the costs of internal controls should not exceed the anticipated benefits, the objective is to provide reasonable, rather than absolute, assurance that the financial statements are free of any material misstatements.

Water Authority policy requires that an independent certified public accounting firm, selected by the Board, audit the financial statements on an annual basis. Davis Farr, LLP, has issued an unmodified (or clean) opinion on the Water Authority's financial statements for the fiscal year ended June 30, 2019. The independent auditor's report is presented as the first component of the Financial Section of this report.

Management's Discussion and Analysis (MD&A) immediately follows the independent auditor's report in the Financial Section and provides an overview, summary, and analysis of the financial statements. The MD&A complements this Letter of Transmittal and should be read in conjunction with it.

According to Generally Accepted Accounting Principles (GAAP) enterprise funds are not legally required to adopt and adhere to a budget, nor present budgetary comparison information. However, the Board has chosen to adopt a two-year budget as a management tool for estimating and planning Water Authority revenues and expenses which is used to identify unusual or unanticipated trends. The Water Authority adopted a multi-year budget for fiscal years 2018 and 2019, and a Budgetary Comparison Schedule for both fiscal years through June 30, 2019 can be found in the Required Supplementary Information (RSI) and Supplemental Information Section of this report.

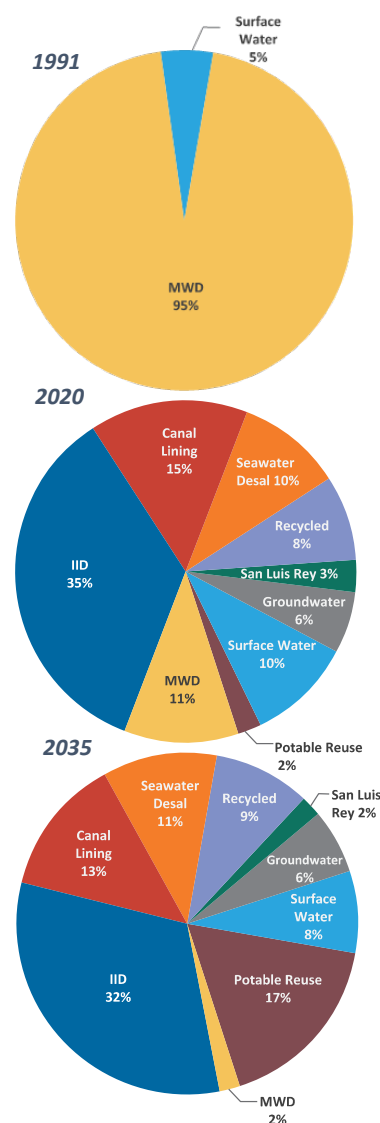
## Celebrating 75 Years of Service to San Diego County

The San Diego County Water Authority's story started during the height of World War II, when it became clear that imported water supplies were necessary to sustain a booming region on the forefront of the war effort. On June 9, 1944, San Diego voters approved the agency's formation under the County Water Authority Act. Imported water arrived three years later to slake the thirst of a growing population just weeks before local supplies would have run out. For its first several decades, the Water Authority served mainly as a pumps-and-pipes agency, delivering imported water to local cities and water districts. But a severe drought in the early 1990s forced the region to confront the fact that continuing to provide safe and reliable water demanded a diverse portfolio of water supplies instead of near-total reliance on a single source.

In the decades that followed, the Water Authority transformed itself into one of the most pioneering, visionary, agile and driven water agencies in the world, winning national and international acclaim for engineering and water management excellence. Today, the Water Authority and its member agencies are leaders in water conservation, asset management, innovation, seawater desalination and water resource planning to serve the region's 3.3 million residents and sustain its \$231 billion economy for decades to come.

### Water Authority Profile

The Water Authority was organized on June 9, 1944 under the County Water Authority Act for the primary purpose of providing a safe and reliable supply of imported water to its member agencies for domestic, municipal, and agricultural uses. The Water Authority's service area encompasses roughly the western one-third of San Diego County or approximately 1,490 square miles. As a semi-arid region, local surface water and groundwater supplies met only 13 percent of regional demand in Fiscal Year 2019. Fifteen percent of regional supply was generated from the use of recycled water, and desalinated water. The remaining 72 percent of the region's water supply was from Water Authority and member agency sources outside the region. (Starting in 2017, the City of Escondido and Vista Irrigation District began receiving San Luis Rey water transfers.) As noted in the pie charts to the right, the Water Authority is continuing to diversify its sources of water. Additionally, as a wholesale entity, the Water Authority has no retail customers; it serves only its 24 member agencies, which deliver water to approximately 97 percent of San Diego County's 3.3 million residents. These member agencies include six cities, five water districts, three irrigation districts, eight municipal water districts, one public utility district, and one federal agency. The Water Authority is a member agency of, and obtains water from, the Metropolitan Water District of Southern California (MWD), which derives its supply from the Colorado River and the California State Water Project. The Water Authority also obtains water under a water transfer agreement with the Imperial Irrigation District (IID) and All-American and Coachella Canal lining project agreements, both of which are long-term agreements in which the Water Authority receives conserved Colorado River water supplies. The Water Authority also derives its supplies through a water purchase agreement for water produced at the Claude "Bud" Lewis Carlsbad Desalination Plant.



## Board of Directors

A 36-member board governs the Water Authority, with each of the 24 member agencies having at least one voting representative on the Board. Member agencies may also designate and appoint one additional representative for each full five percent of Water Authority assessed value within the member agency service area. Currently, the City of San Diego has 10 directors; Carlsbad, Helix, and Otay Water District have two directors each; and the remaining member agencies have one director each. Directors are appointed to six-year terms by the chief executive officers of the respective member agencies, subject to approval by the member agencies' governing bodies. The voting rights of member agencies are weighted and based upon each agency's total historical financial contribution to the Water Authority. Currently, all Board actions require an affirmative vote constituting at least 55 percent of the total weighted vote of the member agencies. In addition to the 36 voting members, the County of San Diego has one representative who may participate in certain Board deliberations and committee actions, but has no voting rights on Board actions. Officers of the Board begin two-year terms on October 1<sup>st</sup> of each even-numbered year.

## Committees and Organizational Structure

To facilitate matters, most business coming before the Water Authority's Board is first considered by one of its five standing committees, described below, which then makes recommendations to the full Board for formal action:

**The Administrative and Finance Committee** is responsible for administrative and finance matters, including: rates, fees, charges, and other sources of revenue; budget; investments; human resources; employer-employee relations; information technology; insurance; risk management; and other matters of general business operations.

**The Engineering and Operations Committee** is responsible for matters of design, construction, replacement, maintenance and operation of the Water Authority's facilities, property and equipment, including: administration of the Capital Improvement Program; administration of the Aqueduct Protection Program; right of way acquisition and management; system and facility security; water quality; and other matters relating to facility operations.

**The Imported Water Committee** is responsible for imported water supply matters, including: activities and issues as a member agency of MWD; administration of the Colorado River Quantification Settlement Agreement and related agreements; Colorado River Board; California State Water Project; California WaterFix; and other matters relating to water supplies from sources outside San Diego County.

**The Legislation and Public Outreach Committee** is responsible for community and governmental outreach matters, including: legislation, lobbying, and intergovernmental relations; community relations; media relations; social media; online communication; capital project outreach; and small-business contracting outreach.

**The Water Planning and Environmental Committee** is responsible for water supply planning and supporting local supply development, including: water supply and demand forecasting and reporting; shortage allocation planning and administration; seawater desalination; water recycling and potable reuse; groundwater and conjunctive use; local surface water; environmental management; regulatory compliance and policy; Urban Water Management Plans; water use efficiency programs; and other planning matters.

In addition, the Water Authority has one special purpose Board committee that is responsible for oversight of the audit and CAFR as follows:

**The Audit Committee** is responsible for independent oversight of the annual financial reporting process, including the selection of, and communication with the Water Authority's outside audit firms. The Audit Committee was established in 2009 driven by the Board's desire to separate oversight responsibilities for the audit function from the Administrative and Finance Committee.

The Water Authority's organizational structure as of June 30, 2019 can be found on page 18. The General Manager reports directly to the Board and manages the Water Authority's daily operations. The General Counsel also reports directly to the Board. Reporting directly to the General Manager is a Deputy General Manager, two Assistant General Managers and the Human Resources Manager. The remainder of the executive team consists of nine department and program directors, responsible for managing the Administrative Services, Engineering, Finance, Operations and Maintenance, Public Outreach and Conservation, and Water Resources Departments, and the MWD Program, Colorado River Program and Government Relations Program.

## Economic Conditions and Outlook

San Diego labor market fundamentals remain strong in 2019 with continuing job growth. According to the San Diego Regional Economic Development Corporation's June Snapshot, the region added 25,700 jobs year-over-year, a 1.7 percent increase in total employment since 2018. The PST Services (professional, scientific and technical) sector experienced the largest growth in employment at 27.3 percent, followed closely by education and health services being not far behind in jobs creation. The unemployment rate trended lower to 3.3 percent, which is lower than last year at 3.6 percent. San Diego County's median home price was \$590,000 in June, its highest point in a decade and a 2.6 percent increase in a year, as reported by real estate tracker CoreLogic. While homes are staying on the market longer than last year, mortgage interest rates are lower than they were a year ago.

San Diego County saw the largest decrease in homebuilding in Southern California in the first six months of 2019 with 43 percent fewer homes constructed in the six-month period compared to the same time last year, per the Real Estate Research Council of Southern California. A large drop in multifamily permits compared to 2018 has occurred while more single-family permits have been pulled, and the California Association of Realtors has anticipated fewer homes will be constructed than in 2018. Scarcity of land, as well as increased costs for land, labor and materials are all contributing to the slowdown in development as homebuyers are not as able to afford the higher prices.

Water use in the San Diego area totaled approximately 463,000 acre-feet for fiscal year ending June 30, 2019, a 55,000 acre-foot decline from 2018 consumptive use levels. This 11 percent drop in water use was driven by above average local rainfall experienced between December 2018 and February 2019. Total rainfall at Lindbergh Field for fiscal year ending June 30, 2019 measured approximately 13 inches or 24 percent above normal. Water use is anticipated to increase moderately year-over-year as normal precipitation levels return to the region. The Water Authority will continue to implement long-term water use efficiency measures in the San Diego region and the Water Authority's investments in highly reliable supplies (such as Colorado River transfers, local seawater desalination, and in-region carryover storage) will help to buffer San Diego's exposure to supply shortages and support sustained growth in our local economy.

## Long-Range Planning

The Government Finance Officers Association (GFOA) recommends that all governmental entities use some form of strategic planning to provide a long-term perspective for service delivery and budgeting. The Water Authority has developed a comprehensive Long-Range Financing Plan (LRFP) that is monitored and reviewed frequently to adapt to the ever-changing environment. The current LRFP was developed with member agency involvement and approved by the Board of Directors in January 2016. The Water Authority plans to update the LRFP in Fall 2020.

The LRFP codifies certain enhanced financial policies relating to debt service coverage, reserve levels, and financial risks. The current LRFP highlights the transition to an operations and asset management-focused agency from a construction-oriented agency. The LRFP also addresses the near-term financial impacts of statewide demand regulations and provides additional information regarding key assumptions, sensitivity analysis, and non-bonded liabilities. More information about the LRFP can be found at: [http://www.sdcwa.org/sites/default/files/files/finance-investor/FINAL\\_LRFP2015.pdf](http://www.sdcwa.org/sites/default/files/files/finance-investor/FINAL_LRFP2015.pdf)

## Financial Policies

The Water Authority has adopted a comprehensive set of financial policies. During the current year, four of these policies were of most significance.

### **Debt**

The Water Authority has a Debt Management and Disclosure Policy that sets forth comprehensive guidelines for the issuance and management of the Water Authority's debt. Compliance with the policy is essential to ensure that the Water Authority maintains a sound debt position and that it protects the credit quality of its debt obligations. The Water Authority's policy establishes guidelines for its disclosure obligations and refinancing debt to achieve savings levels based on a call option pricing model.

### **Investments**

Annually, the Board adopts an investment policy that is in compliance with California Government Code Section 53600 et seq. The investment of idle funds is delegated by the Board to the Water Authority's Treasurer, who assumes full responsibility for the transactions of the investment program, including the investment of bond proceeds and debt service reserves. The objectives of the investment policy are safety, liquidity, yield, and public trust. The Water Authority's investments are in compliance with the adopted investment policy. Refer to Note 2 in the Notes to the Financial Statements for detailed investment information and the Continuing Disclosure Section for a more detailed overview of the policy.

### **Funds**

The Board has an adopted policy that governs the Rate Stabilization Fund's (RSF) balances. The policy established a minimum target balance and maximum target balance. The minimum RSF target balance is equal to the financial impact of 2.5 years of wet weather and the maximum target balance (cash reserve) is set equal to the financial impact of 3.5 years of wet weather. As a general rule, the Water Authority will transfer portions of its net water revenues exceeding its debt service coverage requirement into the RSF. From time to time, as needed, the Water Authority will transfer amounts from the RSF into water revenues to meet debt service coverage requirements, or to help provide adequate working capital to the Operating Fund.

## **Budget**

In addition to the financial statements, the Water Authority includes a schedule in the RSI and Other Supplementary Information Section that compares the final budget to the actual amounts for fiscal years ended June 30, 2018 and 2019. The schedule includes a reconciliation of adjustments from the budgetary basis to the Generally Accepted Accounting Principles (GAAP) basis.

This report also contains a Statistical Section, which provides both financial and non-financial trend data about the Water Authority and its operations, and a Continuing Disclosure Section, which provides both financial and non-financial information in compliance with the Water Authority's Continuing Disclosure requirements.

## **Highlights of the Capital Improvement Program**

The major Capital Improvement Program (CIP) activities include the following:



*Deployment of a robotic condition assessment tool on the First Aqueduct*

### **Asset Management Program**

The Water Authority continues to implement and develop the latest in inspection technologies and risk-assessment processes to safeguard its critical water conveyance infrastructure. With the latest data gathering techniques comes increased confidence in being able to optimize the timing of infrastructure rehabilitation spending.

Following a rolling 5-year Condition Assessment Plan, all infrastructure assets are evaluated for performance and integrity over the medium and long term. This allows a system-wide risk assessment to be performed ahead of every two-year budget cycle, with focus on executing projects to maximize the lifespan of the existing assets.

A number of projects have been enrolled into the FY2020 and 2021 budget cycle and include the assessment of the Water Authority's oldest pipelines, constructed beginning in 1947. Rehabilitation efforts are being performed concurrently on facilities associated with these pipelines to make maximum use of the extended pipeline outage times.

More information about the Asset Management Program and Relining and Pipe Replacement Program can be found at the project web pages at: <http://www.sdcwa.org/asset-management> and <http://www.sdcwa.org/pipeline-relining>



*DIAKONT Robot*



*Pure Technologies RFEC Tool*

## Capital Assets

The Water Authority also has a significant investment in capital assets approximating a \$3.5 billion net book value to ensure the safe and reliable delivery of water to the San Diego region. The capital assets are comprised of non-depreciable and depreciable assets. Non-depreciable assets include land, easements, mitigation bank credits and construction in progress. Depreciable assets include pipelines and dams, buildings and facilities, machinery and equipment, and intangible assets such as software and mitigation improvements, participation and capacity rights and water storage rights. These assets are monitored and maintained to ensure continuous performance and then replaced according to set schedules or as needed.

Supporting this practice is the Equipment Replacement Fund (ERF), created to receive monies designated for replacing machinery and equipment, computers, fleet vehicles, SCADA operating system and computer software when needed. As part of the budget adoption process, the Board authorizes monies to be deposited into the ERF where it will accrue over time to correspond back to the replacement cost of the individual asset lives. Footnotes 1(f) and 6-9 in the Notes to the Financial Statements provides further information on the Water Authority's Capital Assets.

## Major Initiatives

### Colorado River Plan

A critical step in Colorado River management was the finalization of the Drought Contingency Plan in May 2019. With prolonged drought causing record-low Lake Mead levels, the Colorado River Basin States spent over five years developing the Drought Contingency Plan to help build elevation in Lake Mead and prevent future shortages. Now complete, the Drought Contingency Plan parties have collectively agreed to make voluntary water contributions by reducing demand and implementing conservation measures to store water in Lake Mead. Over the past year, several updates were provided to the Water Authority Board and Member Agency Managers as progress on the Drought Contingency Plan was made and milestones were achieved. While not a party to the Drought Contingency Plan, the Water Authority has supplies to store in Lake Mead which would provide both local and Basin-wide benefits. Colorado River opportunities such as Lake Mead storage are a key focus in the next era of water management for the Water Authority and we will continue to work with our member agencies, California stakeholders, Colorado River Basin states, the Bureau of Reclamation, and binationally with Mexico on these issues going forward.



*Drought Contingency Plan Signing - May 2019*

## Energy Program

Energy is a significant cost in treating and delivering water to our member agencies. The Water Authority created the Energy Program to oversee agency-wide planning, regulatory, and operational energy-related issues regarding energy usage and production. The following initiatives are examples of the Energy Program's pursuit of opportunities to reduce energy demands and costs; stabilize water rates for our member agencies; and reduce greenhouse gas emissions for our communities by leveraging existing water infrastructure.

In June 2019, the Board adopted an updated Energy Management Policy (EMP) that focuses on six areas: energy supplies, existing system operations, new energy generation and storage, energy efficient equipment and features, collaborative relationships, and government relations. The EMP establishes goals including reducing energy costs at the Claude "Bud" Lewis Desalination Plant, continuing progress on the proposed San Vicente Energy Storage Facility, and using existing and new infrastructure to generate revenues to offset water rates.

Over the last year, the Water Authority developed a 1 Megawatt/2 Megawatt-hour commercial-sized battery system through a public-private-partnership agreement with no capital investment by the Water Authority. This battery system, installed at the Water Authority's Twin Oaks Valley Water Treatment Plant, stores grid energy and excess solar energy generated during low-cost, low demand times for release during high energy usage periods. This system is anticipated to save nearly \$100,000 annually in energy costs.



*Commercial Batteries at Twin Oaks Valley  
Water Treatment Plant*

Using existing water infrastructure to generate revenue, the Water Authority sells energy and Renewable Energy Credits (REC) from its 4.5-megawatt Rancho Peñasquitos Hydro-generation and Pressure Control Facility (Rancho Hydro). Currently, revenues from selling the energy and the RECs are estimated to be over \$750,000 annually. The Water Authority is evaluating the option of applying the energy generated at the Rancho Hydro facility to the Carlsbad Desalination plant for an estimated savings of \$1 Million annually in energy costs.



*Rancho Peñasquitos Hydro-Generation  
and Pressure Control Facility*

The Water Authority and City of San Diego are exploring a potential 500-megawatt pumped energy storage facility located at the San Vicente Reservoir, which is owned by the City and where both parties share water storage. The facility would consist of a closed-loop pumping system between the existing lower reservoir and a new, smaller reservoir located uphill. It would pump water uphill when renewable energy is plentiful to create a bank of stored energy that would be released to the lower reservoir by gravity at times when renewable energy supplies are unavailable and energy demand and costs are high. If developed, revenues generated could lessen upward pressure on water rates and support California's clean and renewable energy goals. To help advance this potential project, the City and Water Authority worked with consultants to develop a white paper entitled "Pumped Energy Storage: Vital to California's Renewable Energy Future" and can be found at: <https://www.sdcwa.org/san-vicente-energy-storage-facility>.

Reducing energy costs and exploring revenue generating projects, such as the San Vicente Energy Storage Facility, are the cornerstones of the Energy Program. By pursuing these initiatives and continuing to optimize energy usage at existing and proposed facilities, developing collaborative relationships with strategic partners, and working with government relations staff to support the Water Authority's energy legislative policies, the Water Authority will maximize energy reliability, which is crucial to fulfilling our water supply mission.



*San Vicente Energy Storage Facility*

## **Innovation Program**

The Water Authority's Innovation Program, which began in November 2015, provides structure and processes to identify creative ideas, which assist the Water Authority in meeting our objectives. The Water Authority's Innovation Program's goals are to capture the organization's collective innovative power, develop an innovation culture where all staff see themselves as innovators, build external collaborative partnerships and provide a conduit for outside vendors to partner with the Water Authority where business interests align. The Innovation Program includes the internal "Bright Idea" program, which collects innovative ideas throughout the organization. Externally, our innovation efforts align with our strategic direction, mission and vision, and include exchanging information with regional agencies, including the Water Authority's 24 member agencies. Two examples are the Water Authority sponsored Regional Innovation Forum and the Condition Assessment Technology Showcase.

## **Fiscal Sustainability Task Force**

In conjunction with the adoption of the Fiscal Years 2020 and 2021 Budget, the Board adopted to include the reconstitution of the Fiscal Sustainability Task Force (FSTF) to provide a forum for discussion and recommendations regarding the Water Authority Rates and Charges and financial policies, ensuring fair and proportionate recovery of capital investments and continued long term financial health of the Water Authority. The FSTF is comprised of a mix of Member Agency Managers and Water Authority Board Members to focus on the following themes:

1. Current fixed charges (Infrastructure Access Charge and Supply Reliability Charge)
2. Special Agricultural Water Rate
3. Capital Funding Strategy (PayGo and Debt)
4. Reserve Policies (including Rate Stabilization Fund)

Staff supporting the FSTF will include key Water Authority staff and professional consultants including a cost of service consultant and a financial advisor. Progress and results of the efforts of the FSTF will be reported to the Administrative and Finance Committee.

## **Prudent Financial Management**

### **Adopted Calendar Year 2020 Rates and Charges**

In June 2019, consistent with the Water Authority's annual rate setting process, the Board approved adjustments to rates and charges for Calendar Year 2020. These adjustments amount to an increase of \$65/acre foot (AF) or 4.8

percent for untreated water and \$69/AF or 4.3 percent for treated water. These increases are mitigated by planned rate relief measures that included a projected draw of the Rate Stabilization Fund (to reflect revised (lower) target levels) and refunding of the 2012 Pipeline Bonds that saved nearly \$18 million on a present value basis over the lifetime of the refunded bonds. The key rate and charge drivers were MWD's supply and transportation rate increases, increased QSA water deliveries, and the reduced water sales environment.

### **Rating Agency affirmation of ratings**

The Water Authority continued to hold long-term senior lien credit ratings of AA+, and Aa2 from Fitch and Moody's, and AAA by Standard & Poor's. Long-term subordinate lien credit ratings are usually 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 by Standard and Poor's, Fitch, and Moody's. These ratings were affirmed in June 2019.

### **Adopted Fiscal Year 2020 and 2021 Budget Highlights**

In June 2019, the Water Authority Board formally adopted the \$1.69 billion Fiscal Years 2020 and 2021 Budget. Water purchases and treatment represented 64.2 percent or \$1.08 billion of the total Water Authority budget. This includes the costs of water, treatment, transportation and payments for groundwater storage. The CIP represented 9.6 percent or \$162.2 million of the total budget, as the Water Authority continues to shift from the construction of new infrastructure toward asset management. The operating departments' budget represented 6.4 percent of the total budget or \$108.5 million.

### **Equipment Replacement Fund**

The Water Authority reviewed and revised the Equipment Replacement Fund and internal policy guidelines in Fiscal Year 2019. The changes were incorporated in the Fiscal Years 2020 and 2021 budget. The new policy will stabilize the fund balance and allow for future planning with transparency and greater accountability of equipment replacements. The fund will maintain a balance of no less than the value of the highest cost item within the fund. Current capital assets eligible for replacement in the Equipment Replacement Fund include computers, fleet vehicles and equipment, the SCADA operating system, and large software replacements.

### **Defined Benefit Pension Plan Funding Policy**

After carefully assessing the Water Authority's pension plan liabilities, the Board adopted a pension plan funding policy establishing a 75-85 percent funded target range, setting a twenty-year term to achieve this target, electing to make payments directly to CalPERS and designating the source for additional supplemental payments to come from budgetary savings and one-time revenues.

### **Adopted Debt Management and Disclosure Policy**

The most significant change in the Debt Policy adopted by the Board in January 2018 was the addition of a disclosure section and an update to the title of the Policy now stated as the Debt Management and Disclosure Policy. As a result of the 2017 Security Exchange Commission amendments to Rule 15c2-12, under the Securities Exchange Act of 1934 that would add: 1) the incurrence of material financial obligations, or any agreement to certain covenants, events of default, remedies, priority rights or other terms that could affect securities holders; and 2) report of an occurrence of such financial obligations impacting policies and practices of issuers and obligors of municipal securities. The Water Authority's new debt policy reflects these changes.

Topics addressed include guidelines involving public statements made by Water Authority officials, initial market disclosure involved with securities offerings, and compliance with continuing disclosure. The Policy also includes additions/changes to arbitrage management and post-issuance tax compliance, as well as additions under Section IX.

### **Adopted Statement of Investment Policy and Long-Term Investment Strategy**

In December 2018, the Water Authority Board approved the Annual Statement of Investment Policy for Calendar Year 2019. Annual statements of investment policy to the legislative body are optional per California Government Code Section 53646. The Policy and permitted investments are consistent with California Government Code. The Policy allows for portfolio performance enhancement through diversification of investment types. The annual review and adoption of the Policy, along with the submission of the monthly Treasurer's Report to the Board, is central to a transparent portfolio management process. With the approval of the 2019 Investment Policy, the Water Authority continued toward a structure to safely enhance earnings and long-term capital appreciation through investments in high quality, longer-maturity investments. Taking full advantage of the investment types permitted by California Government Code can increase overall diversification and safety for the portfolio, while providing additional opportunities to enhance long-term return and value to the Water Authority's investment program.

### **Adopted Updated Rate Stabilization Fund Policy**

In June 2018, the Water Authority Board formally adopted a change in the RSF Policy. Since 2006 the RSF was calculated based on 2.5 years (3.5 years max) of wet weather, and the projection that the Water Authority would experience a 25 percent reduction in water sales. However, wet weather events in 2005 and 2011 demonstrated a reduction of water demand in wet years of just 14-15 percent. The Water Authority revised the reserve policy down to a 20 percent reduction in water sales effective January 1, 2019, and to a 15 percent reduction in water sales effective January 1, 2021.

### **Metropolitan Water District Litigation**

The Water Authority has sued MWD in various related cases, mainly pertaining to alleged rate overcharges by MWD. The Water Authority has been paying the disputed MWD rates over the years, so the cases generally relate to potential damages to be awarded to the Water Authority, not additional new payments or damages to MWD. The general status of these cases:

#### **2010/2012 Rate Cases:**

The Water Authority won a trial court award from MWD on rate overcharges, interest, and attorney's fees for years 2011-2014. On June 21, 2017, the First District Court of Appeal (Court of Appeal) issued its decision in the MWD appeal of that trial award. The Court of Appeal decision may be found at 12 Cal.App.5th 1124. The Court of Appeal sided with the Water Authority on most issues, but allowed MWD to charge the Water Authority certain California State Water Project costs for water being transported under an exchange agreement, thereby potentially significantly reducing the ultimate monetary award to the Water Authority. That Court of Appeal decision was subject to a Petition for Review to the California Supreme Court, which was filed by the Water Authority on July 31, 2017. The Supreme Court, however, denied review on September 27, 2017. The Court of Appeal opinion therefore becomes final, and the case has returned to the trial court for further proceedings consistent with the Court of Appeal's ruling. The case is proceeding at the trial court.

**2014 Rate Case:**

This case challenges MWD's rates adopted in 2014 for 2015 and 2016, was transferred to San Francisco Superior Court, and currently remains stayed. However, the stay may be lifted in the future, given the above result in the 2010/2012 cases.

**2016 Rate Case:**

This case challenges MWD's rates adopted in 2016 for 2017 and 2018, and was transferred to San Francisco Superior Court. The Water Authority, MWD, and the eight MWD member agencies who answered the 2016 complaint entered into a stipulation (1) allowing the Water Authority to amend the 2016 complaint to add claims under the Exchange Agreement and for monetary damages; and (2) staying the 2016 case pending the outcome of the appeal in the 2010/2012 cases. On November 14, 2016, the Water Authority filed its amended complaint, and the 2016 case remains stayed. However, the stay may be lifted in the future, given the above result in the 2010/2012 cases.

**2017 Rate Case:**

This case challenges MWD's rates adopted in 2017 for 2018 and has been transferred to San Francisco Superior Court, where it is stayed. The stay may be lifted in the future, given the above result in the 2010/2012 cases.

**2018 Rate Case:**

This case challenges MWD's rates adopted in 2018 for 2019/2020 and was transferred to San Francisco Superior Court, where it is stayed. The stay may be lifted in the future, given the above result in the 2010/2012 cases.

All the above cases have been the subject of settlement talks between the parties. To date no settlement has been reached, but though the litigation continues the parties will also continue to consider ways to potentially resolve their disputes.

**Member Agency Detachment:**

The Water Authority has 24 member agencies. Two of those members at the north end of the Water Authority service area, Fallbrook Public Utilities District and Rainbow Municipal Water District, have informed the Water Authority that they plan to file applications with the San Diego Local Agency Formation Commission ("LAFCO") to detach from the Water Authority and annex into Eastern Municipal Water District in Riverside County. As of the date of this letter, such applications have not yet been filed. Should the requests be made, the Water Authority anticipates there may be a multi-year process to review the requests and for the LAFCO to reach a decision which would likely then go to the voters. The Water Authority cannot provide any opinions as to whether the detachment applications would be denied, or approved, or how they might be conditioned by the local LAFCO.

For detailed information on the Water Authority's rate litigation, visit: <http://www.sdcwa.org/mwdrate-challenge>. For any other information, contact the General Counsel's office, 4677 Overland Ave., San Diego, CA 92123, (858) 522-6790.

## California Weather and Supply

Following a dry start to Water Year (WY) 2019, hydrologic conditions improved in California with a shift to wetter weather beginning in late November 2018 that resulted in a significant improvement to the northern Sierra snowpack. A series of storms in February 2019 more than doubled the northern Sierra snowpack from January levels, and storm systems in March continued to produce additional snow, resulting in a snowpack that measured

163 percent of normal as of April 1, the typical seasonal peak. Precipitation for WY 2019 was also above average with the Northern Sierra 8-Station Index accumulated precipitation for October 2018 through July 2019 totaling over 68 inches, or 135 percent of normal. The resulting unimpaired statewide runoff through the spring of 2019 was at 125 percent of average, compared to 75 percent of average at the same time last year. These conditions prompted the Department of Water Resources to set the State Water Project contractors' Table A allocation for 2019 at 75 percent of requested supplies – more than double the previous year's Table A allocation of 35 percent of requested supplies. Water Authority staff continues to closely monitor seasonal weather patterns and evolving hydrologic conditions to assess potential impacts on the San Diego region's water supplies.

## Continuing Water Use Efficiency

In May 2018, Senate Bill 606 and Assembly Bill 1668 were signed into law by then California State Governor Jerry Brown. The laws are intended to help the state better prepare for droughts and climate change through various provisions, including the creation of water-use objectives for retail water agencies (not individual households or businesses). The Water Authority and its member agencies were engaged in the stakeholder process to represent the San Diego region's interests. For wholesale water suppliers like the Water Authority, the water-use objective provisions of the law do not apply. However, there are other provisions of the law that address water supply planning that apply to the Water Authority.

The new water-use objectives for retail water agencies will be calculated based on aggregated standards for indoor and outdoor use, system water loss, variances, and potable reuse credit. The state initiated work on developing the standards using a stakeholder process. The standards must be adopted by the State Water Resources Control Board by June 2022. Retail water suppliers will report compliance beginning in November 2023, and by November 1 every year thereafter. Starting in 2027, fines could be issued to retail water agencies that do not meet their water-use objectives. The fines would not be levied on individual households or businesses. The laws also established new planning and submittal requirements for agricultural water management and urban water management plans. The Water Authority will work closely with its member agencies to remain engaged in the process as the new water-use objectives and reporting requirements are implemented.

## Public Outreach and Conservation

The Water Authority has a decades-long track record of successfully managing comprehensive and increasingly sophisticated public outreach, conservation and education programs to address near-term concerns such as drought and supply conditions. It has also effectively deployed multi-year strategies to inform and educate the public on the value of a reliable water system, member agency investments and efficient water use practices. In addition, the Water Authority manages a suite of education offerings to inform the next generation about the importance of using precious water resources wisely.

In Fiscal Year 2019, the Water Authority Board approved multi-year funding to continue an enhanced communications program to boost appreciation for the ratepayer investments in water reliability necessary to support the region's \$231 billion economy and its 3.3 million residents. The program, called "Brought to You by Water," highlights iconic San Diego industries, connecting the importance of water reliability to business attraction and expansion.



The program is supported with a focused website, digital and social media advertisements, television advertisements and extensive community outreach. The program website is located at <https://b2ubyh2o.org/>

This year, the member agencies helped to support the “Brought to You by Water” program through active social media engagement and through participation at several events held around the county to highlight the importance of reliable water supplies to key local industries. For example, in February, the Water Authority Board declared it to be brewing month, and several events were held in partnership with member agencies and local breweries to highlight the connection between water and the \$1.2 billion local brewing industry.



*Water Authority and Member Agencies celebrated Regional Industries that are Brought to You by Water.*

The Water Authority also joined with member agencies and the San Diego County Farm Bureau to inform the public about the importance of the \$4.8 billion agricultural industry to the region’s economy through events, grocery store bag giveaways and video productions.

An important component of outreach efforts is the Water Authority’s collaboration with member agencies. For decades, the Water Authority has worked in partnership with member agencies through its Joint Public Information Council to educate the public about the importance of a safe and reliable water supply during both drought and non-drought periods.

The Water Authority has also raised the region’s water IQ through its groundbreaking and award-winning Citizens Water Academy, which now boasts more than 650 civically engaged alumni. Further, the Water Authority is an active leader in the region’s civic affairs through engagement with numerous chambers of commerce, economic development councils and other stakeholders. As part of this effort, staff organizes an active, countywide speaker’s bureau, which coordinated nearly 100 presentations last fiscal year to inform groups about the Water Authority’s diversification strategy and timely water policy issues.



As a result of a successful court ruling, the Water Authority became eligible for \$2.4 million in funds from MWD. The Water Authority had been barred from participating in the Member Agency Administered Program (MAAP) since 2011 after it challenged MWD’s rates. The Water Authority used the MAAP funds, in addition to grants from the state of California, to support business and residential water use efficiency efforts through device incentives, education and rebates for turf conversions. These grants also helped to support popular education programs to train landscape professionals in best practices and help homeowners design water smart landscapes. In addition, the Water Authority helped its member agencies develop and successfully receive MAAP funding for a variety of agency-specific programs, including hydro-stations at schools, informational videos and water smart plant rebates.

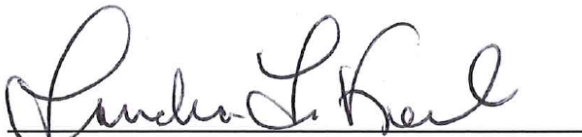
## Awards and Acknowledgements

The GFOA awarded a Certificate of Achievement for Excellence in Financial Reporting to the Water Authority for its CAFR for the fiscal year ended June 30, 2018. This is the nineteenth consecutive year that the Water Authority has achieved this prestigious award. In order to be awarded a Certificate of Achievement, the Water Authority had to publish an easily readable and efficiently organized CAFR that satisfies both GAAP and applicable legal requirements.

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

We would like to thank the Board for its continued leadership in excellence in financial management. Additionally, this report could not have been accomplished without the hard work and dedication of the entire Finance Department with recognition to the Accounting Division. Special appreciation is extended to: Christopher W. Woidzik, Controller; Geena Balistrieri and Wendy Joplin, Accounting Supervisors; Jocelyn Matsuo, Senior Accountant; David Gore, Senior Management Analyst; Monika Wojcik, Management Analyst; and Nicole Spriggs, Administrative Assistant. We also wish to express our appreciation to all departments that assisted and contributed to the preparation of this report.

Respectfully submitted,



Sandra L. Kerl  
Acting General Manager



Lisa Marie Harris  
Director of Finance/Treasurer



Government Finance Officers Association

**Certificate of  
Achievement  
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in Financial  
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Presented to

**San Diego County Water Authority  
California**

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended

**June 30, 2018**

*Christopher P. Morill*

Executive Director/CEO

## San Diego County Water Authority Board of Directors

Chair	Jim Madaffer, <b>City of San Diego</b>
Vice Chair	Gary Croucher, <b>Otay Water District</b>
Secretary	Christy Guerin, <b>Olivenhain Municipal Water District</b>

### **Carlsbad Municipal Water District**

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Keith Lewinger

### **City of Del Mar**

Mel Katz

### **City of Escondido**

John Masson

### **City of National City**

Ron Morrison

### **City of Oceanside**

Brian Boyle

### **City of Poway**

Barry Leonard

### **City of San Diego**

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Tony Heinrichs  
Elsa Saxod  
Fern Steiner  
Almis Udry

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Joel Scalzitti

### **Lakeside Water District**

Frank Hilliker

### **Otay Water District**

Tim Smith

### **Padre Dam Municipal Water District**

Doug Wilson

### **Pendleton Military Reservation**

John Simpson

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David Barnum

### **Rincon Del Diablo Municipal Water District**

James Murtland

### **San Dieguito Water District**

Joe Mosca

### **Santa Fe Irrigation District**

Michael Hogan

### **South Bay Irrigation District**

Jose Preciado

### **Vallecitos Water District**

Betty Evans

### **Valley Center Municipal Water District**

Gary Arant

### **Vista Irrigation District**

Marty Miller

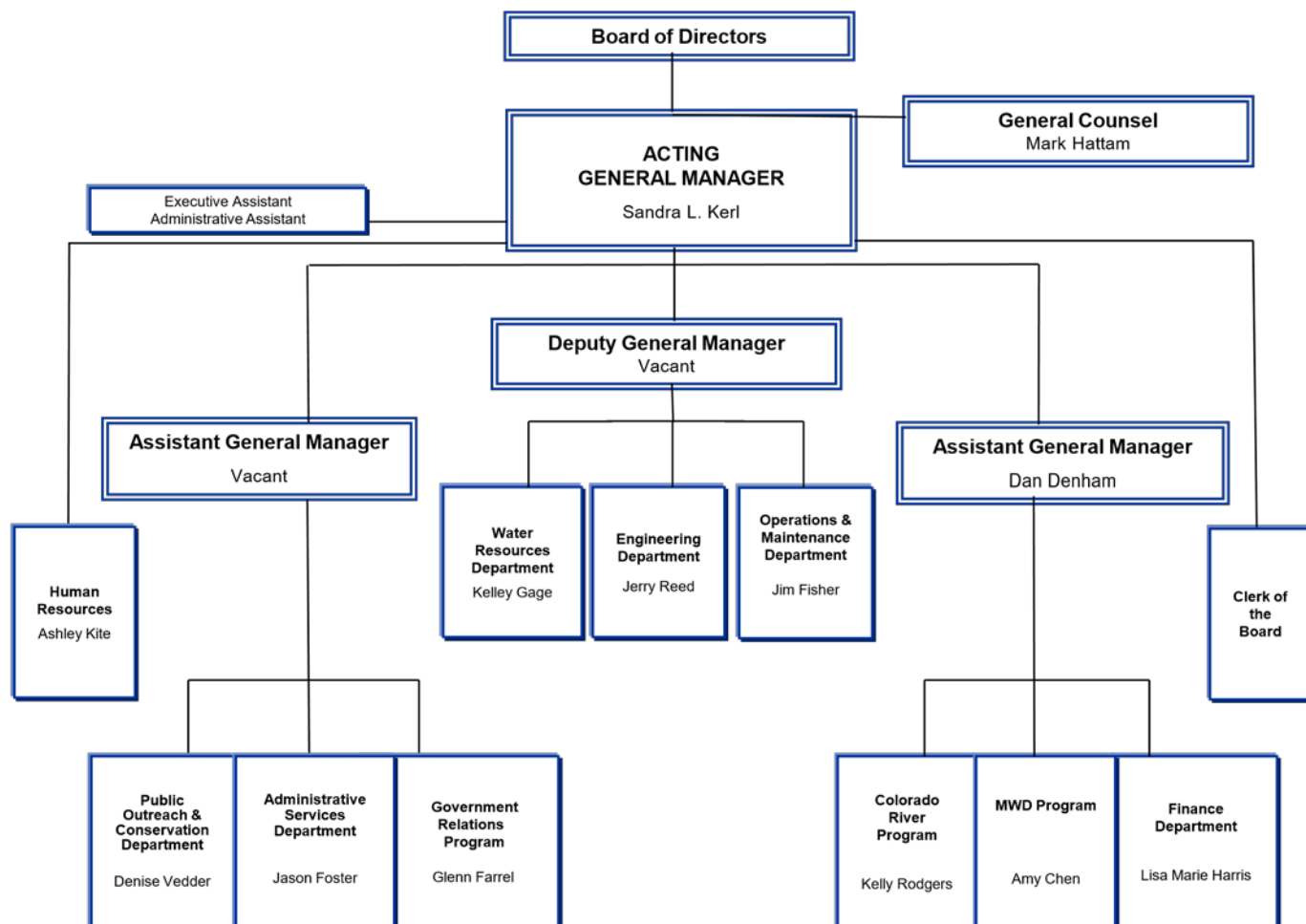
### **Yuima Municipal Water District**

Ron Watkins

### **County of San Diego, Representative**

Jim Desmond

## San Diego County Water Authority Organizational Structure



Financial Section

1944 - 2019





## **Independent Auditor's Report**

Board of Directors  
San Diego County Water Authority  
San Diego, California

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

We have audited the accompanying financial statements of the San Diego County Water Authority (the "Water Authority") as of and for the year ended June 30, 2019, 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 audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

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

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

## **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, 2019, and the changes in financial position and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

## **Report on Summarized Comparative Information**

We previously audited the Water Authority's 2018 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated October 26, 2018. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2018 is consistent, in all material respects, with the audited financial statements from which it has been derived.

## **Other Matters**

### *Required Supplementary Information*

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

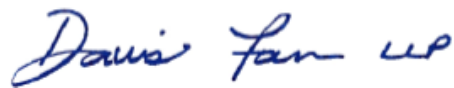
### *Other Information*

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Water Authority's basic financial statements. The *budgetary comparison schedule*, *introductory section*, *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 *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 audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the *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 section* have not been subjected to the auditing

procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

**Other Reporting Required by *Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated October 16, 2019 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. 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 the Water Authority's internal control over financial reporting and compliance.

A handwritten signature in blue ink that reads "Davis Fan" followed by a stylized flourish.

Irvine, California  
October 16, 2019

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## Management's Discussion and Analysis

1944 - 2019





## 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 year ended June 30, 2019. 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 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 Statement of Net Position** presents 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 Statement of Revenues, Expenses, and Changes in Net Position** presents 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 Statement of Cash Flows** reports cash receipts, cash payments, and net changes in cash resulting from operating activities, noncapital 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. See Note 1(a) of the Notes for further information regarding these entities.

## Financial Analysis of the Water Authority

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

	June 30,	
	2019	2018
<b>Assets:</b>		
Capital assets	\$ 3,463.1	\$ 3,464.6
Other assets	549.0	606.4
<b>Total assets</b>	<b>4,012.1</b>	<b>4,071.0</b>
<b>Deferred outflows of resources</b>	<b>65.4</b>	<b>78.5</b>
<b>Liabilities:</b>		
Long-term liabilities	1,961.6	2,029.3
Other liabilities	502.0	540.1
<b>Total liabilities</b>	<b>2,463.6</b>	<b>2,569.4</b>
<b>Deferred inflows of resources</b>	<b>11.9</b>	<b>3.1</b>
<b>Net position:</b>		
Net investment in capital assets	1,225.0	1,154.7
Restricted	65.6	120.4
Unrestricted	311.4	301.9
<b>Total net position</b>	<b>\$ 1,602.0</b>	<b>\$ 1,577.0</b>

### Net Position

Over time net position may serve as a useful indicator of an entity's financial position. Assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by \$1,602.0 million and \$1,577.0 million as of June 30, 2019 and 2018, respectively. Of these amounts, \$311.4 million and \$301.9 million in unrestricted net position as of June 30, 2019 and June 30, 2018, respectively, were available for current approved services and construction projects, and for new programs for the region's citizenry. During Fiscal Year 2019, total net position increased by \$25.0 million, or 1.6 percent. The largest portion of the Water Authority's net position, 76.5 percent, reflected the investment in capital assets less any related outstanding debt used to acquire those assets.

## Capital Assets

### San Diego County Water Authority Capital Assets

(Net of Accumulated Depreciation and Amortization), in Millions (\$)

	June 30,	
	2019	2018
Capital Assets - Non-Depreciable	\$ 129.9	\$ 118.3
Capital Assets - Depreciable, net	3,333.2	3,346.3
<b>Total</b>	<b>\$ 3,463.1</b>	<b>\$ 3,464.6</b>

Capital assets are classified into two categories: non-depreciable and depreciable capital assets. Non-depreciable capital assets include land, easements, mitigation bank credits, and construction in progress. Depreciable capital assets include pipelines and dams, buildings and facilities, equipment, computer systems software, participation and capacity rights, and storage rights, net of accumulated depreciation and amortization. In accordance with the Water Authority's capitalization policy, capital assets under construction are capitalized to construction in progress and when a project is substantially complete and has been issued a notice of operational acceptance or has been placed in service, it is reclassified to the appropriate depreciable category. Additional information regarding capital assets can be found in the Notes 6 – 9 of the Notes to the Financial Statements.

During Fiscal Years 2019 and 2018, total capital asset additions were \$62.2 million and \$75.0 million, respectively. Of those amounts, \$59.5 million and \$69.5 million were additions to construction in progress, a non-depreciable category of capital assets, for the Fiscal Years ended June 30, 2019 and 2018, respectively. Other non-depreciable additions consisting of land and easements additions in Fiscal Years 2019 and 2018 were \$5 thousand and \$1.1 million, respectively. Depreciable capital asset additions in Fiscal Years 2019 and 2018 relating to buildings and facilities, machinery and equipment, and participation and capacity rights additions were \$2.6 million and \$4.5 million, respectively.

There were two projects with material commitments under construction contracts existing at June 30, 2019 totaling \$26.5 million. The following projects accounted for the majority of the 82 capital projects expenditures incurred during Fiscal Year 2019:

P5 PCCP Relining Point of Delivery to Sage Road	\$ 28.3 million
First Aqueduct Structures and Lining Rehabilitation	10.3 million
Vallecitos 11/Vista Irrigation District 12 Flow Control Facility Rehabilitation	2.9 million
Mission Trails FRS II and Flow Control Facility	1.9 million
Moosa Canyon Erosion Control	1.3 million
San Vicente Energy Storage	1.3 million
Comprehensive Condition Assessment of First Aqueduct Reinforced Concrete	1.2 million

## Debt Administration

### Short-Term Debt

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

	June 30,	
	2019	2018
Tax-Exempt Commercial Paper Program	\$ 245.0	\$ 245.0
Extendable Commercial Paper Program	100.0	100.0
<b>Total</b>	<b>\$ 345.0</b>	<b>\$ 345.0</b>

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.

There was no change to the outstanding amount in the short-term debt program for Fiscal Year 2019. During the year the Water Authority extended the Series 9 Tax-Exempt Commercial Paper Notes to July 2023. The Series 8 Tax-Exempt Commercial Paper Notes expired in June 2019 and were replaced with the Series 10 Tax-Exempt Commercial Paper Notes expiring in June 2024. The non-tax exempt Extendable Commercial Paper Notes, Series 1 do not expire. The Water Authority has a practice of extending its short-term debt borrowings to service its capital improvement program requirements as well as provide a balanced portfolio debt approach.

### Long-Term Debt

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

	June 30,	
	2019	2018
Revenue Bonds	\$ 1,742.2	\$ 1,793.7
Certificates of Participation	34.3	42.6
<b>Total</b>	<b>\$ 1,776.5</b>	<b>\$ 1,836.3</b>

Long-term debt consists of revenue bonds and certificates of participation used to fund the capital improvement program. The Water Authority continues to hold long-term senior lien credit ratings of AAA, AA+, and Aa2 from Standard & Poor's, Fitch and Moody's, respectively. Long-term subordinate lien credit ratings are usually 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 by Standard & Poor's, Fitch, and Moody's, respectively. More detailed information on long-term debt is presented in Note 11 of the Notes.

As of June 30, 2019, the Water Authority had \$1.8 billion in long-term debt outstanding, a 3.3 percent decrease compared to Fiscal Year 2018. As of June 30, 2019, and 2018, the total Revenue Bonds outstanding approximated \$1.7 billion and \$1.8 billion, respectively, and total Certificates of Participation were \$34.3 million and \$42.6 million, respectively. During Fiscal Year 2019, \$34.1 million of scheduled revenue bond and \$8.3 million of certificates of participation principal payments were made in addition to the net reduction of \$17.4 million of revenue bonds from the refunding of \$200.6 million outstanding balance of the Water Furnishing Revenues Bonds, Series 2012 with the \$183.2 million Water Furnishing Revenue Refunding Bonds, Series 2019.

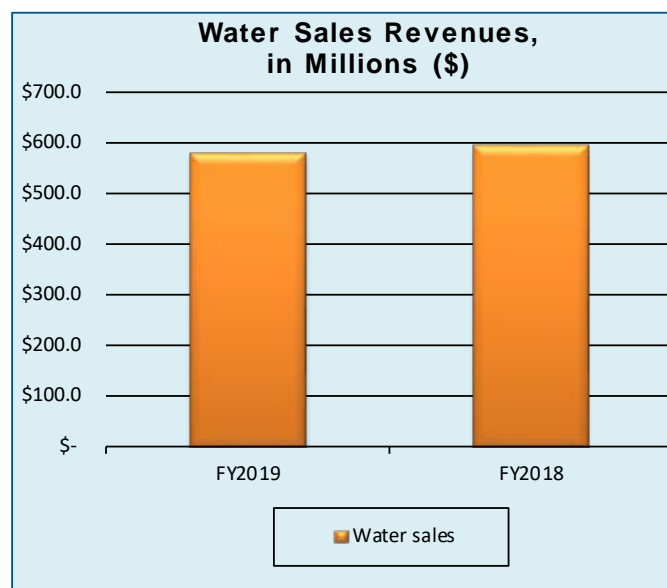
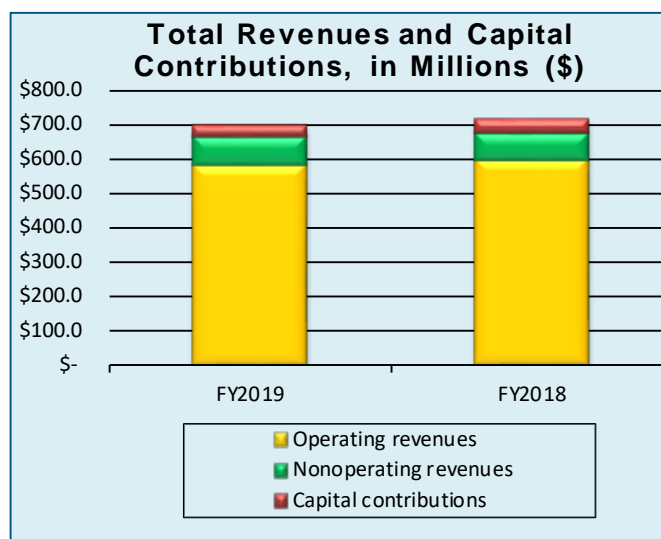
## San Diego County Water Authority

### Statement of Revenues, Expenses and Changes in Net Position, in Millions (\$)

	June 30,	
	2019	2018
<b>Operating revenues:</b>		
Water sales	\$ 579.6	\$ 591.8
Other revenues	4.6	4.1
<b>Total operating revenues</b>	<b>584.2</b>	<b>595.9</b>
<b>Nonoperating revenues:</b>		
Property taxes and in-lieu charges	14.7	13.8
Infrastructure access charges	33.2	32.5
Investment income	13.8	4.3
Other income	9.6	19.2
Intergovernmental	11.3	10.7
Gain on sale/retirement of capital assets	-	0.1
<b>Total nonoperating revenues</b>	<b>82.6</b>	<b>80.6</b>
<b>Total revenues</b>	<b>666.8</b>	<b>676.5</b>
<b>Operating expenses:</b>		
Cost of sales	450.2	442.4
Operations and maintenance	21.5	24.2
Planning	9.6	9.2
General and administrative	16.3	16.9
Depreciation and amortization	62.7	62.8
<b>Total operating expenses</b>	<b>560.3</b>	<b>555.5</b>
<b>Nonoperating expenses:</b>		
Interest expense	97.1	99.9
Debt issuance costs	3.7	0.2
Other expenses	11.7	39.5
<b>Total nonoperating expenses</b>	<b>112.5</b>	<b>139.6</b>
<b>Total expenses</b>	<b>672.8</b>	<b>695.1</b>
<b>Income before capital contributions</b>	<b>(6.0)</b>	<b>(18.6)</b>
<b>Capital contributions:</b>		
Capacity charges	19.8	28.2
Water standby availability charges	11.2	11.1
<b>Total capital contributions</b>	<b>31.0</b>	<b>39.3</b>
<b>Changes in net position</b>	<b>25.0</b>	<b>20.7</b>
<b>Net position, beginning of year</b>	<b>1,577.0</b>	<b>1,556.3</b>
<b>Net position, end of year</b>	<b>\$ 1,602.0</b>	<b>\$ 1,577.0</b>

## Revenues by Source

Total revenues (operating and nonoperating) and capital contributions for the Fiscal Years 2019 and 2018 were \$697.8 million and \$715.8 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 2019, water sales and other operating revenues, nonoperating revenues, and capital contributions accounted for 83.8 percent, 11.8 percent and 4.4 percent, respectively, of the total revenues and capital contributions.



## Operating Revenues

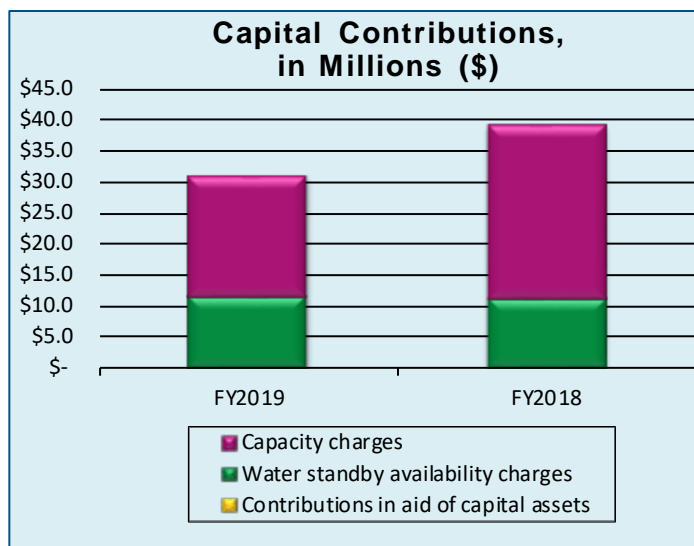
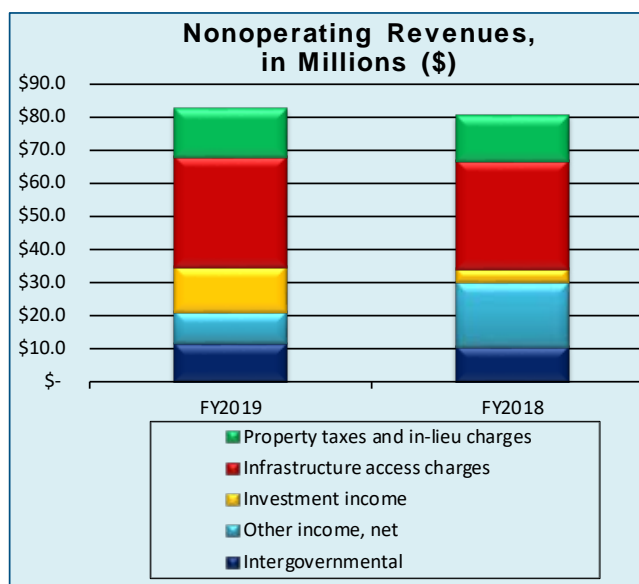
Water sales revenue is the principal source of revenue and totaled \$579.6 million for Fiscal Year 2019, a decrease of \$12.2 million or 2.1 percent from the Fiscal Year 2018 total of \$591.8 million. Overall in Fiscal Year 2019, total water deliveries were lower by 5.3 percent to 378,528 acre-feet (AF) from 399,826 AF in Fiscal Year 2018. This decrease was attributed to (1) the commencement of water deliveries through the Indian Water Authority to Vista Irrigation District and City of Escondido that directly offset sales to those agencies; (2) greater use of local surface water supplies by member agencies; and (3) the effect of heavy rains in the winter months. Additionally, other operating revenues increased by \$0.5 million compared to Fiscal Year 2018 primarily due to the Hydroelectric revenues being higher

in Fiscal Year 2019 by \$0.8 million resulting from a more active management strategy being implemented by an outside scheduling coordinator. Since the expiration of the power purchase agreement in 2017, an outside scheduling coordinator has been contracted to assist in actively managing energy and Renewable Energy Credits and this is behind the increased revenues. The other operating revenues category was reduced by a \$0.3 million decrease in miscellaneous revenues from FY18 that vary from year to year.

## Revenues by Source (continued)

### Nonoperating Revenues

Nonoperating revenues were \$2.0 million higher in Fiscal Year 2019 compared to Fiscal Year 2018. Investment income increased by \$9.5 million benefitting from (1) higher interest rates, (2) the favorable change in fair market value of investments and (3) the shift in investment strategy to longer-term investments as a response to the changing interest rate environment. This was equally offset by the reduction to Other Income due to receipts of the \$7.2 million shortfall revenue payment related to the Claude “Bud” Lewis Carlsbad Desalination Plant and \$0.6 million of additional miscellaneous income received in Fiscal Year 2018. The other nonoperating revenues categories experienced modest changes during the year comprising the remaining \$2.0 million increase.

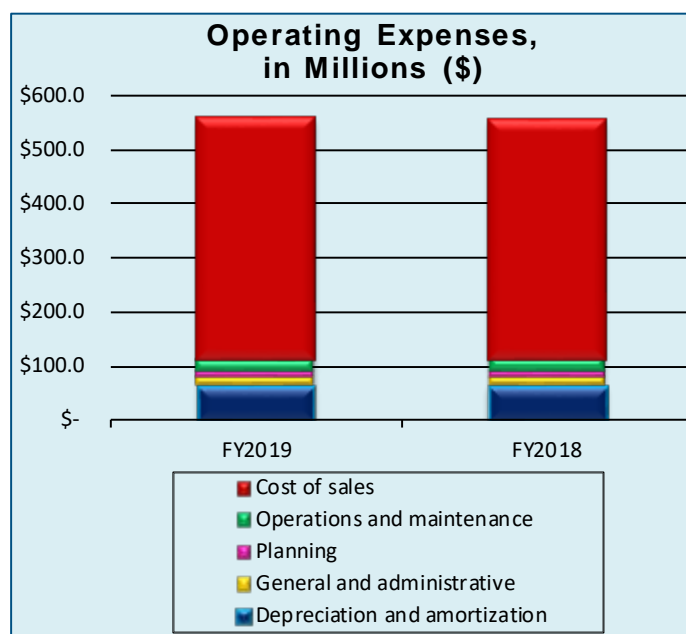
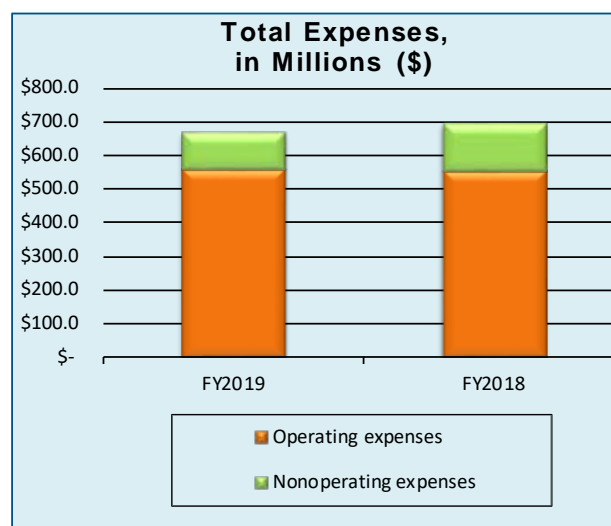


### Capital Contributions

Capital contributions decreased by \$8.3 million in Fiscal Year 2019 compared to Fiscal Year 2018. The change was the result of a \$8.4 million decrease in capacity charges revenue resulting from a decrease in building permits primarily related to residential housing construction that was offset by a \$0.1 million increase in water standby availability charge revenue. For the second year in a row there were no revenues related to contributions in aid of capital assets due to project delays or cancellations by other agencies. It is anticipated that minor revenues will be seen in the next fiscal year.

## Expenses by Function

Total expenses for Fiscal Years 2019 and 2018 were \$672.8 million and \$695.1 million, respectively. Operating expenses include the cost of water sales, operating department/program expenses, and depreciation and amortization expenses. Operating expenses were \$560.3 million and \$555.5 million for Fiscal Years 2019 and 2018, respectively. Nonoperating expenses, consist of interest, debt issuance costs, loss on sale/retirement of capital assets and other expenses. Total nonoperating expenses were \$112.5 million and \$139.6 million for Fiscal Years 2019 and 2018, respectively. Interest expense for Fiscal Year 2019 was \$97.1 million and \$99.9 million, net of capitalized interest, for Fiscal Year 2018.



## Operating Expenses

Total operating expenses increased by \$4.8 million in Fiscal Year 2019 compared to Fiscal Year 2018. The 0.9 percent increase in operating expenses in Fiscal Year 2019 was due to a \$7.8 million increase in the cost of water sales due to increased water purchasing and treatment costs. The increase was attributable to MWD's supply costs increasing in excess of 4% and the Water Authority purchasing 30,000-acre feet more of water from IID under the Transfer of Conserved Water agreement which was incrementally higher but more reliable as a source of water. Total operating department expenses decreased by \$2.9 million in Fiscal Year 2019 compared to Fiscal Year 2018 primarily due to lower pension expenses and operations and maintenance costs at various facilities.

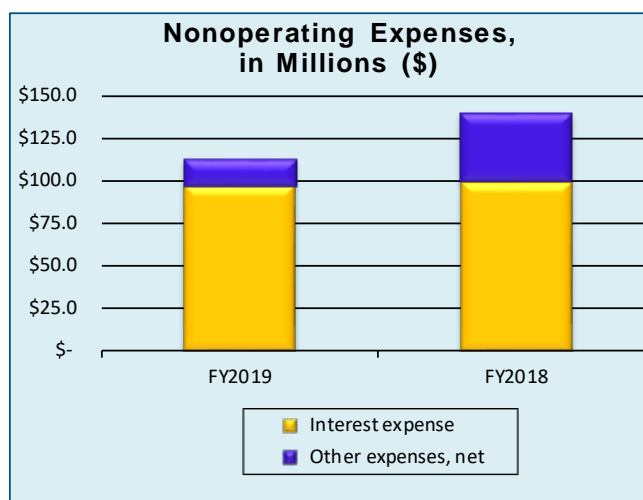
Depreciation and amortization expense decreased by \$0.1 million from Fiscal Year 2018 due to certain assets achieving their full depreciable life during the year and for other assets the reduction was due to the assets being disposed of during the year.

## Expenses by Function (continued)

### Nonoperating Expenses

Total nonoperating expenses, consisting primarily of interest expense, debt issuance costs and other expenses, totaled \$112.5 million and \$139.6 million in Fiscal Years 2019 and 2018, respectively. Interest costs remain similar to the prior year with \$97.1 million recorded in Fiscal Year 2019 and \$99.9 million recorded in Fiscal Year 2018. The reduction is due to lower rates on the short-term debt. The Water Authority adopted GASB 89 in Fiscal Year 2018 thereby no longer permitting interest costs to be capitalized to projects during construction, so it is now expensed. Interest costs remain a significant part of nonoperating expenses and will continue to do so until long-term debt principal begins to be paid down according to the set payoff schedules. Debt issuance costs were higher and amounted to \$3.7 million in Fiscal Year 2019 compared to \$0.2 million in Fiscal Year 2018. The increase was attributable to the refunding of the Water Furnishing Revenue Bonds, Series 2012 (Pipeline Bonds) and issuance of the 2019 Water Furnishing Revenue Refunding Bonds, Series 2012 (Pipeline Bonds) and additional minor costs related to extensions on the short-term debt issues while continuing to keep the same amount of short-term debt outstanding. The refunding resulted in a cash flow savings of \$35.0 million, an economic gain of \$17.8 million, and a deferred gain on refunding the 2012 Bonds of \$4.3 million.

Other expenses decreased by a net \$27.8 million in Fiscal Year 2019 compared to Fiscal Year 2018 primarily due to the large dollar value of projects written-off in Fiscal Year 2018. Fiscal Year 2019 did experience \$0.9 million of construction in progress costs written off due to the expensing of demolition costs as they are incurred and then removal of minor balances on older delayed projects, as well as a \$1.6 million increase in costs for the continuing maintenance costs associated with the Mission Trails Chlorine Injection project and Skinner Plant project.



### 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 Christopher W. Woidzik, CPA, Controller in the Finance Department at the San Diego County Water Authority, 4677 Overland Avenue, San Diego, California 92123, via email at [cwoidzik@sdewa.org](mailto:cwoidzik@sdewa.org), or 858-522-6670.

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Financial Statements

1944 - 2019





**San Diego County Water Authority**  
**Statement of Net Position**  
**June 30, 2019**  
**(with comparative data as of June 30, 2018)**

	2019	2018
<b>ASSETS</b>		
<b>Current assets:</b>		
Cash and investments (Note 2)	\$ 118,299,651	\$ 104,682,066
Restricted cash and investments (Note 2)	65,357,774	119,984,952
Water receivables	88,919,021	106,982,874
Interest receivable	1,295,060	1,112,444
Taxes receivable	1,133,750	1,026,196
Other receivables	14,897,732	19,833,613
Inventories (Note 3)	101,120,903	96,334,231
Prepaid expenses (Note 4)	4,639,845	4,649,883
<b>Total current assets</b>	<u>395,663,736</u>	<u>454,606,259</u>
<b>Noncurrent assets:</b>		
Cash and investments (Note 2)	118,940,860	107,746,039
Restricted cash and investments (Note 2)	22,038,315	22,665,917
Advances to other agencies	717,345	217,594
Retention receivable	1,217,781	1,245,470
Long-term loan receivables (Note 5)	9,180,815	19,174,304
Net OPEB asset (Note 13)	1,231,733	795,852
Capital assets (Note 6):		
Non-Depreciable	129,862,254	118,295,114
Depreciable, net	3,333,229,133	3,346,284,374
<b>Total noncurrent assets</b>	<u>3,616,418,236</u>	<u>3,616,424,664</u>
<b>Total assets</b>	<u>4,012,081,972</u>	<u>4,071,030,923</u>
<b>DEFERRED OUTFLOWS OF RESOURCES</b>		
Deferred loss on refunding	49,932,704	61,113,716
Pension contributions subsequent to measurement date (Note 12)	7,445,085	4,240,681
OPEB contributions subsequent to measurement date (Note 13)	397,828	366,591
Deferred actuarial amounts related to pensions (Note 12)	7,573,946	12,733,072
Deferred actuarial amounts related to OPEB (Note 13)	40,643	84,422
<b>Total deferred outflows of resources</b>	<u>65,390,206</u>	<u>78,538,482</u>
<b>LIABILITIES</b>		
<b>Current liabilities:</b>		
Accounts payable and other liabilities	77,309,736	104,266,238
Interest payable	17,911,578	20,430,541
Construction deposits	377,721	362,845
Short-term liabilities (Note 10)	345,000,000	345,000,000
Current portion of long-term liabilities (Note 11)	51,307,411	54,165,278
<b>Total current liabilities</b>	<u>491,906,446</u>	<u>524,224,902</u>
<b>Noncurrent liabilities:</b>		
Long-term liabilities (Note 11)	1,910,295,701	1,975,170,555
Net pension liability (Note 12)	61,399,347	70,106,317
<b>Total noncurrent liabilities</b>	<u>1,971,695,048</u>	<u>2,045,276,872</u>
<b>Total liabilities</b>	<u>2,463,601,494</u>	<u>2,569,501,774</u>
<b>DEFERRED INFLOWS OF RESOURCES</b>		
Deferred gain on refunding	4,185,980	-
Deferred actuarial amounts related to pensions (Note 12)	7,124,856	2,528,360
Deferred actuarial amounts related to OPEB (Note 13)	588,822	581,562
<b>Total deferred inflows of resources</b>	<u>11,899,658</u>	<u>3,109,922</u>
<b>NET POSITION</b>		
Net investment in capital assets	1,225,002,600	1,154,718,703
Restricted for construction projects	65,357,775	119,984,952
Restricted for debt service	178,327	377,929
Unrestricted	311,432,324	301,876,125
<b>Total net position</b>	<u>\$ 1,601,971,026</u>	<u>\$ 1,576,957,709</u>

See accompanying notes to the financial statements.

**San Diego County Water Authority**  
**Statement of Revenues, Expenses, and Changes in Net Position**  
**For the Fiscal Year Ended June 30, 2019**  
**(with comparative data for the Fiscal Year Ended June 30, 2018)**

	2019	2018
<b>OPERATING REVENUES:</b>		
Water sales	\$ 579,605,983	\$ 591,809,280
Other revenues	4,565,447	4,053,221
<b>Total operating revenues</b>	<u>584,171,430</u>	<u>595,862,501</u>
<b>OPERATING EXPENSES:</b>		
Cost of sales	450,184,311	442,369,171
Operations and maintenance	21,538,024	24,219,304
Planning	9,564,422	9,179,960
General and administrative	16,283,984	16,914,642
Depreciation and amortization	62,719,586	62,842,596
<b>Total operating expenses</b>	<u>560,290,327</u>	<u>555,525,673</u>
<b>Operating income</b>	<u>23,881,103</u>	<u>40,336,828</u>
<b>NONOPERATING REVENUES (EXPENSES):</b>		
Property taxes and in-lieu charges	14,666,252	13,753,714
Infrastructure access charges	33,202,686	32,482,290
Investment income	13,755,026	4,342,461
Other income	9,638,210	19,253,393
Intergovernmental	11,280,109	10,665,858
Gain (Loss) on sale/retirement of capital assets	(11,035)	131,308
Interest expense	(97,053,235)	(99,915,662)
Debt issuance costs	(3,645,450)	(227,212)
Other expenses	(11,663,707)	(39,453,750)
<b>Total nonoperating revenues (expenses)</b>	<u>(29,831,144)</u>	<u>(58,967,600)</u>
<b>Income before capital contributions</b>	<u>(5,950,041)</u>	<u>(18,630,772)</u>
<b>CAPITAL CONTRIBUTIONS:</b>		
Capacity charges	19,809,365	28,153,768
Water standby availability charges	11,153,993	11,102,611
Contributions in aid of capital assets	-	16,000
<b>Total capital contributions</b>	<u>30,963,358</u>	<u>39,272,379</u>
<b>Changes in net position</b>	<u>25,013,317</u>	<u>20,641,607</u>
<b>NET POSITION AT BEGINNING OF YEAR</b>	<u>1,576,957,709</u>	<u>1,556,316,102</u>
<b>NET POSITION AT END OF YEAR</b>	<u>\$ 1,601,971,026</u>	<u>\$ 1,576,957,709</u>

See accompanying notes to the financial statements.

**San Diego County Water Authority**  
**Statement of Cash Flows**  
**For the Fiscal Year Ended June 30, 2019**  
**(with comparative data for the Fiscal Year Ended June 30, 2018)**

	2019	2018
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>		
Receipts from customers	\$ 648,834,295	\$ 637,794,300
Payments to suppliers for purchases of water	(452,199,887)	(434,619,711)
Payments to suppliers for goods and services	(16,185,647)	(17,483,304)
Payments to employees for services	(44,525,321)	(42,295,487)
<b>Net cash provided by operating activities</b>	<u>135,923,440</u>	<u>143,395,798</u>
<b>CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES:</b>		
Property taxes and in-lieu charges received	14,558,698	13,881,330
Intergovernmental	11,280,109	10,665,858
<b>Net cash provided by noncapital financing activities</b>	<u>25,838,807</u>	<u>24,547,188</u>
<b>CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:</b>		
Acquisition and construction of capital assets	(82,387,403)	(61,801,353)
Contributions and capital related revenues received from other governments	32,141,123	38,585,265
Proceeds from disposition of capital assets	63,206	1,118,207
Proceeds from long-term debt issuance	202,728,177	-
Proceeds from long-term debt service reserve fund and bond fund release	13,432,491	-
Cost of debt issuance	(3,645,450)	(227,212)
Principal paid on long-term debt	(250,574,399)	(55,798,383)
Interest paid on debt	(104,269,681)	(103,340,648)
<b>Net cash used for capital and related financing activities</b>	<u>(192,511,936)</u>	<u>(181,464,124)</u>
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>		
Purchase of investments	(146,716,322)	(92,138,325)
Proceeds from sale of investments	129,613,171	125,240,959
Interest received on investments	7,043,184	5,739,312
<b>Net cash provided by (used for) investing activities</b>	<u>(10,059,967)</u>	<u>38,841,946</u>
<b>Net increase (decrease) in cash and cash equivalents</b>	<u>(40,809,656)</u>	<u>25,320,808</u>
<b>CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR</b>	<u>113,090,069</u>	<u>87,769,261</u>
<b>CASH AND CASH EQUIVALENTS AT END OF YEAR</b>	<u>\$ 72,280,413</u>	<u>\$ 113,090,069</u>
<b>Reconciliation of cash and cash equivalents at end of year to the Statement of Net Position:</b>		
Current assets:		
Cash and investments	\$ 118,299,651	\$ 104,682,066
Restricted cash and investments	65,357,774	119,984,952
Noncurrent assets:		
Cash and investments	118,940,860	107,746,039
Restricted cash and investments	22,038,315	22,665,917
Less Investments not meeting the definition of cash equivalents	(252,356,187)	(241,988,905)
<b>Cash and cash equivalents at end of year</b>	<u>\$ 72,280,413</u>	<u>\$ 113,090,069</u>

See accompanying notes to the financial statements.

**San Diego County Water Authority**  
**Statement of Cash Flows (continued)**  
**For the Fiscal Year Ended June 30, 2019**  
**(with comparative data for the Fiscal Year Ended June 30, 2018)**

	2019	2018
<b>Reconciliation of operating income to net cash provided by operating activities:</b>		
Operating income	\$ 23,881,103	\$ 40,336,828
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation and amortization	62,719,586	62,842,596
Infrastructure access charges	33,202,686	32,482,290
Other expenses	(10,795,466)	(15,637,172)
Other income	9,638,210	19,253,393
(Increase) Decrease in assets:		
Water receivables	18,063,853	(4,389,369)
Other receivables	3,758,116	(5,414,515)
Inventories	(4,786,672)	648,922
Prepaid expenses	10,038	(9,635)
Retention receivable	27,689	(421,528)
Long-term loan receivables	9,993,489	825,696
Net OPEB asset	(435,881)	(795,852)
(Increase) Decrease in deferred outflows of resources:		
Pension contributions subsequent to measurement date	(3,204,404)	11,923,133
OPEB contributions subsequent to measurement date	(31,237)	(41,609)
Deferred actuarial amounts related to pensions	5,159,126	(4,172,113)
Deferred actuarial amounts related to OPEB	43,779	191,543
Increase (Decrease) in liabilities:		
Accounts payable and other liabilities	(7,242,817)	6,352,258
Construction deposits	14,876	(66,299)
Compensated absences	10,580	137,715
Net pension liability	(8,706,970)	(1,028,710)
Net OPEB liability	-	(170,141)
Increase (Decrease) in deferred inflows of resources:		
Deferred actuarial amounts related to pensions	4,596,496	(33,195)
Deferred actuarial amounts related to OPEB	7,260	581,562
<b>Total adjustments</b>	<b>112,042,337</b>	<b>103,058,970</b>
<b>Net cash provided by operating activities</b>	<b>\$ 135,923,440</b>	<b>\$ 143,395,798</b>
<b>Noncash investing, capital and financing activities:</b>		
Change in fair value of investments	\$ 6,696,622	\$ (1,591,279)

See accompanying notes to the financial statements.

Notes to the Financial Statements

1944 - 2019





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### Notes to the Financial Statements

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## 1. 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 also 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 and adopted a Regional Water Facilities Master Plan in 2003 to identify capital facilities necessary to store, treat, and deliver a reliable water supply. Pursuant to the Colorado River 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 receives water conserved by lining of the All-American and Coachella Canals. On December 20, 2012, the Water Authority entered into a 30-year Water Purchase Agreement to purchase potable water from the Claude "Bud" Lewis Carlsbad Desalination Plant. The plant became operational in December 2015 (see Note 17).

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 24.79 percent of MWD's total supply as of June 30, 2019. 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 Water Authority does not issue separate financial statements for the SDCWAFC because its activities are blended with those of the Water Authority for financial reporting purposes.

The San Diego County Water Authority Financing Agency (SDCWFA) was established on December 17, 2009 to facilitate financing and refinancing of capital improvement projects of the Water Authority. The SDCWFA 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 SDCWFA'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 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 Water Authority does not issue separate financial statements for the SDCWFA because its activities are blended with those of the Water Authority for financial reporting purposes.

## 1. 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 (PAYGO). 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 and is responsible for making an issue's annual debt service payments in the event that the Water Authority should be unable to make such payments. The PAYGO 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.

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 2 contains additional information on permissible investments per the Water Authority's Investment Policy.

### (d) Inventories and Prepaid Expenses

The Water Authority's inventories consist of water, valves, and materials in storage and are valued using the average cost method. Prepaid expenses represent benefits prepayments and purchases of prepaid water stored in Northern California outside the Water Authority's service area in a long-term groundwater storage facility. Both inventory and prepaid items use the consumption method whereby they are reported as an asset and expensed as they are consumed.

### (e) Reserves

The Water Authority established other designated funds in alignment with best practice guidance:

**Rate Stabilization Fund (RSF)** - The RSF was established for the purpose of collecting the excess amount of net revenues in years when operating revenues exceeded operating expenses. These monies are to be used to mitigate "rate shock" in years of weak water sales and/or to manage debt service coverage ensuring coverage ratios remain above the legally required minimum.

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

### (e) Reserves (continued)

**Equipment Replacement Fund (ERF)** - The ERF was established to ensure monies were available to replace equipment that has reached the end of its useful life including small capital equipment purchases such as computers, vehicles, the Supervisory Control and Data Acquisition (SCADA) system, etc. It is funded through scheduled draws from the Operating Fund per the Board approved budget.

**Stored Water Fund** - The Stored Water Fund was established to support the purchase of water to fill the various Water Authority reservoirs. The majority of the monies have been used to fill San Vicente Reservoir for the Emergency and Carryover Storage projects.

### (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 capital assets are reported at acquisition value. 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 Credits, and Construction in Progress. Depreciable capital assets include Pipelines and Dams, Facilities, Equipment, Computer Systems Software, Mitigation Improvements, Participation and Capacity Rights, and Storage Rights.

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

Pipelines and Dams	60 to 100 years
Buildings and Facilities	5 to 50 years
Machinery and Equipment	3 to 8 years
Computer Systems Software	4 years
Mitigation Improvements	30 to 55 years
Participation and Capacity Rights	10 to 110 years
Storage Rights	10 to 100 years

### 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 permanent storage rights, or participation and 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 software and mitigation improvements, and over the life of the agreements for storage, participation and capacity rights.

### (g) Deferred Outflows/Inflows of Resources

In addition to assets, the statement of net position reports a separate section for deferred outflows of resources. This separate financial statement element, *deferred outflows of resources*, represents a consumption of net position that applies to future periods and will not be recognized as an outflow of resources (expense) until that time. The Water Authority has the following items that qualify for reporting in this category:

- Deferred loss on refunding
- Employer contributions subsequent to measurement date for pensions and other post-employment benefits
- Deferred actuarial amounts related to pensions and other post-employment benefits

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

### (g) Deferred Outflows/Inflows of Resources (continued)

In addition to liabilities, the statement of net position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element, *deferred inflows of resources*, represents an acquisition of net position that applies to future periods and will not be recognized as an inflow of resources (revenue) until that time. The Water Authority has the following items that qualifies for reporting in this category:

- Deferred gain on refunding
- Deferred actuarial amounts related to pensions and other post-employment benefits

### (h) 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 are paid zero percent of the unused sick leave. Employees that attained the age of 55, were vested with five years of service, and terminated employment due to retirement, layoff, or death, are 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. A Terminal Pay Plan (TPP) was established requiring retirees, or those separating due to death, 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 TPP after completing five years of service and reaching the age of 55. Those who voluntarily separate (or are discharged) with five years of service and have reached the age of 55, are able to use the TPP for payout of accrued vacation hours only.

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, 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.

### (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.

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

### **(i) Net Position (continued)**

#### **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 \$3.01 per meter equivalent per month for Calendar Year 2019.

### **(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.

### **(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 Statement 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.

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

## (n) Capital Contributions (continued)

The Water Authority has two separate revenue sources to fund the Capital Improvement Program. 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, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Water Authority's plan (Plan), which is administered by the California Public Employees' Retirement System (CalPERS), and additions to/deductions from the Plan's fiduciary net position have been determined on the same basis as they are reported by CalPERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when currently due and payable in accordance with the benefit terms. Investments are reported at fair value.

GASB requires that the reported results must pertain to liability and asset information within certain defined timeframes. For this report, the following timeframes are used:

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

## (r) Other Post-Employment Benefits (OPEB)

For purposes of measuring the net OPEB liability (asset), deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, information about the fiduciary net position of the Water Authority's plan (OPEB Plan), the assets of which are held by the California Employers' Retiree Benefit Trust (CERBT), and additions to/deductions from the OPEB Plan's fiduciary net position have been determined by an independent actuary. For this purpose, benefit payments are recognized when currently due and payable in accordance with the benefit terms. Investments are reported at fair value.

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

### (r) Other Post-Employment Benefits (OPEB) (continued)

GASB requires that the reported results must pertain to liability and asset information within certain defined timeframes. For this report, the following timeframes are used:

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

### (s) Prior Year Data

Selected information regarding the prior year has been included in the accompanying financial statements. This information has been included for comparison purposes only and does not represent a complete presentation in accordance with generally accepted accounting principles. Accordingly, such information should be read in conjunction with the Water Authority's prior year financial statements, from which this selected financial data was derived.

### (t) New Accounting Pronouncements

#### *Current Year Standards*

The following GASB Statements were implemented for the Fiscal Year ended June 30, 2019, as required, and did not impact the Water Authority's financial statements:

- **GASB Statement No. 83** – *Certain Asset Retirement Obligations*, effective for periods beginning after June 15, 2018.
- **GASB Statement No. 88** – *Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements*, effective for periods beginning after June 15, 2018.

#### *Pending Accounting Standards*

The following GASB Statements have been issued which may impact the Water Authority's financial reporting requirements in the future:

- **GASB Statement No. 84** – *Fiduciary Activities*, effective for periods beginning after December 15, 2018.
- **GASB Statement No. 87** – *Leases*, effective for periods beginning after December 15, 2019.
- **GASB Statement No. 90** – *Majority Equity Interests*, effective for periods beginning after December 15, 2018
- **GASB Statement No. 91** – *Conduit Debt Obligations*, effective for periods beginning after December 15, 2020.

## 2. Cash and Investments

Cash and investments are classified in the accompanying Statement of Net Position at June 30, 2019 as follows:

<b>Current assets:</b>	
Cash and investments	\$ 118,299,651
Restricted cash and investments	65,357,774
<b>Total current assets</b>	<b>183,657,425</b>
<b>Noncurrent assets:</b>	
Cash and investments	118,940,860
Restricted cash and investments	22,038,315
<b>Total noncurrent assets</b>	<b>140,979,175</b>
<b>Total cash and investments</b>	<b>\$ 324,636,600</b>

The carrying value of cash and investments held by the Water Authority at June 30, 2019 consisted of the following:

Petty cash	\$ 2,500
Deposits	249,997
Investments	324,384,103
<b>Total cash and investments</b>	<b>\$ 324,636,600</b>

### (a) Investments Authorized by the California Government Code and the Water Authority's Investment Policy

The following table 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.

## 2. Cash and Investments (continued)

### (a) Investments Authorized by the California Government Code and the Water Authority's Investment Policy (continued)

	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	30%	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	None	None	None	None	None
Bankers' acceptances	180 days	180 days	40%	40%	30%	5%	None	A1/P1/F1
Commercial paper	270 days	270 days	25%	25%	None	5%	A1/P1/F1	A1/P1/F1
Certificates of deposit	5 years	5 years	30% <sup>(4)</sup>	30% <sup>(5)</sup>	None	5%	None	None
Placement service deposits	5 years	5 years	30% <sup>(4)</sup>	30% <sup>(5)</sup>	None	None	None	None
Negotiable certificates of deposit	5 years	5 years	30% <sup>(4)</sup>	30% <sup>(5)</sup>	None	5%	None	A
Repurchase agreements	1 year	1 year	None	20%	None	None	None	A
Medium-term notes	5 years	5 years	30%	30%	None	5%	A	A
Mutual funds	n/a	n/a	20%	20%	10%	10%	AAA	AAA <sup>(8)</sup>
Money market mutual funds	n/a	n/a	20%	20%	None	20%	AAA	AAA <sup>(8)</sup>
Mortgage pass-through & asset-backed securities	5 years	5 years	20%	20%	None	5% <sup>(9)</sup>	AA	AA
County pooled investment funds <sup>(1)</sup>	n/a	<sup>(3)</sup>	None	<sup>(3)</sup>	None	<sup>(3)</sup>	None	<sup>(3)</sup>
JPA pools (other investment pools)	n/a	n/a	None	25%	None	None	None	AAA
Supranationals <sup>(6)</sup>	5 years	5 years	30%	10%	None	5%	AA	AA
Local agency investment fund (LAIF) <sup>(2)</sup>	n/a	n/a	None	<sup>(7)</sup>	None	None	None	None

Notes:

<sup>(1)</sup> Authorized by Government Code Section 53684 (a).

<sup>(2)</sup> Authorized by Government Code Section 16429.1.

<sup>(3)</sup> These investments are not authorized by the Investment Policy.

<sup>(4)</sup> The Government Code maximum portfolio exposure to placement service certificates of deposit and negotiable certificates of deposit is 30 percent each.

<sup>(5)</sup> The combined Investment Policy maximum portfolio exposure to certificates of deposit, placement service certificates of deposit and negotiable certificates of deposit is 30 percent.

<sup>(6)</sup> Authorized by Govt. Code Section 53601 (q).

<sup>(7)</sup> The Investment Policy's maximum permitted investment amount is governed by current state law.

<sup>(8)</sup> A mutual fund and a money market mutual fund must receive the highest ranking by not less than two NRSROs authorized by Gov't. Code Sections 53601 and 53635.

<sup>(9)</sup> There is no issuer limitation on any mortgage security where the issuer is the US Treasury or Federal Agency/GSE.

## 2. 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 Gov't. Code or the Water Authority's Inv. 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 show the distribution of the Water Authority's investments by terms to maturity for Fiscal Year 2019.

Investment Type	June 30, 2019	Remaining Term to Maturity			
		12 months or less	13 to 36 months	37 to 60 months	More than 60 months
U.S. Treasury securities	\$ 76,987,481	\$ 39,861,600	\$ 12,312,777	\$ 24,813,104	\$ -
Federal agency securities	76,893,570	53,090,567	2,052,740	21,750,263	-
Medium-term notes	53,244,040	11,990,660	9,800,750	31,452,630	-
Supranationals	8,057,620	-	4,047,600	4,010,020	-
Commercial paper	2,995,063	2,995,063	-	-	-
LAIF	13,848,658	13,848,658	-	-	-
JPA pools	28,337,896	28,337,896	-	-	-
Money market mutual funds	29,865,028	29,865,028	-	-	-
Asset Backed Securities	8,588,083	-	4,223,562	4,364,521	-
<b>Held by bond trustees:</b>					
Guaranteed investment contract	12,240,775	-	-	-	12,240,775
Money market mutual funds	13,325,889	13,325,889	-	-	-
<b>Total</b>	<b>\$ 324,384,103</b>	<b>\$193,315,361</b>	<b>\$ 32,437,429</b>	<b>\$ 86,390,538</b>	<b>\$ 12,240,775</b>

## 2. 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 following table for Fiscal Year 2019 is the minimum rating required (where applicable) by the California Gov't. Code, the Water Authority's Inv. Policy, or debt agreements, and the actual rating as of year-end for each investment type.

Investment Type	June 30, 2019	Minimum Rating	Exempt from Disclosure	Rating as of Fiscal Year Ended June 30, 2020			
				AAA/AA-	A	A1	Not Rated
U.S. Treasury securities	\$ 76,987,481	n/a	\$ 76,987,481	\$ -	\$ -	\$ -	\$ -
Federal agency securities	76,893,570	n/a	-	76,893,570	-	-	-
Medium-term notes	53,244,040	A	-	25,300,755	27,943,285	-	-
Supranationals	8,057,620	AA	-	8,057,620	-	-	-
Commercial paper	2,995,063	A1	-	-	-	2,995,063	-
LAIF	13,848,658	n/a	-	-	-	-	13,848,658
JPA pools	28,337,896	AAAm	-	28,337,896	-	-	-
Money market mutual funds	29,865,028	AAAm	-	29,865,028	-	-	-
Asset-Backed Securities	8,588,083	AA	-	8,588,083	-	-	-
<b>Held by bond trustees:</b>							
Guaranteed investment contract	12,240,775	n/a	-	-	-	-	12,240,775
Money market mutual funds	13,325,889	AAAm	-	13,325,889	-	-	-
<b>Total</b>	<b>\$ 324,384,103</b>		<b>\$ 76,987,481</b>	<b>\$ 190,368,841</b>	<b>\$ 27,943,285</b>	<b>\$ 2,995,063</b>	<b>\$ 26,089,433</b>

### (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 investments for Fiscal Year 2019 are as follows:

Issuer	Investment Type	Reported Amount	% of Total Investments
Federal Home Loan Mortgage Corporation	Federal agency securities	\$ 21,888,612	6.7%
Federal National Mortgage Association	Federal agency securities	\$ 39,970,860	12.3%

### (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 Gov't. Code and the Water Authority's Inv. 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 Gov't. 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.

## 2. Cash and Investments (continued)

### (g) Investment Value Measurement

The Water Authority categorizes certain assets and liabilities within the fair value hierarchy established by generally accepted accounting principles. The following is a summary of Water Authority investments based on the method for measuring value as of June 30, 2019:

	Fair Value Measurements Using			June 30, 2019
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	
<b>Investments by fair value level</b>				
U.S. Treasury securities	\$ -	\$ 76,987,481	\$ -	\$ 76,987,481
Federal agency securities	-	76,893,570	-	76,893,570
Medium-term notes	-	53,244,040	-	53,244,040
Supranationals	-	8,057,620	-	8,057,620
Commercial paper	-	2,995,063	-	2,995,063
Asset Backed Securities	-	8,588,083	-	8,588,083
<b>Total investments by fair value level</b>	<b>\$ -</b>	<b>\$ 226,765,857</b>	<b>\$ -</b>	<b>\$ 226,765,857</b>
<b>Investments measured at cost</b>				
Guaranteed investment contract				12,240,775
Money market mutual funds <sup>(1)</sup>				43,190,917
LAIF <sup>(2)</sup>				13,848,658
JPA pools <sup>(3)</sup>				28,337,896
<b>Total investments measured at cost</b>				<b>97,618,246</b>
<b>Total investments</b>				<b>\$ 324,384,103</b>

Notes:

(1) Reported as a stable one-dollar value per share.

(2) Reported based on the application of a fair value factor to each one-dollar share.

(3) Measured at amortized cost.

The Water Authority categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the investments. The three levels of the fair value hierarchy are as follows:

**LEVEL 1:** Inputs are unadjusted quoted prices in active markets for identical assets or liabilities. As of June 30, 2019, the Water Authority did not own Level 1 investments.

**LEVEL 2:** Inputs are significant other observable inputs for the asset or liability. Securities classified in Level 2 are valued by a recognized third-party utilizing matrix pricing.

**LEVEL 3:** Inputs are significant unobservable inputs for the asset or liability. As of June 30, 2019, the Water Authority did not own Level 3 investments.

The definition of fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair value is measured as an exit price for financial investments.

## 2. Cash and Investments (continued)

### (g) Investment Value Measurement (continued)

The Water Authority utilizes valuation techniques consistent with market, cost, or income approaches to determine fair value. The most appropriate technique is utilized to maximize the use of observable inputs and minimize the use of unobservable inputs.

The Water Authority owns investments utilizing a stable one dollar per share value. These investment assets are exempt from reporting under the fair value measurement levels. There are no redemption restrictions for the investments reported at a value of one dollar per share.

### (h) 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 16429.1 under the oversight of the Treasurer of the State of California. The value of the Water Authority's investment in the pool is reported in the accompanying financial statements at amounts based upon a fair value factor applied to each one-dollar share.

### (i) JPA Pools

The Water Authority is a voluntary participant in the 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.

## 3. Inventories

Components of inventories at June 30, 2019 are as follows:

Water in storage	\$ 100,266,216
Valves and pipes in storage	680,050
Materials in storage	174,637
<b>Total inventories</b>	<b>\$ 101,120,903</b>

<b>Water in storage:</b>	<b>Value</b>	<b>Acre-Feet</b>
San Vicente	\$ 80,939,874	130,223.6
Olivenhain	13,226,988	21,091.0
Lake Hodges	5,199,706	8,630.1
Sweetwater	-	-
Otay	899,648	1,227.0
<b>Total water in storage</b>	<b>\$ 100,266,216</b>	<b>161,171.7</b>

## 4. 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 8(d). As such, it is classified as prepaid expenses on the Statement of Net Position in the amount of \$4,620,500 as of June 30, 2019. Other prepaid expenses were \$19,345 as of June 30, 2019, which includes payments to the Water Authority's benefits administrator. The total prepaid expenses balance as of June 30, 2019 was \$4,639,845.

## 5. Long-Term Loan Receivables

### Imperial Irrigation District (IID)

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 totaling \$10.0 million (the "Loan"). These funds will be used to pay for the initial administrative costs and estimated and annual cumulative socioeconomic impact costs. Beginning in Calendar Year 2018, the Water Authority began receiving credits from IID to be applied against any payments due and shall continue until Calendar Year 2047 or until the agreement is terminated, whichever comes first. If the agreement terminates before Calendar Year 2047, IID is under no obligation to pay the Water Authority the remaining balance of the loan.

As of June 30, 2019, the total outstanding balance due from IID is \$9,507,640, of which \$326,825 is expected to be collected within the next year, and the \$9,180,815 balance collected according to a payment schedule.

## 6. Capital Assets

Capital asset activity for the Fiscal Year ended June 30, 2019 was as follows:

	Balance at June 30, 2018	Additions	Deletions	Transfers	Balance at June 30, 2019
<b>Non-depreciable capital assets:</b>					
Land	\$ 24,621,026	\$ -	\$ -	\$ -	\$ 24,621,026
Easements	12,843,763	5,008	-	-	12,848,771
Mitigation bank credits	5,323,118	-	-	-	5,323,118
Construction in progress	75,507,207	59,523,779	(868,241)	(47,093,406)	87,069,339
<b>Total non-depreciable capital assets</b>	<b>118,295,114</b>	<b>59,528,787</b>	<b>(868,241)</b>	<b>(47,093,406)</b>	<b>129,862,254</b>
<b>Depreciable capital assets:</b>					
Pipelines and dams	2,200,695,359	-	(99,996)	33,736,249	2,234,331,612
Buildings and facilities	798,272,139	872,144	(239,150)	9,553,348	808,458,481
Machinery and equipment	32,970,982	1,773,036	(929,982)	-	33,814,036
Intangible software and mitigation improvements	6,599,377	-	-	-	6,599,377
Participation and capacity rights	520,051,103	-	-	-	520,051,103
Storage rights	519,052,259	-	-	3,803,809	522,856,068
<b>Total depreciable capital assets</b>	<b>4,077,641,219</b>	<b>2,645,180</b>	<b>(1,269,128)</b>	<b>47,093,406</b>	<b>4,126,110,677</b>
<b>Less accumulated depreciation and amortization for:</b>					
Pipelines and dams	(369,941,889)	(26,329,082)	68,327	-	(396,202,644)
Buildings and facilities	(212,193,826)	(22,225,620)	203,544	-	(234,215,902)
Machinery and equipment	(28,138,379)	(1,173,257)	923,016	-	(28,388,620)
Intangible software and mitigation improvements	(2,341,392)	(513,195)	-	-	(2,854,587)
Participation and capacity rights	(97,951,457)	(7,096,690)	-	-	(105,048,147)
Storage rights	(20,789,902)	(5,381,742)	-	-	(26,171,644)
<b>Total accumulated depreciation and amortization</b>	<b>(731,356,845)</b>	<b>(62,719,586)</b>	<b>1,194,887</b>	<b>-</b>	<b>(792,881,544)</b>
<b>Total depreciable capital assets, net</b>	<b>3,346,284,374</b>	<b>(60,074,406)</b>	<b>(74,241)</b>	<b>47,093,406</b>	<b>3,333,229,133</b>
<b>Total capital assets, net</b>	<b>\$ 3,464,579,488</b>	<b>\$ (545,619)</b>	<b>\$ (942,482)</b>	<b>\$ -</b>	<b>\$ 3,463,091,387</b>

## 7. 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.

## 7. Mitigation Bank (continued)

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, 2019, the value of acreage remaining was \$5,323,118.

Mitigation Sites	Acres		Value
	Total	Remaining	
Crestridge Habitat Management Area (HMA)	258.45	16.93	\$ 148,840
San Miguel Conservation	820.85	819.76	5,174,278
<b>Total Mitigation Bank</b>	<b>1,079.30</b>	<b>836.69</b>	<b>\$ 5,323,118</b>

## 8. 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 \$415,002,956 as of June 30, 2019.

<b>Participation Rights:</b>		
Colorado River Water Delivery and All-American and Coachella Canals (a)	\$	260,436,361
Quantification Settlement Agreement Joint Powers Authority (b)		76,458,379
Imperial Irrigation District Water Transfer (c)		45,666,361
Semitropic-Rosamond Water Bank (d)		9,054,878
Vidler Water Company (d)		7,049,940
Rancho Cañada Permit for Endangered Species (e)		5,065,380
<b>Total Participation Rights</b>		<b>403,731,299</b>
<b>Capacity Rights:</b>		
Helix Water District Levy Plant (f)		10,236,196
Los Coches Pump Station (g)		515,639
Helix Flume Pipeline (g)		461,310
Moreno-Lakeside Pipeline (h)		58,512
<b>Total Capacity Rights</b>		<b>11,271,657</b>
<b>Total Participation and Capacity Rights, net of amortization</b>	<b>\$</b>	<b>415,002,956</b>

### (a) 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, Coachella Valley Water District (CVWD), and the San Luis Rey Indian Water Authority (SLR). Participation rights for this agreement, net of amortization, totaled \$3,413,711 as of June 30, 2019 and are amortized utilizing the straight-line method over the life of the agreement, which is 110 years.

## **8. Participation and Capacity Rights (continued)**

### **(a) Canal Lining Participation Rights (continued)**

The agreement specifically assigned the project of lining the Coachella Canal, which is a branch of the All-American Canal from the Colorado River and is owned by the U.S. Bureau of Reclamation (BOR), to the Water Authority. The lining of the canal prevents and conserves 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 \$115,797,408 as of June 30, 2019 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 \$141,225,242 as of June 30, 2019 and are amortized utilizing the straight-line method over the life of the agreement of 110 years.

### **(b) 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 \$47,315,024 as of June 30, 2019. 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, \$7,656,442 as of June 30, 2019 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 were capitalized in Fiscal Year 2011 due to litigation finalized in that Fiscal Year with MWD, in relation to the QSA JPA projects. These costs are being amortized utilizing the straight-line method over the life of the 75-year Agreement, and totaled, net of amortization, \$21,486,913 for Fiscal Year ended June 30, 2019. The QSA JPA is not a named party to separate ongoing Water Authority litigation challenging MWD's rate structure, as discussed in Note 17.

### **(c) IID 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 \$45,666,361 as of June 30, 2019 and are being amortized utilizing the straight-line method over the 75-year life of the agreement.

## 8. Participation and Capacity Rights (continued)

### (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 of 70,000 acre-feet. Storage and recovery rights for this program totaled, net of amortization, \$9,054,878 for Semitropic and \$7,049,940 for Vidler as of June 30, 2019. These rights are amortized using the straight-line method over the life of the agreements, which end in 2035.

### (e) Rancho Cañada Permit for Endangered Species

The Water Authority contributed to property acquisition for conservation measures under this permit in an amount net of amortization of \$5,065,380 as of June 30, 2019. The property is owned and managed by the Department of Fish and Wildlife consistent with mitigation requirements associated with the Emergency Storage Project (ESP) and Carryover Storage Project (CSP), Federal Endangered Species Act (Section 7), Clean Water Act, Porter-Cologne Act, CA Fish and Game Code 1602 permits and the CSP CA Environmental Quality Act (CEQA) mitigation measures, and the Natural Community Conservation Plan/Habitat Conservation Plan, a 55-year multi-species take permit issued pursuant to the Federal Endangered Species Act (Section 10) and Natural Community Conservation Planning Act (NCCPA). Any acreage not applied as mitigation to ESP or CSP, constitutes the Water Authority's commitment towards regional multi-species conservation pursuant to provisions of the NCCPA, and allowed for the issuance of the 55-year multi-species take permit, which streamlines endangered species permitting for the Water Authority's current and future CIP projects and operation and maintenance activities.

### (f) Helix Water District 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 \$10,236,196 as of June 30, 2019 and are being amortized using the straight-line method over 35 years.

### (g) 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 serve Otay Water District, Lakeside Water District, and Padre Dam Municipal Water District.

## 8. Participation and Capacity Rights (continued)

### (g) Los Coches Pump Station and Helix Flume Pipeline Capacity Rights (continued)

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 an additional 12 mgd. Capacity rights for Los Coches Pump Station, net of amortization, totaled \$515,639 as of June 30, 2019 and for Helix Flume Pipeline, net of amortization, totaled \$461,310 as of June 30, 2019 and are being amortized using the straight-line method over ten years.

### (h) Moreno - Lakeside Pipeline Capacity Rights

In June 2001, 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 \$58,512 as of June 30, 2019 and are being amortized using the straight-line method over ten years.

## 9. Storage Rights

In 1995, the Water Authority entered into agreements with the City of San Diego (City) to acquire permanent water storage rights in the City's Hodges and San Vicente reservoirs as part of the Water Authority's Emergency Storage Project (ESP) program. The ESP 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 connected the City's Hodges Reservoir, also called Lake Hodges, to the Water Authority's Olivenhain Reservoir. The Water Authority constructed the Tailrace Tunnel and Inlet/Outlet components to permit water movement between the reservoirs and to store 20,000 acre-feet of water for emergency use in the Hodges Reservoir. The related improvements for the storage rights, net of amortization, totaled \$38,179,415, as of June 30, 2019 and are amortized utilizing the straight-line method over 100 years. Separately, the Water Authority completed two related subprojects that are being amortized over twenty and ten years that have a net unamortized balance of \$2,508,007. All of the corresponding improvements have been turned over to the City and San Diego Gas & Electric Company in exchange for the Water Authority receiving permanent storage rights.

The San Vicente Dam Raise Project raised the San Vicente Dam by 117 feet, more than doubling the capacity of the reservoir, and adding 157,000 acre-feet of water for emergency use by the Water Authority in San Vicente Reservoir. Storage rights for this project, net of amortization, totaled \$455,997,002 as of June 30, 2019 and are amortized utilizing the straight-line method over 100 years. The corresponding improvements have been turned over to the City in exchange for the Water Authority receiving permanent storage rights.

## 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 also has 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.

## 10. Short-Term Liabilities (continued)

The total amount of short-term revenue certificates (TECP and ECP Notes) authorized at any time to be outstanding is \$460,000,000.

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, Water Revenue Bonds, and Water Revenue Refunding Bonds. At June 30, 2019, the Water Authority had short-term debt outstanding of \$345,000,000.

Short-term liabilities activity for the Fiscal Year ended June 30, 2019 are as follows:

	Original Issue	Interest Rate	Balance at June 30, 2018	Additions	Deletions	Balance at June 30, 2019
Commercial Paper Notes, Series 8	2014	1.40%	\$ 110,000,000	\$ -	\$ (110,000,000)	\$ -
Commercial Paper Notes, Series 9	2016	1.39%	135,000,000	-	-	135,000,000
Commercial Paper Notes, Series 10	2019	1.57%	-	110,000,000	-	110,000,000
Extendable Commercial Paper Notes, Series 1	2014	1.37%	100,000,000	-	-	100,000,000
<b>Total short-term liabilities</b>			<b>\$ 345,000,000</b>	<b>\$ 110,000,000</b>	<b>\$ (110,000,000)</b>	<b>\$ 345,000,000</b>

## 11. Long-Term Liabilities

### (a) Changes in Long-Term Liabilities

Long-term liabilities activity for the Fiscal Year ended June 30, 2019 are as follows:

	Balance at June 30, 2018	Additions	Deletions	Balance at June 30, 2019	Due Within One Year
Revenue Bonds	\$ 1,793,690,000	\$ 183,155,000	\$ (234,680,000)	\$1,742,165,000	\$36,100,000
Certificates of Participation	42,625,000	-	(8,315,000)	34,310,000	8,825,000
<b>Total long-term debt</b>	1,836,315,000	183,155,000	(242,995,000)	1,776,475,000	44,925,000
Unamortized bond premiums	167,117,816	19,573,177	(20,064,475)	166,626,518	-
<b>Total long-term debt, net</b>	2,003,432,816	202,728,177	(263,059,475)	1,943,101,518	44,925,000
Contributions payable	18,945,188	-	(7,579,399)	11,365,789	2,179,549
Compensated absences	6,357,392	3,613,784	(3,603,204)	6,367,972	4,202,862
Arbitrage rebate	600,437	167,396	-	767,833	-
<b>Total long-term liabilities, net</b>	<b>\$ 2,029,335,833</b>	<b>\$ 206,509,357</b>	<b>\$ (274,242,078)</b>	<b>\$1,961,603,112</b>	<b>\$51,307,411</b>

## 11. Long-Term Liabilities (continued)

### (b) Long-Term Debt Outstanding

The following schedule summarizes the major terms of outstanding long-term debt at June 30, 2019:

	Issue Date	Interest Rates to Maturity	Final Maturity Fiscal Year	Original Amount	Balance Outstanding June 30, 2019
<b>Revenue Bonds:</b>					
Water Revenue Bonds, Series 2010A (Non-AMT Tax-Exempt)	2010	4.00-5.25%	2020	\$ 98,495,000	\$ 4,695,000
Water Revenue Bonds, Series 2010B (Taxable Build America Bonds) <sup>(1)</sup>	2010	6.138%	2049	526,135,000	526,135,000
Water Revenue Refunding Bonds, Series 2011A	2011	0.45-5.00%	2027	139,945,000	86,670,000
Water Revenue Refunding Bonds, Series 2011B	2011	3.00-5.00%	2031	94,540,000	94,540,000
Water Revenue Refunding Bonds, Series 2013A	2013	3.00-5.00%	2034	299,105,000	285,100,000
Water Revenue Refunding Bonds, Series 2015A	2015	2.00-5.00%	2029	184,795,000	177,845,000
Subordinate Lien Water Revenue Refunding Bonds, Series 2016S-1	2016	3.00-5.00%	2021	87,685,000	87,685,000
Water Revenue Refunding Bonds, Series 2016A	2016	5.00%	2033	98,945,000	98,945,000
Water Revenue Refunding Bonds, Series 2016B	2016	5.00%	2038	197,395,000	197,395,000
Water Furnishing Revenue Refunding Bonds, Series 2019 (Pipeline Bonds)	2019	5.00%	2046	183,155,000	183,155,000
<b>Total Revenue Bonds</b>					<b>\$ 1,742,165,000</b>
<b>Certificates of Participation (COP):</b>					
Water Revenue COP, 1998A	1998	4.50-5.25%	2028	\$ 180,000,000	\$ 11,685,000
Water Revenue Refunding COP, Series 2005A	2005	5.00-5.25%	2022	107,455,000	13,800,000
Water Revenue COP, Series 2008A	2008	4.00-5.00%	2020	558,015,000	8,825,000
<b>Total COP</b>					<b>\$ 34,310,000</b>
<b>Total long-term debt</b>					<b>\$ 1,776,475,000</b>

Note:

- <sup>(1)</sup> 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.

## 11. Long-Term Liabilities (continued)

### (c) Debt Service Requirements

The total debt service requirements, including principal and interest payments, are as follows:

Fiscal Year	Revenue Bonds		Certificates of Participation		Total	
	Principal	Interest	Principal	Interest	Principal	Interest
2020	\$ 36,100,000	\$ 90,134,163	\$ 8,825,000	\$ 1,720,788	\$ 44,925,000	\$ 91,854,951
2021	130,575,000	89,700,710	6,725,000	1,279,538	137,300,000	90,980,248
2022	45,180,000	83,555,210	7,075,000	926,476	52,255,000	84,481,686
2023	52,425,000	81,388,960	-	555,038	52,425,000	81,943,998
2024	55,145,000	78,910,410	-	555,038	55,145,000	79,465,448
2025-2029	317,395,000	350,438,912	11,685,000	2,220,148	329,080,000	352,659,060
2030-2034	377,040,000	264,561,189	-	-	377,040,000	264,561,189
2035-2039	306,345,000	170,431,519	-	-	306,345,000	170,431,519
2040-2044	206,635,000	99,406,985	-	-	206,635,000	99,406,985
2045-2049	215,325,000	35,537,435	-	-	215,325,000	35,537,435
<b>Total</b>	<b>\$ 1,742,165,000</b>	<b>\$ 1,344,065,493</b>	<b>\$ 34,310,000</b>	<b>\$ 7,257,026</b>	<b>\$ 1,776,475,000</b>	<b>\$ 1,351,322,519</b>

### (d) Issuance of Debt

On February 20, 2019, the California Pollution Control Financing Authority (Issuer) issued \$183,155,000 of Water Furnishing Revenue Refunding Bonds, Series 2019 (the 2019 Bonds) to current refund and redeem the Water Furnishing Revenue Bonds, Series 2012 (the 2012 Bonds) in the amount of \$200,605,000. The bonds are payable from, and secured solely by, a pledge of payments derived under a Pipeline Loan Agreement between the Issuer and the SDCWAFA. The final maturity date for the 2019 Bonds is November 21, 2045. A debt service reserve fund was created to secure the 2019 Bonds and was funded by a portion of the proceeds in the amount of \$9,732,750. Additional funds for the redemption of the 2012 Bonds were provided from balances on hand in reserve funds established pursuant to the Pipeline Indenture. As a result of the refunding, the related liabilities have been removed from the financial statements. The refunding resulted in a cash flow savings of \$34,976,465, an economic gain of \$17,792,117, and a deferred gain on refunding the 2012 Bonds of \$4,252,005.

### (e) Redemption and Defeasance of Debt

In prior years, the following refunded debts were defeased and the related liabilities were removed from the financial statements. At June 30, 2019, principal amounts payable from escrow funds established for defeased debts are as follows:

Defeased Debt Outstanding	Amount	Redemption Date
<b>2015 Escrow September 22, 2015:</b>		
Water Revenue Bonds, Series 2010A	\$ 52,375,000	11/1/2019
<b>2016 Escrow June 23, 2016:</b>		
Water Revenue Bonds, Series 2010A	20,425,000	11/1/2019
<b>Total defeased debt outstanding</b>	<b>\$ 72,800,000</b>	

## 11. Long-Term Liabilities (continued)

### (f) Long-Term Pledged Liabilities

Long-term pledged liabilities for the Fiscal Year ended June 30, 2019 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>				
Water Revenue COP, Series 1998A	2028	\$ 16,680,338	\$ 555,038	\$ 555,038
Water Revenue Refunding COP, Series 2005A	2022	15,620,438	724,500	724,500
Water Revenue COP, Series 2008A	2020	9,266,250	9,172,000	9,172,000
Water Revenue Bonds, Series 2010A ( <i>Non-AMT Tax-Exempt</i> )	2020	4,882,800	4,881,300	4,881,300
Water Revenue Bonds, Series 2010B ( <i>Taxable Build America Bonds</i> )	2049	1,229,135,178	32,294,166	32,294,166
Water Revenue Refunding Bonds, Series 2011A	2027	106,332,750	13,291,550	13,291,550
Water Revenue Refunding Bonds, Series 2011B	2031	130,153,250	4,707,000	4,707,000
Water Furnishing Revenue Bonds, Series 2012 ( <i>Pipeline Bonds</i> )	2019	-	11,395,478	11,395,478
Water Revenue Refunding Bonds, Series 2013A	2034	411,539,931	27,986,519	27,986,519
Water Revenue Refunding Bonds, Series 2015A	2029	228,269,000	15,859,750	15,859,750
Subordinate Lien Water Revenue Refunding Bonds, Series 2016S-1	2021	95,853,500	4,084,250	4,084,250
Water Revenue Refunding Bonds, Series 2016A	2033	161,619,500	4,947,250	4,947,250
Water Revenue Refunding Bonds, Series 2016B	2038	357,580,750	9,869,750	9,869,750
Water Furnishing Revenue Refunding Bonds, Series 2019 ( <i>Pipeline Bonds</i> )	2046	360,863,834	-	-
<b>Total Pledged Net Water Revenue</b>		<b>\$ 3,127,797,519</b>	<b>\$ 139,768,551</b>	<b>\$ 139,768,551</b>

### (g) Contributions Payable

Contributions Payable represent the Water Authority's payment obligation to the QSA JPA for environmental mitigation pursuant to the QSA JPA Creation and Funding Agreement. The outstanding balance of the payment obligation at June 30, 2019 was \$11,365,789. The total contributions payable, including principal and interest payments, are as follows:

Fiscal Year	Contributions Payable		
	Principal	Interest	Total
2020	\$ 2,179,549	\$ 630,504	\$ 2,810,053
2021	1,374,649	526,187	1,900,836
2022	3,332,937	468,695	3,801,632
2023	1,248,878	268,719	1,517,597
2024	1,028,050	193,787	1,221,837
2025-2026	2,201,726	191,406	2,393,132
<b>Total</b>	<b>\$ 11,365,789</b>	<b>\$ 2,279,298</b>	<b>\$ 13,645,087</b>

## 11. Long-Term Liabilities (continued)

### (h) 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 Year 2019.

## 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 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 are 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 or 52, depending on hire date, with statutorily reduced benefits. All members are eligible for non-duty disability benefits after ten years of service. The death benefit is the Optional Settlement 2W Death Benefit. The cost of living adjustments is applied as specified by the Public Employees' Retirement Law.

## 12. Defined Benefit Pension Plan (continued)

### California Public Employees' Retirement System (continued)

The Plans' provisions and benefits in effect at June 30, 2019, are summarized as follows:

Hire Date	Miscellaneous Plan	
	Prior to January 1, 2013 "Classic Members"	On or after January 1, 2013 "PEPRA Members"
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 <sup>(1)</sup>	2.0% to 2.5%	1.0% to 2.5%
Required employee contribution rates	8.00%	6.00%
Required employer contribution rates <sup>(2)</sup>	24.09%	24.09%

Notes:

<sup>(1)</sup> Benefit amounts varies depending on retirement age. Classic members retiring between ages 50-55 receive a benefit of 2% and 2.5% at age 55 or later. PEPRA members retiring between ages 52-62 receive a benefit of 1%, 2% between ages 62-67 and 2.5% thereafter.

<sup>(2)</sup> Employer contribution includes the normal cost percentage of 10.27% plus unfunded actuarial liability contribution percentage of 13.82%.

### Employees Covered

As of the June 30, 2017 actuarial valuation, the following current and former employees were covered by the benefit terms under the Miscellaneous Plan:

Miscellaneous Plan	
Active employees	245
Inactive employees or beneficiaries currently receiving benefits	238
Inactive employees entitled to, but not yet receiving benefits	149
<b>Total</b>	<b>632</b>

### Contributions

Water Authority employees hired prior to January 1, 2013, and any employees hired on or after this date who are not considered "New Members" within the meaning of the Public Employees' Pension Reform Act of 2013 (PEPRA) are Tier I members or "Classic Members". Tier II members are employees hired on or after January 1, 2013 and are considered "New Members" as defined by PEPRA. Current Classic Members are required to contribute eight percent of their annual covered salary to fund the Plan. The Water Authority currently pays seven percent of the employees' required member contribution. Employees pay the remaining one percent of the required member contribution. As a cost sharing method, pursuant to Government Code Section 20516 of the California Public Employees' Retirement Law, Classic Members pay seven percent of the Water Authority's required employer contributions.

## 12. Defined Benefit Pension Plan (continued)

### California Public Employees' Retirement System (continued)

#### *Contributions (continued)*

Due to cost sharing, for "classic" employees, effective July 1, 2013, the Technical/Support, Professional/Administrative, Managerial/Supervisory, and Confidential classified 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 PEPRA 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 new members and similarly situated employees at the Water Authority is six percent.

The Water Authority is required to contribute the remaining amounts, as determined by calculating 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.

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 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. Employer contribution rates may change if plan contracts are amended. Payments made by the employer to satisfy contribution requirements that are identified by the pension plan terms as plan member contribution requirements are classified as plan member contributions.

#### *Actuarial Methods and Assumptions Used to Determine Total Pension Liability*

The June 30, 2017 valuation was rolled forward to determine the June 30, 2018 total pension liability, based on the following actuarial methods and assumptions:

<b>Actuarial Cost Method:</b>	Entry Age Normal in accordance with the requirements of GASB 68
<b>Actuarial Assumptions:</b>	
Discount Rate	7.15%
Inflation	2.50%
Salary Increases	Varies by Entry Age and Service
Mortality Rate Table <sup>(1)</sup>	Derived using CalPERS' Membership Data for all funds
Post Retirement Benefit Increase	Contract COLA up to 2.0% until Purchasing Power Protection Allowance Floor on Purchasing Power applies, 2.50% thereafter

Note:

<sup>(1)</sup> The mortality table used was developed based on CalPERS' specific data. The table includes 15 years of mortality improvements using the Society of Actuaries Scale 90% of scale MP 2016. For more details on this table, please refer to the December 2017 experience study report (based on CalPERS Demographic Data from 1997 to 2015) that can be found on the CalPERS website.

## 12. Defined Benefit Pension Plan (continued)

### California Public Employees' Retirement System (continued)

#### Discount Rate

The discount rate used to measure the total pension liability is 7.15 percent. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current member contribution rates and that contributions from employers will be made at statutorily required rates, actuarially determined. Based on those assumptions, the Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which 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 (geometric) returns were calculated over the short-term (first 10 years) and the long-term (11+ years) using a building-block approach. Using the expected nominal returns for both short-term and long-term, the present value of benefits was calculated for each fund. The expected rate of return was set by calculating the rounded single equivalent expected return that arrived at the same present value of benefits for cash flows as the one calculated using both short-term and long-term returns. The expected rate of return was then set equal to the single equivalent rate calculated and adjusted to account for assumed administrative expenses.

The expected real rates of return by asset class are as follows:

Asset Class <sup>(1)</sup>	Assumed Asset Allocation	Real Return Years 1 - 10 <sup>(2)</sup>	Real Return Years 11 + <sup>(3)</sup>
Global Equity	50.0%	4.80%	5.98%
Fixed Income	28.0%	1.00%	2.62%
Inflation Assets	0.0%	0.77%	1.81%
Private Equity	8.0%	6.30%	7.23%
Real Assets	13.0%	3.75%	4.93%
Liquidity	1.0%	0.00%	-0.92%
<b>Total</b>	<b>100%</b>		

#### Notes:

<sup>(1)</sup> In the CalPERS System's CAFR, Fixed Income is included in Global Debt Securities; Liquidity is included in Short-term Investments; Inflation Assets are included in both Global Equity Securities and Global Debt Securities.

<sup>(2)</sup> An expected inflation of 2.00% used for this period.

<sup>(3)</sup> An expected inflation of 2.92% 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, 2018, using an annual actuarial valuation as of June 30, 2017 rolled forward to June 30, 2018 using standard update procedures.

#### Changes in the Net Pension Liability

The changes in the net pension liability for the Plan are as follows:

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability/(Asset) (c) = (a) - (b)
<b>Balance at June 30, 2018</b> <i>(Measurement Date June 30, 2017)</i>	<b>\$ 246,408,100</b>	<b>\$ 176,301,783</b>	<b>\$ 70,106,317</b>
<b>Changes recognized for the measurement period:</b>			
Service cost	5,054,460	-	5,054,460
Interest on total pension liability	16,947,158	-	16,947,158
Changes of assumptions	(8,431,448)	-	(8,431,448)
Differences between expected and actual experience	1,255,258	-	1,255,258
Net plan to plan resource movement	-	(442)	442
Contributions - employer	-	7,052,963	(7,052,963)
Contributions - employees	-	2,257,185	(2,257,185)
Net investment income	-	15,019,130	(15,019,130)
Benefit payments, including refunds of employee contributions	(9,471,875)	(9,471,875)	-
Administrative expense	-	(274,727)	274,727
Other miscellaneous income/(expense) <sup>(1)</sup>	-	(521,711)	521,711
<b>Net Changes</b>	<b>5,353,553</b>	<b>14,060,523</b>	<b>(8,706,970)</b>
<b>Balance at June 30, 2019</b> <i>(Measurement Date June 30, 2018)</i>	<b>\$ 251,761,653</b>	<b>\$ 190,362,306</b>	<b>\$ 61,399,347</b>

Notes:

<sup>(1)</sup> During Fiscal Year 2017-18, as a result of Governmental Accounting Standards Board Statement (GASB) No.75, Accounting and Financial Reporting for Postemployment Benefit Plans Other Than Pensions (GASB75), CalPERS reported its proportionate share of activity related to postemployment benefits for participation in the State of California's agent OPEB plan. Accordingly, CalPERS recorded a one-time expense as a result of the adoption of GASB 75. Additionally, CalPERS employees participate in various State of California agent pension plans and during Fiscal Year 2017-18, CalPERS recorded a correction to previously reported financial statements to properly reflect its proportionate share of activity related to pensions in accordance with GASB Statement No. 68, Accounting and Financial Reporting for Pensions (GASB 68).

## 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, for measurement period ending June 30, 2018:

	1% Decrease	Current Discount Rate	1% Increase
	6.15%	7.15%	8.15%
<b>Net Pension Liability</b>	\$96,415,214	\$61,399,347	\$32,475,054

#### *Pension Plan Fiduciary Net Position*

Detailed information about the plan's fiduciary net position is available in the separately issued CalPERS GASB 68 Accounting Valuation report for the Water Authority.

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

Gains and losses related to changes in total pension liability and fiduciary net position are recognized in pension expense systematically over time.

The first amortized amounts are recognized in pension expense for the year the gain or loss occurs. The remaining amounts are categorized as deferred outflows and deferred inflows of resources related to pensions and are to be recognized in future pension expense.

The amortization period differs depending on the source of the gain or loss:

Net difference between projected and actual earnings on pension plan investments	5-year straight-line amortization
All other amounts	Straight-line amortization over the expected average remaining service lifetime (EARSLS) of all members that are provided with benefits (active, inactive, and retired) as of the beginning of the measurement period

#### *Pension Expenses and Deferred Outflows/Inflows of Resources Related to Pensions*

For the Fiscal Year ended June 30, 2019, the Water Authority recognized pension expense of \$8,101,615 and reported deferred outflows of resources and deferred inflows of resources related to its pension plan from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Pension contributions subsequent to measurement date	\$ 7,445,085	\$ -
Changes of assumptions	6,425,025	(6,269,538)
Differences between expected and actual experiences	1,033,187	(855,318)
Net difference between projected and actual earnings on pension plan investments	115,734	-
<b>Total</b>	<b>\$ 15,019,031</b>	<b>\$ (7,124,856)</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 \$7,445,085 reported as deferred outflows of resources related to contributions subsequent to the June 30, 2018 measurement date will be recognized as a reduction of the net pension liability during the Fiscal Year ended June 30, 2020. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized as pension expense/(income) as follows:

Fiscal Year Ended June 30	Deferred Outflows/(Inflows) of Resources
2020	\$3,675,124
2021	641,850
2022	(3,377,345)
2023	(490,539)
Thereafter	-

The CalPERS Board of Administration has adopted a new amortization policy effective with the June 30, 2019 actuarial valuation. The new policy shortens the period over which actuarial gains and losses are amortized from 30 years to 20 years with the payments computed using a level dollar amount. In addition, the new policy removes the 5-year ramp-up and ramp-down on UAL bases attributable to assumption changes and non-investment gain/losses. The new policy removes the 5-year ramp-down on investment gains/losses. These changes will apply only to new UAL bases established on or after June 30, 2019.

## 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 serves as the administrator and trustee. The TPP was established and is governed under the Internal Revenue Code Section 414(d), which 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 and completing five years of service.

GASB states the definition of pensions does not include postemployment healthcare benefits and termination benefits. As such, the TPP 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.

### 13. Other Post-Employment Benefits (OPEB) (continued)

#### *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 completing five years of service, 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 1<sup>st</sup> 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.

#### **(b) Retiree Health Benefit**

##### *Plan Description*

The Water Authority has established a Retiree Healthcare Plan (HC Plan), an agent multiple-employer defined benefit retiree healthcare plan. The HC 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.

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 HC Plan.

##### *Employees Covered*

As of the June 30, 2017 actuarial valuation, the following current and former employees were covered by the benefit terms under the HC Plan:

<b>HC Plan</b>	
Active Employees	235
Inactive employees or beneficiaries currently receiving benefits	57
Inactive employees entitled to, but not yet receiving benefits	-
<b>Total</b>	<b>292</b>

### 13. Other Post-Employment Benefits (OPEB) (continued)

#### (b) Retiree Health Benefit (continued)

##### *Contributions*

The HC Plan and its contribution requirements are established by a Memoranda of Understanding with the applicable employee bargaining units and may be amended by agreements between the Water Authority and the bargaining units. The annual contribution is based on projected pay-as-you-go financing requirements. For the Fiscal Year ended June 30, 2019, the Water Authority's cash contributions were \$186,149 in current premiums and the estimated implied subsidy was \$211,679 resulting in total payments of \$397,828.

##### *Actuarial Methods and Assumptions Used to Determine Total OPEB liability (asset)*

The June 30, 2017 valuation was used to determine the June 30, 2018 total OPEB liability (asset), based on the following actuarial methods and assumptions:

<b>Actuarial Cost Method:</b>	Entry Age Normal
<b>Actuarial Assumptions:</b>	
Discount Rate	7.00%
Inflation	2.75%
Salary Increases	3.00% per annum, in aggregate
Investment Rate of Return	7.00%, assuming actuarially determined contributions funded into CERBT Investment Strategy 1
Mortality Rate <sup>(1)</sup>	Derived using CalPERS' Membership Data for all funds
Pre-Retirement Turnover <sup>(2)</sup>	Derived using CalPERS' Membership Data for all funds
Healthcare Trend Rate	6.00% HMO/6.50% PPO decreasing to 4.50% HMO/4.50% PPO

Note:

<sup>(1)</sup> Pre-retirement mortality information was derived from data collected during 1997 to 2011 CalPERS Experience Study dated January 2014 and post-retirement mortality information was derived from the 2007 to 2011 CalPERS Experience Study. The Experience Study Reports may be accessed on the CalPERS website [www.calpers.ca.gov](http://www.calpers.ca.gov) under Forms and Publications.

<sup>(2)</sup> The pre-retirement turnover information was developed based on CalPERS' specific data. For more details, please refer to the 2007 to 2011 Experience Study Report. The Experience Study Report may be accessed on the CalPERS website [www.calpers.ca.gov](http://www.calpers.ca.gov) under Forms and Publications.

##### *Discount Rate*

The discount rate used to measure the total OPEB liability (asset) was 7.00 percent. The projection of cash flows used to determine the discount rate assumed that Water Authority contributions will be made at rates equal to the actuarially determined contribution rates. Based on those assumptions, the OPEB plan's fiduciary net position was projected to be available to make all projected OPEB payments for current active and inactive employees and beneficiaries. Therefore, the long-term expected rate of return on OPEB plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability (asset).

### 13. Other Post-Employment Benefits (OPEB) (continued)

#### (b) Retiree Health Benefit (continued)

The long-term expected rate of return on OPEB plan investments was determined using a building-block method in which expected future real rates of return (expected returns, net of OPEB plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset Class	STRATEGY 1 *	
	Target Allocation	Long-term expected real rate of return
Global Equities	57.0%	5.50%
Global Fixed Income	27.0%	2.35%
REITs	8.0%	3.65%
Inflation Assets	5.0%	1.50%
Commodities	3.0%	1.75%
<b>Total</b>	<b>100%</b>	

\* Long-term expected rate of return is 7.00%.

#### Net OPEB liability (asset)

The Water Authority's net OPEB liability (asset) for the HC Plan is measured as the total OPEB liability (asset), less the OPEB plan's fiduciary net position. The net OPEB liability (asset) of the HC Plan is measured as of June 30, 2018, using an annual actuarial valuation as of June 30, 2017.

#### Changes in the OPEB liability (asset)

The changes in the net OPEB liability (asset) for the HC Plan are as follows:

	Increase (Decrease)		
	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability/(Asset) (c) = (a) - (b)
<b>Balance at June 30, 2018</b> <i>(Measurement Date June 30, 2017)</i>	<b>\$ 4,078,254</b>	<b>\$ 4,874,106</b>	<b>\$ (795,852)</b>
<b>Changes recognized for the measurement period:</b>			
Service cost	146,191	-	146,191
Interest	282,880	-	282,880
Changes of benefit terms	-	-	-
Changes of assumptions	-	-	-
Differences between expected and actual experience	(119,318)	-	(119,318)
Contributions - employer	-	366,591	(366,591)
Net investment income	-	388,093	(388,093)
Benefit payments	(366,591)	(366,591)	-
Administrative expense	-	(9,050)	9,050
<b>Net Changes</b>	<b>(56,838)</b>	<b>379,043</b>	<b>(435,881)</b>
<b>Balance at June 30, 2019</b> <i>(Measurement Date June 30, 2018)</i>	<b>\$ 4,021,416</b>	<b>\$ 5,253,149</b>	<b>\$ (1,231,733)</b>

### 13. Other Post-Employment Benefits (OPEB) (continued)

#### (b) Retiree Health Benefit (continued)

##### *Sensitivity of the Net OPEB liability (asset) to Changes in the Discount Rate*

The following presents the net OPEB liability (asset) 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, for measurement period ending June 30, 2018:

	1% Decrease	Current Discount Rate	1% Increase
	6.00%	7.00%	8.00%
<b>Net OPEB Liability (Asset)</b>	(\$989,981)	(\$1,231,733)	(\$1,454,107)

##### *Sensitivity of the Net OPEB liability (asset) to Changes in the Health Care Cost Trend Rates*

The following presents the net OPEB liability (asset) of the Water Authority if it were calculated using health care cost trend rates that are one percentage point lower or one percentage point higher than the current rate, for measurement period ending June 30, 2018:

	1% Decrease	Current Healthcare Cost Trend Rates	1% Increase
	(5.00%HMO/5.50%PPO decreasing to 3.50%HMO/3.50%PPO)	(6.00%HMO/6.50%PPO decreasing to 4.50%HMO/4.50%PPO)	(7.00%HMO/7.50%PPO decreasing to 5.50%HMO/5.50%PPO)
<b>Net OPEB Liability (Asset)</b>	(\$1,449,330)	(\$1,231,733)	(\$983,841)

#### *OPEB Plan Fiduciary Net Position*

The HC Plan assets are held by the California Employers Retirement Benefit Trust (CERBT) where they are audited annually and a copy of the financial statements may be obtained by contacting CalPERS's CERBT program at [www.calpers.ca.gov](http://www.calpers.ca.gov). Additional, information about the HC Plan is available in the separately issued Nyhart Actuary and Employee Benefits GASB 75 Actuarial Valuation report for the Water Authority.

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

Gains and losses related to changes in total OPEB liability (asset) and fiduciary net position are recognized in OPEB expense systematically over time.

The first amortized amounts are recognized in OPEB expense for the year the gain or loss occurs. The remaining amounts are categorized as deferred outflows and deferred inflows of resources related to OPEB and are to be recognized in future OPEB expense.

The amortization period differs depending on the source of the gain or loss:

Net difference between projected and actual earnings on OPEB plan investments	5-year straight-line amortization
All other amounts	Straight-line amortization over the expected average remaining service lifetime (EARSL) of all members that are provided with benefits (active and retired) as of the beginning of the measurement period

### 13. Other Post-Employment Benefits (OPEB) (continued)

#### (b) Retiree Health Benefit (continued)

##### *OPEB Expenses and Deferred Outflows/Inflows of Resources Related to OPEB*

For the Fiscal Year ended June 30, 2019, the Water Authority recognized OPEB credit of \$18,251. As of Fiscal Year ended June 30, 2019, the Water Authority reported deferred outflows of resources related to OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
OPEB contributions subsequent to measurement date	\$ 397,828	\$ -
Changes of assumptions	40,643	(325,479)
Differences between expected and actual experiences	-	(235,224)
Net difference between projected and actual earnings on OPEB plan investments	-	(28,119)
<b>Total</b>	<b>\$ 438,471</b>	<b>\$ (588,822)</b>

The \$397,828 reported as deferred outflows of resources related to contributions subsequent to the June 30, 2018 measurement date will be recognized as a reduction of the net OPEB liability (asset) during the Fiscal Year ended June 30, 2020. Other amounts reported as deferred outflows of resources related to OPEB will be recognized as OPEB expense as follows:

Fiscal Year Ended June 30	Deferred Outflows/(Inflows) of Resources
2020	\$ (115,501)
2021	(115,503)
2022	(167,557)
2023	(149,618)
Thereafter	-

### 14. Deferred Compensation Plan and Defined Contribution Plan

The Water Authority Board of Directors has adopted a deferred compensation plan and defined contribution plan (the Plans) in accordance with Sections 457(b) 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 recordkeeper for the Water Authority at June 30, 2019 was TIAA-CREF.

Participation in the 457(b) plan is not required and employee contributions may be modified from time to time at the employee's direction. Employees eligible for the 401(a) 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 401(a) 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.

## 14. Deferred Compensation Plan and Defined Contribution Plan (continued)

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 Plans are not considered part of the Water Authority's financial reporting entity. Employee contributions to the 457(b) plan were \$1,412,062 for Fiscal Year 2019. Employee contributions to the 401(a) plan were \$432,556 for Fiscal Year 2019. Employer 401(a) matching contributions were \$52,262 for Fiscal Year 2019.

## 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 the Joint Powers Risk and Insurance Management Authority (JPRIMA) underwritten by 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 \$500 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. The current property policy limit of \$500 million exceeds the current \$300 million valuation of scheduled property. The Water Authority is a participant in JPRIMA pooled insurance program and obtains workers' compensation coverage through the program underwritten by the Zenith Insurance Company. Workers' compensation coverage is per California statutory limits with \$1 million per occurrence for 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.

## 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. See Note 11(g) for the Water Authority's remaining required payments to the QSA JPA.

## 17. Commitments and Contingencies

### (a) Construction Projects

The Water Authority had two material commitments under construction contracts as of June 30, 2019 as follows:

First Aqueduct Rehabilitation	\$ 23,221,286
Vallecitos 11 and Vista 12 Flood Control Facility	3,282,250
<b>Total</b>	<b>\$ 26,503,536</b>

## 17. Commitments and Contingencies (continued)

### (b) Water Purchase Agreement

On December 20, 2012, the Water Authority entered into a 30-year Water Purchase Agreement with Poseidon Resources (Channelside) LP (Company) to purchase potable water from the Claude "Bud" Lewis Carlsbad Desalination Plant (Plant) upon commencement of commercial operations, which was achieved December 23, 2015. The Plant is a 54 million gallons per day (mgd) reverse osmosis desalination plant with an approximate ten-mile pipeline (Pipeline) that connects the Plant to the Water Authority's existing distribution system.

The project was developed as a "public-private partnership" between the Water Authority and the Company. The Company owns, operates and maintains the Plant whereas the Water Authority owns, operates and maintains the Pipeline. Pursuant to the Water Purchase Agreement (WPA), the Company sells the potable water produced by the Plant (Product Water) to the Water Authority and the Water Authority is the sole purchaser of the Product Water.

The Water Authority has 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 WPA 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 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 WPA. The monthly payments are based on actual units of Product Water delivered or deliverable according to the delivery schedule. The Water Authority pays a per-acre-foot charge for delivered or deliverable water calculated to be sufficient to pay debt service on the Series 2012 Plant Bonds, an equity return, and variable and fixed Project operating costs. The Water Authority is responsible for paying debt service costs on the Series 2012 Water Furnishing Revenue Pipeline Bonds. The Company is obligated to make shortfall payments to the Water Authority for the failure to deliver Product Water as required under the WPA (Operating Period Shortfall Payments). To secure its performance obligations under the WPA, 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 December 23, 2015 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 that constitutes permitted approved debt under the WPA plus a return on 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 those 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 that constitutes permitted approved debt under the WPA upon a termination of the WPA for the Company's default.

### (c) 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. Currently, the Water Authority is involved in litigation with MWD in various related cases, mainly pertaining to alleged rate overcharges by MWD. The Water Authority has been paying the disputed MWD rates over the years. The cases generally relate to potential damages to be awarded to the Water Authority, not additional new payments or damages to MWD. Most cases have been stayed pending outcome of the 2010/2012 rate case which is proceeding in trial court. For further information on litigation matters, contact the General Counsel's office, 4677 Overland Ave., San Diego, CA 92123, (858) 522-6790.

## Required Supplementary Information (RSI)

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## A. Defined Benefit Pension Plan - California Public Employees' Retirement System

<b>San Diego County Water Authority Miscellaneous Plan</b> <b>SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY AND RELATED RATIOS</b> <b>for the Measurement Periods Ended June 30</b>					
<i>Measurement Period</i>	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>
<b>Total Pension Liability</b>					
Service cost	\$ 5,054,460	5,050,914	4,578,555	4,706,004	4,921,587
Interest on the total pension liability	16,947,158	16,572,166	15,841,721	14,880,474	14,066,260
Actual and expected experience difference	1,255,258	(1,924,464)	527,455	(1,543,047)	-
Changes in assumptions	(8,431,448)	14,456,305	-	(3,864,680)	-
Changes in benefit terms	-	-	-	-	-
Benefit payments:					
including refunds of employee contributions	(9,471,875)	(8,936,136)	(8,045,995)	(6,923,794)	(6,089,127)
<b>Net change in total pension liability</b>	<b>5,353,553</b>	<b>25,218,785</b>	<b>12,901,736</b>	<b>7,254,957</b>	<b>12,898,720</b>
<b>Total pension liability - beginning</b>	<b>246,408,100</b>	<b>221,189,315</b>	<b>208,287,579</b>	<b>201,032,622</b>	<b>188,133,902</b>
<b>Total pension liability - ending (a) \$</b>	<b>251,761,653</b>	<b>246,408,100</b>	<b>221,189,315</b>	<b>208,287,579</b>	<b>201,032,622</b>
<b>Plan Fiduciary Net Position</b>					
Contribution - employer	7,052,963	16,165,772	6,198,142	5,766,812	5,273,604
Contribution - employee	2,257,185	2,040,297	2,017,385	2,079,502	2,680,225
Net investment income	15,019,130	17,199,107	829,361	3,400,388	21,444,232
Benefit payments:					
including refunds of employee contributions	(9,471,875)	(8,936,136)	(8,045,995)	(6,923,794)	(6,089,127)
Net plan to plan resource movement	(442)	-	-	-	-
Administrative expense	(274,727)	(221,545)	(90,897)	(167,895)	-
Other miscellaneous income/(expense) <sup>1</sup>	(521,711)	-	-	-	-
<b>Net change in plan fiduciary net position</b>	<b>14,060,523</b>	<b>26,247,495</b>	<b>907,996</b>	<b>4,155,013</b>	<b>23,308,934</b>
<b>Plan fiduciary net position - beginning</b>	<b>176,301,783</b>	<b>150,054,288</b>	<b>149,146,292</b>	<b>144,991,279</b>	<b>121,682,345</b>
<b>Plan fiduciary net position - ending (b) \$</b>	<b>190,362,306</b>	<b>176,301,783</b>	<b>150,054,288</b>	<b>149,146,292</b>	<b>144,991,279</b>
<b>Net pension liability - ending (a)-(b) \$</b>	<b>61,399,347</b>	<b>70,106,317</b>	<b>71,135,027</b>	<b>59,141,287</b>	<b>56,041,343</b>
Plan fiduciary net position as a percentage of the total pension liability	75.61%	71.55%	67.84%	71.61%	72.12%
Covered payroll \$	27,642,656	26,809,523	26,692,446	26,977,782	26,830,872

### Notes to Schedule of Changes in Net Pension Liability and Related Ratios:

<sup>1</sup> During Fiscal Year 2017-18, as a result of Governmental Accounting Standards Board Statement (GASB) No. 75, Accounting and Financial Reporting for Postemployment Benefit Plans Other Than Pensions (GASB 75), CalPERS reported its proportionate share of activity related to postemployment benefits for participation in the State of California's agent OPEB plan. Accordingly, CalPERS recorded a one-time expense as a result of the adoption of GASB 75.

**Benefit changes:** The figures above do not include any liability impact that may have resulted from plan changes which occurred after the June 30, 2017 valuation date.

**Changes in assumptions:** In 2018, demographic assumptions and inflation rate were changed in accordance to the CalPERS Experience Study and Review of Actuarial Assumptions December 2017. There were no changes in the discount rate. In 2017, the discount rate reduced from 7.65 percent to 7.15 percent. In 2016, there were no changes. In 2015, amounts reported reflect an adjustment of the discount rate from 7.5 percent (net of administrative expense) to 7.65 percent (without a reduction for pension plan administrative expense). In 2014, amounts reported were based on the 7.5 percent discount rate.

Future years' information will be displayed up to 10 years as information becomes available.

## A. Defined Benefit Pension Plan - California Public Employees' Retirement System (continued)

San Diego County Water Authority Miscellaneous Plan SCHEDULE OF PLAN CONTRIBUTIONS FOR THE FISCAL YEARS ENDED JUNE 30*						
Fiscal Year End	2019	2018	2017	2016	2015	2014
Actuarially Determined Contribution (ADC) <sup>1</sup>	\$ 6,616,458	5,970,163	6,583,368	6,198,142	5,766,812	5,273,604
Contributions in relation to the ADC	(7,445,085)	(7,052,963)	(16,165,772)	(6,198,142)	(5,766,812)	(5,273,604)
Contribution (excess)	\$ (828,627)	(1,082,800)	(9,582,404)	-	-	-
Covered payroll	\$ 28,180,980	27,642,656	26,809,523	26,692,446	26,977,782	26,830,872
Contributions as a percentage of covered payroll	26.42%	25.51%	60.30%	23.22%	21.38%	19.65%

### Notes to Schedule of Plan Contributions:

<sup>1</sup> Employers are assumed to make contributions equal to the actuarially determined contributions. However, the Water Authority has chosen to make additional contributions towards its unfunded liability. Therefore, the contributions have exceed the actuarially determined contributions in Fiscal Years 2017-2019.

\*Actuarial methods and assumptions used to set the actuarially determined contributions for Fiscal Year 2019 were derived from the June 30, 2016 Funding Valuation Report. For changes to previous year's information, refer to past Funding Valuation and Accounting Valuation Reports.

### Methods and assumptions used to determine contribution rates:

#### San Diego County Water Authority, an agent multiple-employer defined benefit plan

Actuarial Cost Method	Entry Age Normal
Amortization Method/Period	For details, see June 30, 2016 Funding Valuation Report.
Asset Valuation Method	Market value of Assets. For details, see June 30, 2016 Funding Valuation Report
Inflation	2.75%
Salary Increases	Varies by Entry Age and Service
Payroll Growth	3.00%
Investment Rate of Return	7.50% Net of Pension Plan Investment and Administrative Expenses; includes inflation.
Retirement Age	The probabilities of Retirement are based on the 2014 CalPERS Experience Study for the period from 1997 to 2011.
Mortality	The probabilities of mortality are based on the 2014 CalPERS Experience Study for the period from 1997 to 2011. Pre-retirement & Post-retirement mortality rates include 20 years of projected mortality improvement using Scale BB published by the Society of Actuaries.

Future years' information will be displayed up to 10 years as information becomes available.

## B. Other Post-Employment Benefits

San Diego County Water Authority			
SCHEDULE OF CHANGES IN THE NET OPEB LIABILITY (ASSET) AND RELATED RATIOS			
for the Measurement Periods Ended June 30			
Measurement Period	2018	2017	2016
<b>Total OPEB Liability</b>			
Service cost	\$ 146,191	200,118	187,026
Interest on the total OPEB liability	282,880	321,724	314,699
Actual and expected experience difference	(119,318)	(209,656)	-
Changes in assumptions	-	(488,219)	81,287
Changes in benefit terms	-	-	-
Benefit payments	(366,591)	(324,982)	(279,009)
<b>Net change in total OPEB liability</b>	<b>(56,838)</b>	<b>(501,015)</b>	<b>304,003</b>
<b>Total OPEB liability - beginning</b>	<b>4,078,254</b>	<b>4,579,269</b>	<b>4,275,266</b>
<b>Total OPEB liability - ending (a)</b>	<b>\$ 4,021,416</b>	<b>4,078,254</b>	<b>4,579,269</b>
<b>Plan Fiduciary Net Position</b>			
Contributions - employer	366,591	324,982	279,009
Net investment income	388,093	467,344	43,839
Benefit payments	(366,591)	(324,982)	(279,009)
Administrative expense	(9,050)	(2,366)	(2,081)
<b>Net change in plan fiduciary net position</b>	<b>379,043</b>	<b>464,978</b>	<b>41,758</b>
<b>Plan fiduciary net position - beginning</b>	<b>4,874,106</b>	<b>4,409,128</b>	<b>4,367,370</b>
<b>Plan fiduciary net position - ending (b)</b>	<b>\$ 5,253,149</b>	<b>4,874,106</b>	<b>4,409,128</b>
<b>Net OPEB (asset) liability - ending (a)-(b)</b>	<b>\$ (1,231,733)</b>	<b>(795,852)</b>	<b>170,141</b>
Plan fiduciary net position as a percentage of the total OPEB liability (asset)	130.63%	119.51%	96.28%
Covered-employee payroll	\$ 29,579,375	26,726,484	24,720,000
Net OPEB liability (asset) as a percentage of covered-employee payroll	4.16%	2.98%	0.69%

### Notes to Schedule of Changes in the Net OPEB Liability (Asset) and Related Ratios:

**Changes in assumptions.** In 2016, the discount rate was changed from 7.28% (net of administrative expense) to 7.00%. Historical information is required only for measurement periods for which GASB 75 is applicable.

Future years' information will be displayed up to 10 years as information becomes available.

## B. Other Post-Employment Benefits (continued)

San Diego County Water Authority SCHEDULE OF CONTRIBUTIONS FOR THE FISCAL YEARS ENDED JUNE 30*					
Fiscal Year End	2019	2018	2017	2016	2015
Actuarially Determined Contribution (ADC) <sup>1</sup>	\$ 73,885	69,192	185,774	180,363	627,077
Contributions in relation to the ADC	(397,828)	(366,591)	(326,391)	(279,909)	(4,300,000)
Contribution deficiency (excess)	<u>\$ (323,943)</u>	<u>(297,399)</u>	<u>(140,617)</u>	<u>(99,546)</u>	<u>(3,672,923)</u>
Covered-employee payroll	\$ 29,412,264	29,579,375	26,726,484	24,720,000	24,720,000
Contributions as a percentage of covered-employee payroll	1.35%	1.24%	1.22%	1.13%	17.39%

### Notes to Schedule of Contributions:

<sup>1</sup> Employers are assumed to make contributions equal to the actuarially determined contributions. However, the Water Authority has chosen to make additional contributions towards its unfunded liability. Therefore, the contributions have exceed the actuarially determined contributions in Fiscal Years 2015-2019. In Fiscal Year 2015, the Water Authority elected to prefund its OPEB Plan.

\*Actuarial methods and assumptions used to set the actuarially determined contributions for Fiscal Year 2019 and 2018 were from the June 30, 2017 actuarial valuation, Fiscal Years 2017 and 2016 were from the June 30, 2015 actuarial valuation and Fiscal Year 2015 was from the June 30, 2013 actuarial valuation.

### Methods and assumptions used to determine contribution rates:

Actuarial Cost Method	Entry Age Normal
Amortization Method/Period	Level percent of payroll over a closed rolling 15-year period
Asset Valuation Method	Market value
Inflation	2.75%
Payroll Growth	3% per annum, in aggregate
Investment Rate of Return	7.00% per annum. Assumes investing in California Employers' Retiree Benefit Trust asset allocation Strategy 1 with a margin for adverse deviation of 28 bps.
Healthcare Cost-Trend Rates	6.0% HMO and 6.5% PPO initial, 1.0% - 2.0% near-term increase then decreasing 0.5% per year to trend rate that reflects medical price inflation.
Retirement Age	Tier 1 employees - 2.5% @55 and Tier 2 employees - 2.0% @62 The probabilities of retirement are based on the 2014 CalPERS Experience Study for the period from 2007 to 2011.
Mortality	Pre-retirement mortality probability based on CalPERS 1997-2011 Experience Study covering CalPERS participants. Post-retirement mortality probability based on CalPERS Experience Study 2007-2011 covering participants in CalPERS.

\*Future years' information will be displayed up to 10 years as information becomes available.

## Supplemental Information

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## C. San Diego County Water Authority Budgetary Comparison Schedule

### Two-Year Budget for the Fiscal Years Ended June 30, 2019 and 2018 – Budgetary Basis

	Final Budget	Actual Amounts <sup>(1)</sup>	Variance with Final Budget Positive (Negative)
<b>Net Water Sales Revenue</b>			
Water Sales	\$ 1,302,329,168	\$ 1,171,415,263	\$ (130,913,905)
Water Purchases and Treatment	(1,029,543,475)	(892,553,482)	136,989,993
<b>Total Net Water Sales Revenue</b>	<b>272,785,693</b>	<b>278,861,781</b>	<b>6,076,088</b>
<b>Revenues and Other Income</b>			
Infrastructure Access Charges	67,991,290	65,684,976	(2,306,314)
Property Taxes and In-Lieu Charges	25,360,573	28,419,966	3,059,393
Investment Income	10,421,636	12,615,100	2,193,464
Hydroelectric Revenue	7,105,700	7,785,760	680,060
Grant Reimbursements	26,635,000	17,440,611	(9,194,389)
Build America Bonds Subsidy	22,605,916	21,132,766	(1,473,150)
Other Income	985,432	14,121,942	13,136,510
Capital Contributions:			
Capacity Charges	33,423,807	47,963,133	14,539,326
Water Standby Availability Charges	22,244,752	22,256,604	11,852
Contributions in Aid of Capital Improvement Program (CIP)	1,683,012	16,000	(1,667,012)
<b>Total Revenues and Other Income</b>	<b>218,457,118</b>	<b>237,436,858</b>	<b>18,979,740</b>
<b>Total Revenues</b>	<b>491,242,811</b>	<b>516,298,639</b>	<b>25,055,828</b>
<b>Expenses</b>			
Debt Service	280,945,000	292,623,921	(11,678,921)
QSA Mitigation	18,829,481	18,829,481	-
Equipment Replacement	4,855,000	3,774,713	1,080,287
Grant Expenses	27,135,000	19,485,353	7,649,647
Other Expenses	1,000,000	3,829,659	(2,829,659)
Operating Departments/Programs (Note 4)	103,202,095	100,355,408	2,846,687
<b>Total Expenses</b>	<b>435,966,576</b>	<b>438,898,535</b>	<b>(2,931,959)</b>
<b>Net Revenues Before CIP Expenses</b>	<b>55,276,235</b>	<b>77,400,104</b>	<b>22,123,869</b>
<b>CIP Expenses</b>	<b>137,617,918</b>	<b>131,713,349</b>	<b>5,904,569</b>
<b>Change in Net Position - Budgetary Basis</b>	<b>(82,341,683)</b>	<b>(54,313,245)</b>	<b>28,028,438</b>
<b>Add Adjustments - Full Accrual (Note 5)</b>	<b>99,968,169</b>	<b>99,968,169</b>	<b>-</b>
<b>Change in Net Position - GAAP Basis</b>	<b>17,626,486</b>	<b>45,654,924</b>	<b>28,028,438</b>
<b>Net Position at Beginning of Year 1</b>	<b>1,556,316,102</b>	<b>1,556,316,102</b>	<b>-</b>
<b>Net Position at End of Year 2</b>	<b>\$ 1,573,942,588</b>	<b>\$ 1,601,971,026</b>	<b>\$ 28,028,438</b>

Note:

<sup>(1)</sup> Actual amounts have been adjusted to more accurately compare it to the adopted multi-year budget which is prepared on a modified accrual basis.

## 1. General Manager's Adopted Multi-Year Budget

In June 2017, the Board of Directors (Board) adopted a \$1.6 billion budget for the Fiscal Years 2018 and 2019. The Water Authority adheres to the budget policies and budgetary controls adopted by the Board for the Fiscal Years 2018 and 2019. The schedule on the previous page presents the final Adopted Multi-Year Budget amounts, as amended by the Board, and compares them to actual amounts as presented on a modified accrual basis, which are different from the amounts presented in the Statement of Revenues, Expenses, and Changes in Net Position for the Fiscal Year ended June 30, 2019, with comparative data for the Fiscal Year ended June 30, 2018.

## 2. Budgetary Controls

The Board, by resolution, has established budgetary controls and made a total appropriation for expenses consistent with the adopted budget. The total appropriation adopted by the Board establishes the legal spending limit for the Water Authority. The Board, by resolution, has delegated to the General Manager authority to make budget adjustments as necessary within a limit of \$150,000 subject to the total appropriation limit. Budget adjustments in excess of \$150,000 or increases in the total appropriation limit must be approved by the Board.

## 3. Budget Process

The Board adopts a multi-year operating and capital improvement program budget every other fiscal year. The Board approves total budgeted appropriations and any amendments to the appropriations throughout the two-year period. The General Manager views the budget as an essential tool for proper financial management and holds a series of budget hearings through the Administrative and Finance Committee. The budget process includes presentations of key assumptions in the budget development and provides mechanisms for questions and comments from the Board to the Water Authority staff. The Finance Department leads the effort in developing the budget and is responsible for monitoring and reporting to the Board.

## 4. Operating Departments/Programs

	Two-Year Final Budget <sup>(1)</sup>	Two-Year Actual Amounts	Variance with Final Budget Positive (Negative)
<b>Operating Departments/Programs</b>			
Administrative Services	\$ 11,984,180	\$ 11,610,825	\$ 373,355
Colorado River Program	3,483,607	2,946,726	536,881
Engineering	7,468,313	7,146,176	322,137
Finance	4,875,185	4,747,768	127,417
General Counsel	6,853,457	5,382,219	1,471,238
General Manager and Board of Directors	9,524,312	8,661,396	862,916
MWD Program	4,258,991	4,198,260	60,731
Operations and Maintenance	38,813,860	36,876,067	1,937,793
Public Outreach and Conservation	7,595,612	7,023,716	571,896
Water Resources	8,344,578	7,683,399	661,179
Actuarial amounts related to Pensions/OPEB	-	4,078,856	(4,078,856)
<b>Total Operating Departments/Programs</b>	<b>\$ 103,202,095</b>	<b>\$ 100,355,408</b>	<b>\$ 2,846,687</b>

Note:

<sup>(1)</sup> Included in the budget is the annual pension contribution, however, pension expenses can vary significantly once the CalPERS actuarial report is received.

## 5. Reconciliation of Adjustments

	Two-Year Actual Budgetary Basis	Adjustments <sup>(1)</sup>	Two-Year Actual GAAP Basis
<b>Revenues and Other Income</b>			
Investment Income	\$ 12,615,100	\$ 5,482,387	\$ 18,097,487
Hydroelectric Revenue	7,785,760	(7,785,760)	-
Grant Reimbursements	17,440,611	(17,440,611)	-
Build America Bonds Subsidy	21,132,766	(21,132,766)	-
Other Income <sup>(2)</sup>	14,121,942	45,454,569	59,576,511
<b>Total Revenues and Other Income</b>	<b>73,096,179</b>	<b>4,577,819</b>	<b>77,673,998</b>
<b>Expenses</b>			
Debt Service	292,623,921	(95,655,024)	196,968,897
QSA Mitigation	18,829,481	(18,829,481)	-
Equipment Replacement	3,774,713	(3,774,713)	-
Grant Expenses	19,485,353	(19,485,353)	-
Other Expenses	3,829,659	47,287,798	51,117,457
Operating Departments	100,355,408	(2,655,072)	97,700,336
Depreciation and Amortization	-	125,562,182	125,562,182
Bond Issuance Costs	-	3,872,662	3,872,662
<b>Total Expenses</b>	<b>438,898,535</b>	<b>36,322,999</b>	<b>475,221,534</b>
<b>Net Revenues Before CIP Expenses</b>	<b>(365,802,356)</b>	<b>(31,745,180)</b>	<b>(397,547,536)</b>
<b>CIP Expenses</b>	<b>131,713,349</b>	<b>(131,713,349)</b>	<b>-</b>
<b>Change in Net Position</b>	<b>\$ (497,515,705)</b>	<b>\$ 99,968,169</b>	<b>\$ (397,547,536)</b>

Notes:

<sup>(1)</sup> Only includes revenues and expenses with adjustments.

<sup>(2)</sup> Other Income includes operating revenues, other income, intergovernmental, and gain/loss on sale/retirement of capital assets.

## 6. Monthly Financial Reporting

In accordance with best financial management practices, the Finance Department provides monthly financial reports to the Board that include the monitoring of Water Purchases and Water Sales in acre-feet and in dollars, and a narrative and variance analysis. In addition, a schedule prepared on a budgetary basis compares the final adopted budget, as amended by the Board, to actual expenses. These monthly financial reports are prepared to provide timely information on the financial progress of the Water Authority for the Board to consider in the decision-making process.

## 7. Annual Financial Reporting

The Water Authority elects to present the budgetary schedule, optional for Enterprise Funds, in accordance with best practices recommended by professional accounting organizations and in keeping with the Water Authority's commitment to transparency in financial reporting and disclosure. The schedule prepared on a budgetary basis compares the final two-year adopted budget, as amended by the Board, to actual expenses for the two-year period as presented on the initial schedule in Other Supplementary Information. In addition, a reconciliation of the budgetary schedule and the audited financial statements are presented in Note 5 Reconciliation of Adjustments.

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# Statistical Section

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# Statistical Section

This section of the San Diego County Water Authority’s Comprehensive Annual Financial Report presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information says about the Water Authority’s overall financial health.

**CONTENTS**

**TABLES**

**Financial Trends**

**1-5**

These tables contain trend information to help the reader understand how the Water Authority’s financial performance has changed over time.

**Revenue Capacity**

**6-10**

These tables contain information to help the reader assess the Water Authority’s most significant revenue sources.

**Debt Capacity**

**11-13**

These tables present information to help the reader assess the ability of the Water Authority to pay debt service on outstanding debt.

**General Information**

**14-15**

These tables contain service and infrastructure data to help the reader understand how information in its financial report relates to Water Authority provided services and activities.

**Demographic and Economic Information**

**16-17**

These tables offer demographic and economic indicators to help the reader understand the environment in which the Water Authority’s financial activities take place.

Note:

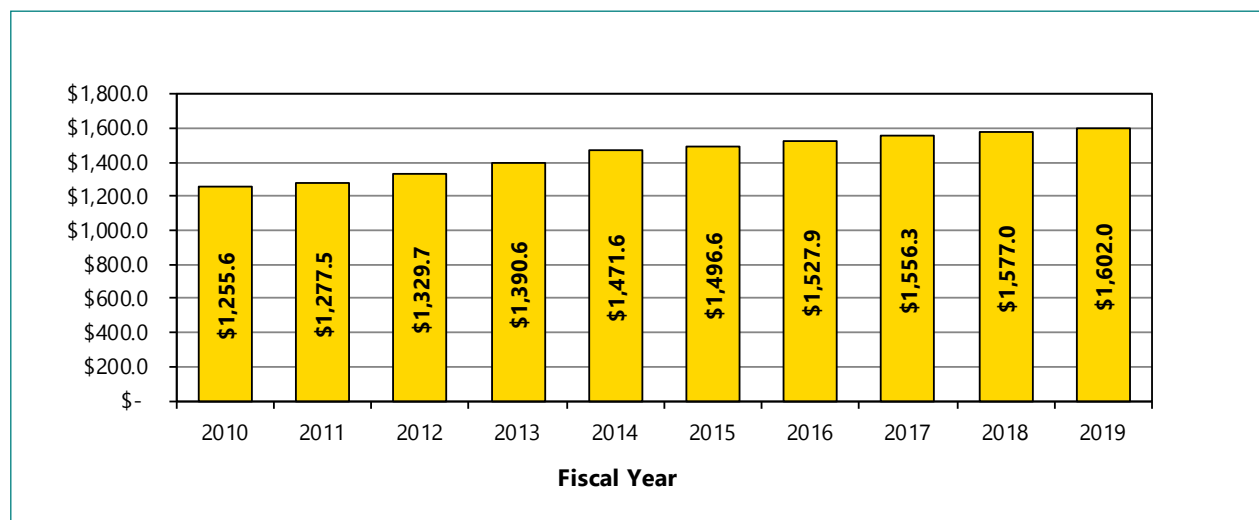
Unless otherwise noted, the information in these schedules is derived from the Water Authority’s comprehensive annual financial reports of the relevant year.

## Net Position Last Ten Fiscal Years

**Table 1**

Fiscal Year	Net Investment in Capital Assets	Restricted for Construction Projects	Restricted for Debt Service	Unrestricted	TOTAL NET POSITION	Changes in Net Position
2019	\$ 1,225,002,600	\$ 65,357,775	\$ 178,327	\$ 311,432,324	<b>\$ 1,601,971,026</b>	\$25,013,317
2018	1,154,718,703	119,984,952	377,929	301,876,125	<b>1,576,957,709</b>	20,641,607
2017	1,123,928,892	147,352,064	235,337	284,799,809	<b>1,556,316,102</b>	(1) 30,302,015
2016	1,138,995,458	156,718,296	158,377	232,035,734	<b>1,527,907,865</b>	(1) 35,965,133
2015	1,102,128,289	143,366,311	113,537	250,964,563	<b>1,496,572,700</b>	(2) 86,143,313
2014	1,011,397,033	201,696,008	549,186	257,965,113	<b>1,471,607,340</b>	81,003,310
2013	980,446,318	151,728,963	540,932	257,887,817	<b>1,390,604,030</b>	60,895,729
2012	976,837,047	133,157,019	675,910	219,038,325	<b>1,329,708,301</b>	(3) 52,228,329
2011	959,638,557	121,172,255	586,217	196,082,943	<b>1,277,479,972</b>	(3) 39,160,773
2010	954,037,294	115,506,824	597,315	185,460,362	<b>1,255,601,795</b>	48,261,746

### Total Net Position, in Millions (\$)



**Notes:**

- (1) Net position at June 30, 2017 and 2016 were restated to properly amortize intangible assets for Storage Rights. Beginning net position was restated by a decrease of \$1,893,778 pursuant to GASB Statement No. 75 implemented in Fiscal Year 2017.
- (2) Beginning net position was restated by a decrease of \$61,177,953 pursuant to GASB Statement Nos. 68 and 71 implemented in Fiscal Year 2015.
- (3) Net position at June 30, 2012 and 2011 was restated to reflect the bond issuance costs expensed in the period incurred.

## Revenues and Capital Contributions by Source Last Ten Fiscal Years

**Table 2.1**

Fiscal Year	Water Sales <sup>(1)</sup>	Other Revenues	TOTAL OPERATING REVENUES
2019	\$ 579,605,983	\$ 4,565,447	\$ 584,171,430
2018	591,809,280	4,053,221	595,862,501
2017	579,057,028	3,727,332	582,784,360
2016	524,934,642	3,240,007	528,174,649
2015	584,172,839	4,567,285	588,740,124
2014	593,695,290	3,935,305	597,630,595
2013	523,455,688	2,578,210	526,033,898
2012	443,347,502	1,519,525	444,867,027
2011	382,922,036	634,572	383,556,608
2010	387,871,218	4,965,060	392,836,278

**Table 2.2**

Fiscal Year	Property Taxes	In-Lieu Charges <sup>(2)</sup>	Infrastructure Access Charges	Investment Income	Other, net	TOTAL NONOPERATING REVENUES
2019	\$ 12,279,706	\$ 2,386,546	\$ 33,202,686	\$ 13,755,026	\$ 20,918,319	\$ 82,542,283
2018	11,515,329	2,238,385	32,482,290	4,342,461	30,050,559	80,629,024
2017	10,816,635	2,096,678	31,144,704	2,237,947	22,860,940	69,156,904
2016	10,066,792	2,000,431	30,434,370	5,985,490	25,905,838	74,392,921
2015	9,577,280	1,898,327	29,895,726	2,905,952	18,967,088	63,244,373
2014	9,387,129	1,754,973	29,205,684	3,674,934	21,265,070	65,287,790
2013	9,202,932	1,593,549	28,675,422	2,936,474	13,546,781	55,955,158
2012	8,240,009	1,642,353	27,700,326	5,211,394	16,277,941	59,072,023
2011	8,071,041	1,583,467	24,507,570	6,960,755	19,250,470	60,373,303
2010	8,341,559 <sup>(3)</sup>	1,630,065	21,241,060	5,217,031	7,100,636	43,530,351

**Notes:**

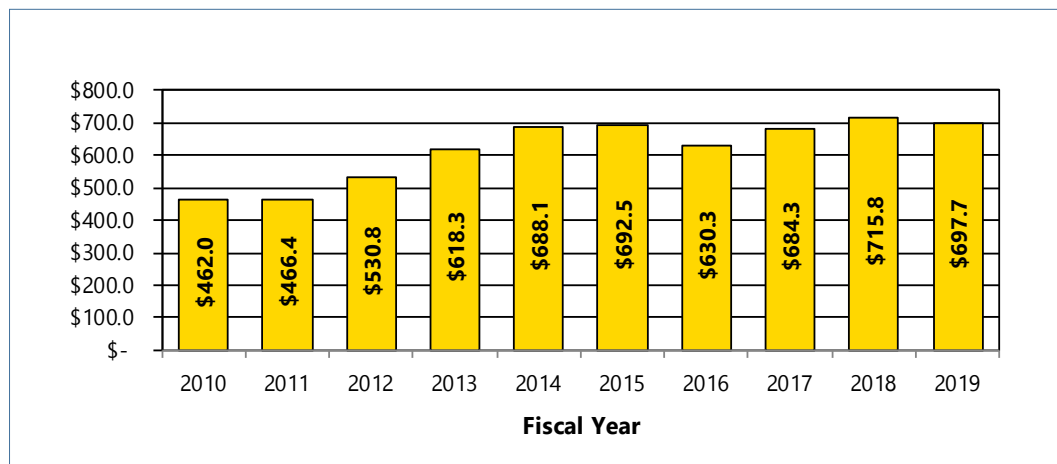
- <sup>(1)</sup> Includes readiness-to-serve and capacity charges assessed by the Metropolitan Water District (MWD).  
<sup>(2)</sup> The City of San Diego elects to pay in-lieu charges rather than the tax levy. This calculation is based on prior year assessed valuation.  
<sup>(3)</sup> Proposition 1A Borrowing by the State of California of \$688,268 in Fiscal Year 2010 was recognized as tax revenues in the fiscal year for which they were levied.

## Revenues and Capital Contributions by Source (continued) Last Ten Fiscal Years

**Table 2.3**

Fiscal Year	Capacity Charges	Water Standby Availability Charges	Contributions in Aid of Capital Assets	TOTAL CAPITAL CONTRIBUTIONS	GRAND TOTAL
2019	\$ 19,809,365	\$ 11,153,993	\$ -	\$ 30,963,358	\$ 697,677,071
2018	28,153,768	11,102,611	16,000	39,272,379	715,763,904
2017	21,080,540	11,091,285	219,325	32,391,150	684,332,414
2016	15,838,800	11,088,377	791,486	27,718,663	630,286,233
2015	22,559,844	11,106,743	6,897,528	40,564,115	692,548,612
2014	13,815,194	11,137,248	230,952	25,183,394	688,101,779
2013	17,709,796	11,147,488	7,409,404	36,266,688	618,255,744
2012	11,098,619	11,240,988	4,533,844	26,873,451	530,812,501
2011	10,321,076	11,255,132	913,097	22,489,305	466,419,216
2010	10,298,928	11,240,386	4,087,011	25,626,325	461,992,954

**Total Revenues by Source, in Millions (\$)**



## Expenses by Function Last Ten Fiscal Years

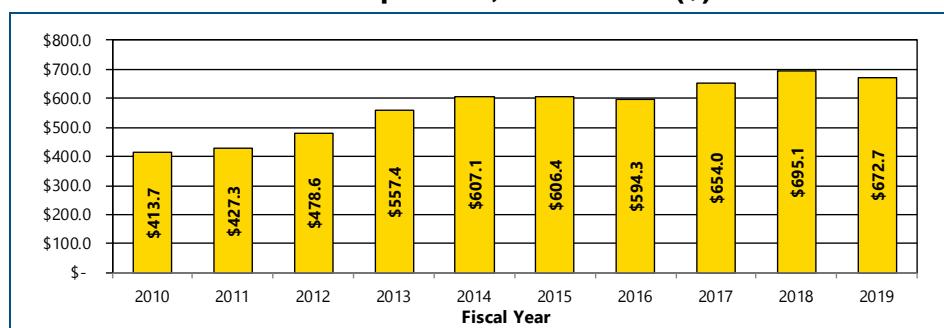
**Table 3.1**

Fiscal Year	Cost of Sales	Operations & Maintenance	Planning	General & Administrative	Depreciation & Amortization	TOTAL OPERATING EXPENSES
2019	\$ 450,184,311	\$ 21,538,024	\$ 9,564,422	\$ 16,283,984	\$ 62,719,586	\$ 560,290,327
2018	442,369,171	24,219,304	9,179,960	16,914,642	62,842,596	555,525,673
2017	430,560,992	19,097,518	9,040,200	14,487,899	67,086,517	540,273,126
2016	387,123,145	18,212,388	8,651,233	14,259,469	64,023,664	492,269,899
2015	411,037,897	22,365,531	8,416,134	14,115,738	57,751,284	513,686,584
2014	422,699,658	18,780,808	6,851,384	13,670,808	56,589,618	518,592,276
2013	371,258,531	19,252,138	9,009,004	13,314,635	52,259,977	465,094,285
2012	312,446,563	16,800,991	7,163,795	13,545,177	51,705,749	401,662,275
2011	275,099,372	16,576,465	9,754,403	13,238,715	37,364,821	352,033,776
2010	291,385,187	15,482,609	8,642,260	15,270,175	30,657,250	361,437,481

**Table 3.2**

Fiscal Year	Interest Expense	Other, net	TOTAL NONOPERATING EXPENSES	GRAND TOTAL
2019	\$ 97,053,235	\$ 15,320,192	\$ 112,373,427	\$ 672,663,754
2018	99,915,662 <sup>(1)</sup>	39,680,962	139,596,624	695,122,297
2017	95,533,730 <sup>(2)</sup>	18,223,543	113,757,273	654,030,399
2016	85,112,986 <sup>(2)</sup>	16,938,215	102,051,201	594,321,100
2015	81,792,704 <sup>(2)</sup>	10,926,011	92,718,715	606,405,299
2014	77,791,397 <sup>(2)</sup>	10,714,796	88,506,193	607,098,469
2013	80,738,966 <sup>(2)</sup>	11,526,764	92,265,730	557,360,015
2012	69,076,153 <sup>(2),(3)</sup>	7,845,744 <sup>(3)</sup>	76,921,897	478,584,172
2011	67,209,780 <sup>(2),(3)</sup>	8,014,887 <sup>(3)</sup>	75,224,667	427,258,443
2010	38,982,442 <sup>(2)</sup>	13,311,285	52,293,727	413,731,208

### Total Expenses, in Millions (\$)



**Notes:**

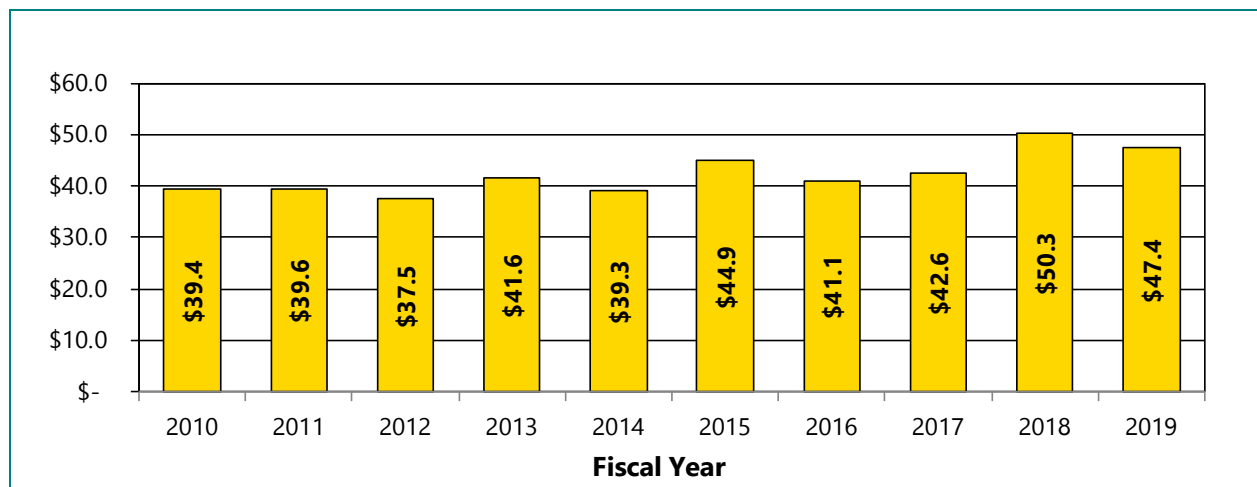
- (1) With the adoption of GASB 89 in Fiscal Year 2018, interest expense is no longer capitalizable.
- (2) Net of interest expense incurred during construction, "capitalized interest" Fiscal Years 2010-2018.
- (3) Fiscal Years 2012 and 2011 expenses were restated for GASB 65 implementation.

## Operating Department/Program Expenses by Major Expense Category Last Ten Fiscal Years

**Table 4**

Fiscal Year	Labor & Benefits	Outside Services	Supplies, Utilities, Insurance	Other Expenses	Capitalized Overhead	TOTAL OPERATING DEPARTMENT EXPENSES <sup>(1)</sup>
2019	\$ 33,720,381	\$ 11,211,468	\$ 4,109,872	\$ 2,056,709	\$ (3,712,000)	\$ 47,386,430
2018	39,921,737 <sup>(2)</sup>	10,153,682	4,171,046	1,842,991	(5,775,550)	50,313,906
2017	30,203,216	13,163,995	3,809,016	2,012,274	(6,562,884)	42,625,617
2016	30,157,924	12,393,149	3,264,804	1,832,617	(6,525,404)	41,123,090
2015	33,547,387	13,244,296	3,324,270	1,713,115	(6,931,665)	44,897,403
2014	29,882,613	13,981,175	3,127,000	1,640,283	(9,328,071)	39,303,000
2013	30,592,860	13,555,169	3,151,622	1,576,776	(7,300,650)	41,575,777
2012	30,342,606	8,759,265	2,584,696	2,270,811	(6,447,415)	37,509,963
2011	30,972,738	9,928,970	3,078,911	1,491,077	(5,902,113)	39,569,583
2010	30,934,843	8,588,898	2,614,997	1,622,306	(4,366,000)	39,395,044

### Total Operating Department/Program Expenses, in Millions (\$)



**Notes:**

- (1) Excludes equipment purchases.
- (2) In Fiscal Year 2018, Labor and Benefits expense is higher than prior years due to \$9.6 million supplemental payment to CalPERS to reduce the Unfunded Pension Liability.

## Capital Assets Last Ten Fiscal Years

**Table 5.1**

Fiscal Year	Land	Easements	Mitigation Banks	Construction in Progress	Total Non-Depreciable Capital Assets
2019	\$24,621,026	\$ 12,848,771	\$ 5,323,118	\$ 87,069,339	\$ 129,862,254
2018	24,621,026	12,843,763	5,323,118	75,507,207	118,295,114
2017	24,490,954	11,915,888	5,329,998	110,208,603	151,945,443
2016	24,458,404	11,858,791	5,329,998	171,049,357	212,696,550
2015	24,053,307	11,858,791	5,329,998	187,115,515	228,357,611
2014	23,244,672	7,933,369	5,017,023	555,898,353	592,093,417
2013	22,333,982	7,610,124	5,017,023	451,716,143	486,677,272
2012	19,291,657	7,301,686	2,644,029	637,434,621	666,671,993
2011 <sup>(1)</sup>	16,833,637	7,301,686	2,644,029	520,058,635	546,837,987
2010 <sup>(1)</sup>	16,421,418	1,023,887	2,644,029	1,200,331,306	1,220,420,640

**Table 5.2**

Fiscal Year	Pipelines and Dams	Facilities	Equipment	Intangible Software & Mitigation	Participation and Capacity Rights	Storage Rights <sup>(2)</sup>	Total Depreciable Capital Assets
2019	\$ 2,234,331,612	\$ 808,458,481	\$ 33,814,036	\$ 6,599,377	\$ 520,051,103	\$ 522,856,068	\$ 4,126,110,677
2018	2,200,695,359	798,272,139	32,970,982	6,599,377	520,051,103	519,052,259	4,077,641,219
2017	2,160,923,351	789,443,884	32,025,782	5,306,323	517,686,553	489,681,404	3,995,067,297
2016	2,131,640,177	780,095,031	37,739,089	8,757,292	510,663,098	418,652,214	3,887,546,901
2015	1,871,305,792	739,777,239	36,341,572	7,917,720	507,821,415	415,862,959	3,579,026,697
2014	1,790,726,715	731,162,857	35,202,142	7,917,720	508,782,992	41,016,383	3,114,808,809
2013	1,786,130,985	744,832,423	34,751,465	7,644,109	503,001,729	41,016,383	3,117,377,094
2012	1,645,493,121	635,616,230	32,307,160	4,995,235	491,565,179	-	2,809,976,925
2011 <sup>(1)</sup>	1,629,816,278	622,504,085	31,694,365	3,253,579	482,042,703	-	2,769,311,010
2010 <sup>(1)</sup>	1,188,379,660	436,476,504	24,800,078	3,253,579	258,678,630	-	1,911,588,451

**Table 5.3**

Fiscal Year	Accumulated Depreciation/Amortization	Depreciable Capital Assets, Net	NET CAPITAL ASSETS
2019	\$ (792,881,544)	\$ 3,333,229,133	\$ 3,463,091,387
2018	(731,356,845)	3,346,284,374	3,464,579,488
2017	(669,824,136)	3,325,243,161	3,477,188,604
2016	(618,428,521)	3,269,118,380	3,481,814,930
2015	(554,725,060)	3,024,301,637	3,252,659,248
2014	(493,889,000)	2,620,919,809	3,213,013,226
2013	(437,057,773)	2,680,319,321	3,166,996,593
2012	(384,901,910)	2,425,075,015	3,091,747,008
2011 <sup>(1)</sup>	(334,288,815)	2,435,022,195	2,981,860,182
2010 <sup>(1)</sup>	(296,923,994)	1,614,664,457	2,835,085,097

**Notes:**

- (1) In Fiscal Year 2012, the categorization of non-depreciable and depreciable capital assets was updated. For comparative purposes, Fiscal Years 2011 and 2010 have been updated.
- (2) Storage Rights were recategorized from non-depreciable to depreciable in Fiscal Year 2018.

## Schedule of Rates and Charges Last Ten Calendar Years

**Table 6.1**

Calendar Year	Metropolitan Water District Supply Charges							
	Full Service Tier 1		Full Service Tier 2		Interim Agricultural Water Program <sup>(1)</sup>		Replenishment Water Rate <sup>(2)</sup>	
	UTR	TR	UTR	TR	UTR	TR	UTR	TR
2019	\$ 731	\$ 1,050	\$ 817	\$ 1,136	\$ -	\$ -	\$ -	\$ -
2018	695	1,015	781	1,101	-	-	-	-
2017	666	979	760	1,073	-	-	-	-
2016	594	942	728	1,076	-	-	-	-
2015	582	923	714	1,055	-	-	-	-
2014	593	890	735	1,032	-	-	-	-
2013	593	847	743	997	-	-	-	-
2012	560	794	686	920	537	765	442	651
2011	527	744	652	869	482	687	409	601
2010	484	701	594	811	416	615	366	558

Notes:

- (1) Reflects MWD treated Interim Agricultural Water Program (IAWP) rate which was discontinued after 2012.  
(2) MWD's Replenishment Rate is a discounted rate for surplus system supplies available for the purpose of replenishing local supplies.

UTR = untreated acre foot

TR = treated acre foot

**Table 6.2**

Calendar Year <sup>(1)</sup>	San Diego County Water Authority										
	Melded Supply Rate <sup>(2)</sup>		Special Agricultural Water Rate <sup>(3)</sup>		Transportation Rate <sup>(4)</sup>	Customer Service	Storage	Supply Reliability Charge <sup>(5)</sup>	Water Standby Charge <sup>(6)</sup>	Capacity Charge <sup>(7)</sup>	Infrastructure Access Charge <sup>(8)</sup>
	UTR	TR	UTR	TR							
2019	\$909	\$1,185	\$731	\$1,007	\$120	\$25,600,000	\$65,000,000	\$30,200,000	\$10	\$ 5,267	\$3.01
2018	894	1,194	695	995	115	26,400,000	65,000,000	28,600,000	10	5,240	3.01
2017	855	1,145	666	956	110	26,400,000	65,000,000	24,800,000	10	5,157	2.87
2016	780	1,060	594	874	105	26,400,000	63,200,000	26,000,000	10	4,963	2.76
2015	764	1,042	582	860	101	26,400,000	63,200,000	-	10	4,800	2.76
2014	732	1,006	593	867	97	26,400,000	63,200,000	-	10	4,800	2.68
2013	714	970	593	849	93	26,400,000	60,200,000	-	10	4,492	2.65
2012	638	872	560	794	85	26,400,000	54,200,000	-	10	4,492	2.60
2011	597	812	527	742	75	23,200,000	44,300,000	-	10	4,492	2.49
2010	532	747	484	699	67	18,000,000	34,000,000	-	10	4,492	2.02

Notes:

- (1) All rates are calendar year except for the Water Standby Charge, which is fiscal year.  
(2) The Water Authority's Melded Supply Rate includes MWD's Full Service Tier 1 charge, as well as other supply and treatment charges.  
(3) A new transitional rate was adopted on December 10, 2008 for customers opting out of MWD's IAWP. Customers participating in the Special Agricultural Water Rate (SAWR) program are considered M&I customers by MWD.  
(4) Per acre-foot of water.  
(5) The Supply Reliability charge is a fixed charge that went into effect on January 1, 2016 and recovers costs associated with desalinated and transfer water.  
(6) Per parcel or acre, whichever is greater.  
(7) Per equivalent meter (less than one inch) and includes system and treatment capacity charges.  
(8) Per equivalent meter.

UTR = untreated acre foot

TR = treated acre foot

## Water Sales by Customer Fiscal Years Ended June 30, 2019 and 2010<sup>(1)</sup>

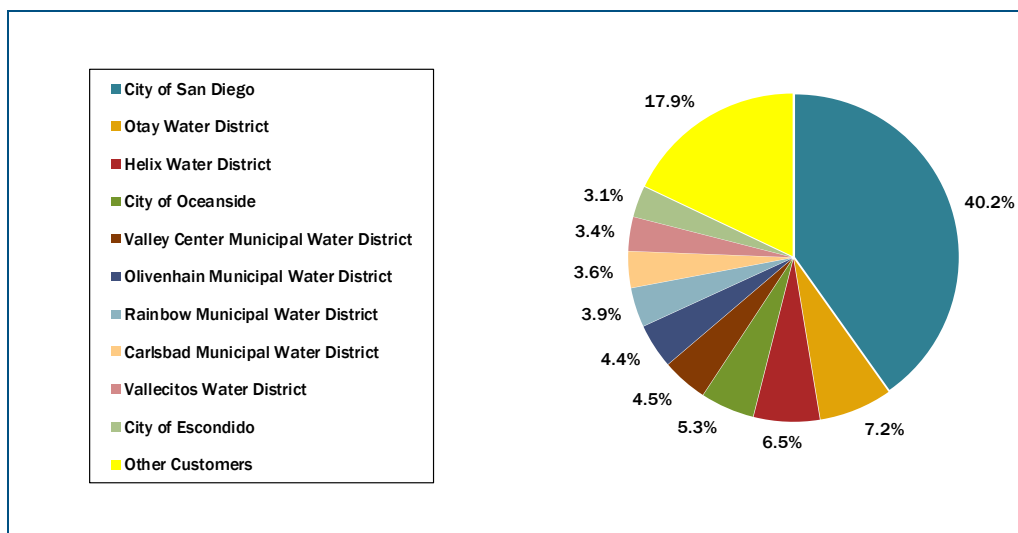
**Table 7**

Fiscal Year Ended June 30, 2019			Fiscal Year Ended June 30, 2010		
Member Agency	Sales (acre-feet)	Percent of Water Sold	Member Agency	Sales (acre-feet)	Percent of Water Sold
City of San Diego	152,187	40.2%	City of San Diego	187,032	38.1%
Otay Water District	27,385	7.2%	Otay Water District	31,188	6.4%
Helix Water District	24,617	6.5%	Valley Center Municipal Water District	29,522	6.0%
City of Oceanside	19,902	5.3%	Helix Water District	28,903	5.9%
Valley Center Municipal Water District	17,166	4.5%	City of Oceanside	24,555	5.0%
Olivenhain Municipal Water District	16,817	4.4%	Rainbow Municipal Water District	22,407	4.6%
Rainbow Municipal Water District	14,654	3.9%	Olivenhain Municipal Water District	19,992	4.1%
Carlsbad Municipal Water District	13,521	3.6%	City of Escondido	19,972	4.1%
Vallecitos Water District	12,774	3.4%	Carlsbad Municipal Water District	17,142	3.5%
City of Escondido	11,717	3.1%	Vallecitos Water District	16,308	3.3%
<b>Total Top Ten Customers</b>	<b>310,740</b>	<b>82.1%</b>	<b>Total Top Ten Customers</b>	<b>397,021</b>	<b>80.9%</b>
Vista Irrigation District	9,340	2.5%	Vista Irrigation District	15,336	3.1%
Padre Dam Municipal Water District	9,298	2.5%	Sweetwater Authority <sup>(2)</sup>	14,551	3.0%
City of Poway	8,840	2.3%	Fallbrook Public Utilities District	13,070	2.7%
Fallbrook Public Utilities District	7,599	2.0%	Padre Dam Municipal Water District	12,459	2.5%
Santa Fe Irrigation District	6,436	1.7%	City of Poway	10,050	2.1%
Ramona Municipal Water District	5,085	1.3%	Ramona Municipal Water District	7,194	1.5%
Yuima Municipal Water District	4,747	1.3%	Rincon Municipal Water District	6,280	1.3%
Rincon Municipal Water District	4,739	1.3%	Santa Fe Irrigation District	5,666	1.2%
Sweetwater Authority <sup>(2)</sup>	4,615	1.2%	Lakeside Water District	3,332	0.7%
San Dieguito Water District	3,407	0.9%	Yuima Municipal Water District	2,519	0.5%
Lakeside Water District	2,643	0.7%	San Dieguito Water District	2,156	0.4%
City of Del Mar	961	0.3%	City of Del Mar	1,129	0.2%
Camp Pendleton Marine Corps Base	80	0.0%	Camp Pendleton Marine Corps Base	66	0.0%
<b>Other Customers</b>	<b>67,790</b>	<b>17.9%</b>	<b>Other Customers</b>	<b>93,808</b>	<b>19.1%</b>
<b>Total Water Sales</b>	<b>378,530</b>	<b>100.0%</b>	<b>Total Water Sales</b>	<b>490,829</b>	<b>100.0%</b>

<sup>(1)</sup> Represents gross water delivery net of water exchanges.

<sup>(2)</sup> Sweetwater Authority includes National City and South Bay Irrigation District.

## Water Sales by Customer for Fiscal Year Ended June 30, 2019



## Total Treated and Untreated Water Sales Last Ten Fiscal Years

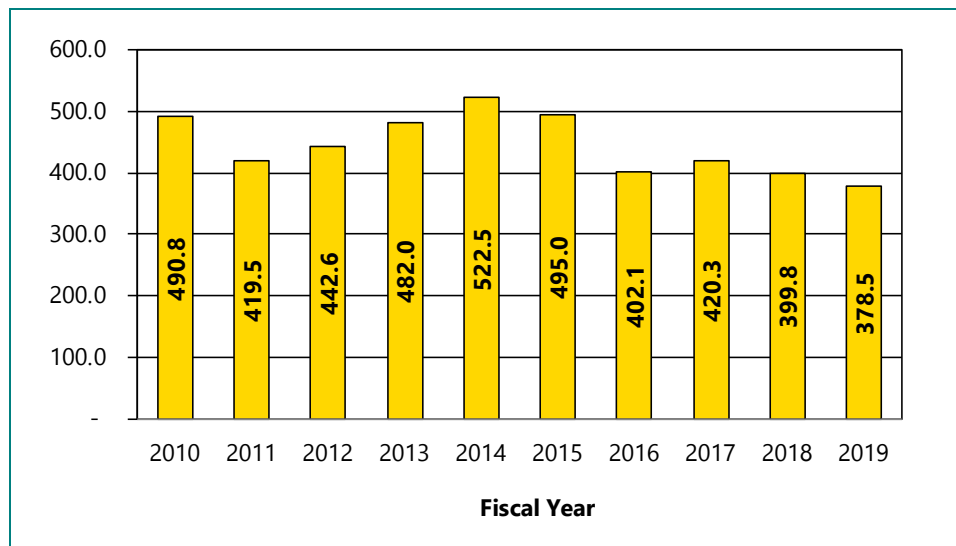
**Table 8**

Fiscal Year	Treated Water		Untreated Water		Total			
	Acre-Feet	Sales	Acre-Feet	Sales	Acre-Feet	Change in Acre-Feet	Sales <sup>(1)</sup>	Change in Sales
2019	141,902	\$186,273,586	236,626	\$ 248,941,801	<b>378,528</b>	(21,298)	\$ 435,215,387	\$ (12,710,557)
2018	164,636	209,395,264	235,190	238,530,680	<b>399,826</b>	(20,446)	447,925,944	14,248,821
2017	157,126	185,939,681	263,146	247,737,442	<b>420,272</b>	18,207	433,677,123	41,553,006
2016	146,112	159,173,709	255,953	232,950,408	<b>402,065</b>	(92,918)	392,124,117	(68,001,573)
2015	173,204	181,907,967	321,779	278,217,723	<b>494,983</b>	(27,470)	460,125,690	(13,560,973)
2014	198,397	199,785,961	324,056	273,900,702	<b>522,453</b>	40,440	473,686,663	64,636,999
2013	199,257	186,241,667	282,756	222,807,997	<b>482,013</b>	39,370	409,049,664	75,184,306
2012	181,445	150,884,055	261,198	182,981,303	<b>442,643</b>	23,132	333,865,358	38,485,802
2011	177,098	138,798,942	242,413	156,580,614	<b>419,511</b>	(71,318)	295,379,556	(23,150,056)
2010	195,937	147,719,098	294,892	170,810,514	<b>490,829</b>	(122,266)	318,529,612	28,307,791

Notes:

<sup>(1)</sup> Total water sales do not include MWD's readiness-to-serve, capacity charges, CWA fixed charges, and agriculture credits passed on to member agencies.

## Total Treated and Untreated Water Sales Total Acre-Feet (in Thousands)



## Assessed Valuation of Taxable Property Last Ten Fiscal Years

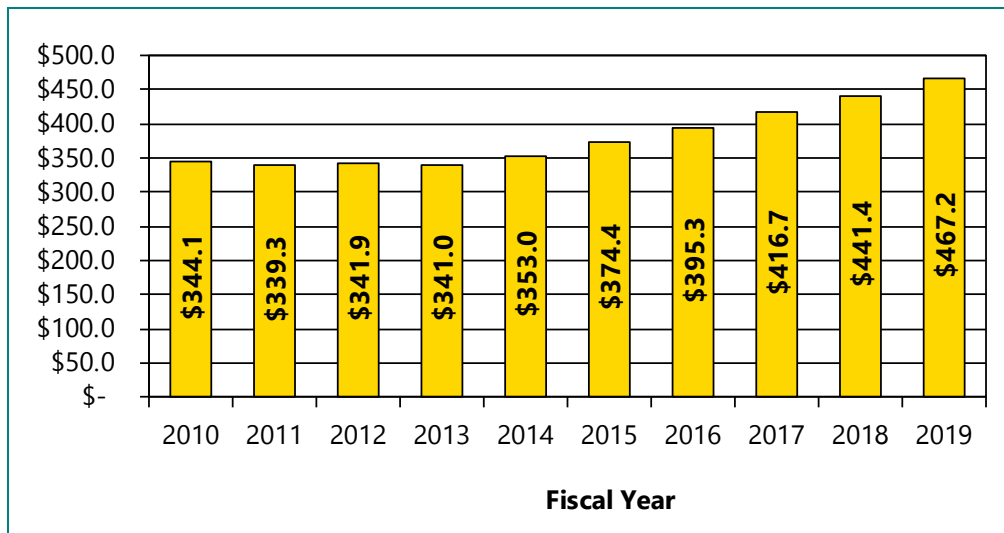
**Table 9**

Fiscal Year	Local Secured Property	State Secured Property	Redevelopment and Homeowners Exemptions	Net Secured Assessed Value	Net Unsecured Assessed Value	TOTAL ASSESSED VALUE
2019	\$509,133,975,679	\$1,342,390,285	\$ 57,792,609,392	\$452,683,756,572	\$ 14,509,708,976	<b>\$467,193,465,548</b>
2018	479,613,217,379	1,046,310,773	53,266,338,749	427,393,189,403	13,988,486,909	<b>441,381,676,312</b>
2017	451,344,411,144	947,193,625	48,943,478,320	403,348,126,449	13,343,942,403	<b>416,692,068,852</b>
2016	427,427,915,780	798,410,621	45,982,840,513	382,243,485,888	13,084,323,381	<b>395,327,809,269</b>
2015	404,011,617,061	730,338,926	43,257,822,190	361,484,133,797	12,871,635,577	<b>374,355,769,374</b>
2014	380,636,482,118	808,778,971	40,786,610,505	340,658,650,584	12,314,446,187	<b>352,973,096,771</b>
2013	367,697,518,087	934,170,553	39,467,366,837	329,164,321,803	11,813,249,531	<b>340,977,571,334</b>
2012	368,513,444,797	948,639,459	39,371,348,044	330,090,736,212	11,762,281,838	<b>341,853,018,050</b>
2011	366,269,868,285	987,948,775	39,929,289,823	327,328,527,237	11,965,058,478	<b>339,293,585,715</b>
2010	371,808,214,146	747,943,167	40,999,711,071	331,556,446,242	12,538,322,810	<b>344,094,769,052</b>

Source:

County of San Diego's Office of the Auditor & Controller

## Total Assessed Valuation in Billions (\$)



## Levies and Collections Last Ten Fiscal Years

**Table 10**

Fiscal Year	Property Taxes	Special Assessments <sup>(1)</sup>	Total Levy	Total Collections	Net Delinquent	% of Delinquent/Total Levy
2019	\$ 11,783,510	\$ 11,787,017	\$ 23,570,527	\$ 22,676,119	\$ 894,408	3.79%
2018	11,188,782	11,867,058	23,055,840	22,231,133	824,707	3.58%
2017	10,602,193	11,912,245	22,514,438	21,531,426	983,012	4.37%
2016	10,057,779	11,913,896	21,971,675	20,939,584	1,032,091	4.70%
2015	9,642,868	12,045,616	21,688,484	20,644,160	1,044,324	4.82%
2014	9,175,527	12,260,070	21,435,597	20,236,442	1,199,155	5.59%
2013	8,831,152	12,319,533	21,150,685	19,747,352	1,403,333	6.63%
2012	8,769,573	12,331,193	21,100,766	19,603,936	1,496,830	7.09%
2011	8,885,757	12,443,203	21,328,960	19,878,227	1,450,733	6.80%
2010	9,103,831	12,370,600	21,474,431	19,788,939	1,685,492	7.85%

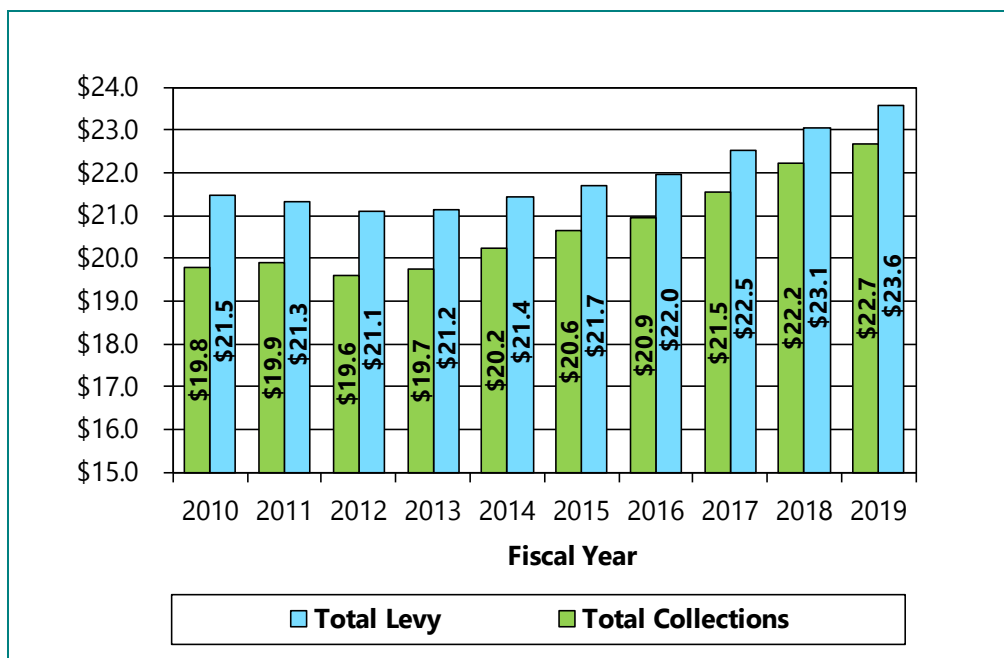
Notes:

<sup>(1)</sup> Represents the tax levy for the Water Authority's Water Standby Availability Charge.

Source:

County of San Diego's Office of the Auditor & Controller and the San Diego County Water Authority

## Total Levy and Collections in Millions (\$)



## Revenue Debt Service Coverage Last Ten Fiscal Years

**Table 11**

Fiscal Year	Revenues for Purpose of Calculation <sup>(1)</sup>	Operating Expenses <sup>(2)</sup>	Net Revenue Available for Debt Service	Senior Lien Debt Service <sup>(3)</sup>			Coverage Factor
				Principal	Interest	Total	
2019	\$ 676,782,031	\$ 482,904,489	\$ 193,877,542	\$ 42,390,000	\$ 81,558,921	\$ 123,948,921	156%
2018	671,386,019	478,929,363	192,456,656	44,620,000	83,683,510	128,303,510	150%
2017	650,240,212	460,273,296	189,966,916	41,560,000	85,044,572	126,604,572	150%
2016	589,264,060	416,179,012	173,085,048	26,550,000	88,662,002	115,212,002	150%
2015	636,915,844	444,459,693	192,456,151	34,615,000	93,550,901	128,165,901	150%
2014	643,791,434	450,860,556	192,930,878	31,940,000	96,311,875	128,251,875	150%
2013	584,848,831	402,037,827	182,811,004	28,175,000	93,543,288	121,718,288	150%
2012	502,859,753	340,074,164	162,785,589	26,585,000	84,026,291	110,611,291	147%
2011	446,399,335	305,014,447	141,384,888	24,120,000	79,942,971	104,062,971	136%
2010	439,639,107	320,808,607	118,830,500	6,365,000 <sup>(4)</sup>	73,067,368 <sup>(5)</sup>	79,432,368	150%

**Notes:**

<sup>(1)</sup> Includes amounts transferred to and from the Rate Stabilization Fund, and excludes interest on debt proceeds, property tax receipts, contributions in aid of capital assets, and Capital Improvement Program (CIP) grant reimbursements.

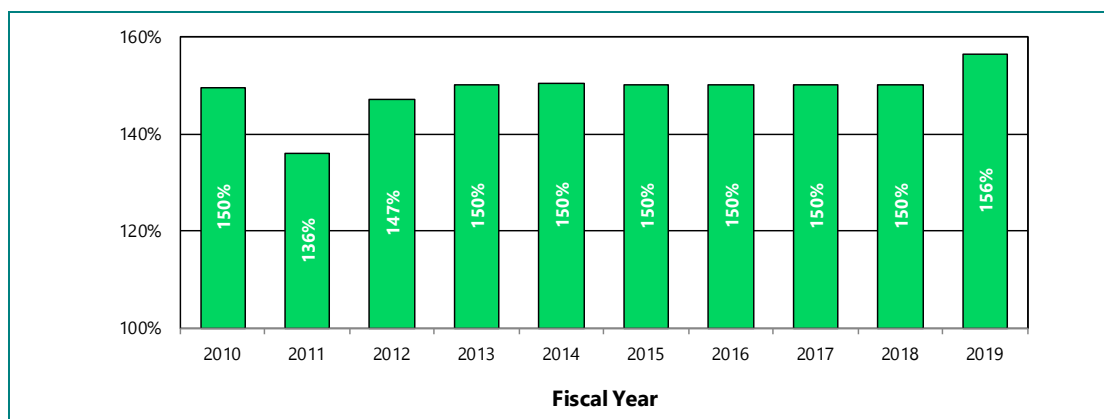
<sup>(2)</sup> Excludes depreciation and amortization expenses; net of applicable property tax receipts.

<sup>(3)</sup> Excludes commercial paper.

<sup>(4)</sup> Excludes \$51,005,000 principal payment on the 1998A COPs which was paid from debt proceeds.

<sup>(5)</sup> Excludes \$1,500,000 interest payment on the 2008A COPs and \$9,530,000 interest payment on the 2010A and B Bonds, which was paid from debt proceeds.

### Senior Lien Debt Service Coverage in Percentages (%)



## Long-Term Debt Outstanding Last Ten Fiscal Years (in Thousands)

**Table 12.1**

	Certificates of Participation						
Fiscal Year	1997A	1998A	2002A	2004A	2005A	2008A	Total
2019	\$ -	\$ 11,685	\$ -	\$ -	\$ 13,800	\$ 8,825	\$ 34,310
2018	-	11,685	-	-	13,800	17,140	42,625
2017	-	11,685	-	-	28,490	34,460	74,635
2016	-	11,685	-	-	43,495	48,965 <sup>(6)</sup>	104,145
2015	-	11,685	-	- <sup>(2)</sup>	57,375	512,650 <sup>(7)</sup>	581,710
2014	-	11,685	-	43,925	70,885	536,110	662,605
2013	-	11,685	- <sup>(1)</sup>	43,925 <sup>(3)</sup>	83,490	547,030	686,130
2012	-	11,685	17,510	388,710	95,730	556,150	1,069,785
2011	6,110	11,685	236,750	425,000	107,455	558,015	1,345,015
2010	23,610	11,685	243,370	425,000	107,455	558,015	1,369,135
<b>Original Par Amount</b>	\$ 162,315	\$ 180,000	\$ 300,000	\$ 425,000	\$ 107,455	\$ 558,015	
<b>Debt Service Reserve Funds</b>	\$ -	\$ 12,241	\$ - <sup>(1)</sup>	\$ - <sup>(4)</sup>	\$ 10,746 <sup>(5)</sup>	\$ 23,671 <sup>(5)</sup>	\$ 46,658
<b>Final Maturity FY</b>	2012	2028	2013	2015	2022	2020	

**Notes:**

- (1) \$18,385,750 of proceeds were released from the debt service reserve fund to defease the balance of \$17,510,000 on the 2002A COPs in February 2013.
- (2) \$43,925,000 was defeased on the 2004A COPs in February 2015.
- (3) \$344,785,000 of the 2004A COPs was refunded by the 2013A Bonds in March 2013.
- (4) \$4,052,362 of proceeds were released from the debt service reserve fund to defease part of the 2004A COPs in February 2015.
- (5) Balance satisfied with surety bond.
- (6) \$142,445,000 of the 2008A COPs was refunded by the 2015A Bonds in September 2015; \$114,895,000 and \$205,195,000 of the 2008A COPs was refunded by the 2016A and 2016B Bonds, respectively, in June 2016.
- (7) \$12,100,000 was defeased on the 2008A COPs in February 2015.
- (8) \$52,375,000 of the 2010A Bonds was refunded by the 2015A Bonds in September 2015; \$20,425,000 of the 2010A Bonds was refunded by the 2016B Bonds in June 2016.
- (9) \$86,630,000 of the 2011S-1 Bonds was refunded by the Series 9 Notes in May 2016.
- (10) \$200,605,000 of the 2012 Bonds was refunded in February 2019.
- (11) See Table 16 for personal income and population data.

## Long-Term Debt Outstanding (continued) Last Ten Fiscal Years (in Thousands)

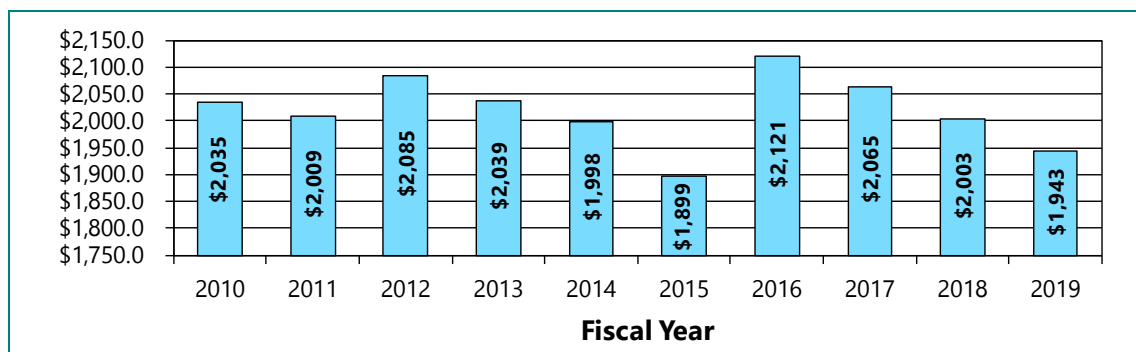
**Table 12.2**

Revenue Bonds													
Fiscal Year	2010A	2010B	2011S-1	2011A	2011B	2012	2013A	2015A	2016S-1	2016A	2016B	2019	Total
2019	\$ 4,695	\$526,135	\$ -	\$ 86,670	\$ 94,540	\$ - <sup>(10)</sup>	\$ 285,100	\$ 177,845	\$ 87,685	\$ 98,945	\$ 197,395	\$ 183,155	\$ 1,742,165.00
2018	9,165	526,135	-	95,320	94,540	200,605	299,105	184,795	87,685	98,945	197,395	-	1,793,690.00
2017	13,460	526,135	-	103,635	94,540	203,215	299,105	184,795	87,685	98,945	197,395	-	1,808,910.00
2016	17,590 <sup>(8)</sup>	526,135	- <sup>(9)</sup>	111,555	94,540	203,215	299,105	184,795	87,685	98,945	197,395	-	1,820,960.00
2015	94,365	526,135	86,630	119,100	94,540	-	299,105	-	-	-	-	-	1,219,875.00
2014	96,925	526,135	86,630	126,285	94,540	-	299,105	-	-	-	-	-	1,229,620.00
2013	98,495	526,135	86,630	133,130	94,540	-	299,105	-	-	-	-	-	1,238,035.00
2012	98,495	526,135	86,630	139,945	94,540	-	-	-	-	-	-	-	945,745.00
2011	98,495	526,135	-	-	-	-	-	-	-	-	-	-	624,630.00
2010	98,495	526,135	-	-	-	-	-	-	-	-	-	-	624,630.00
<b>Original Par Amount</b>	<b>\$ 98,495</b>	<b>\$ 526,135</b>	<b>\$ 86,630</b>	<b>\$ 139,945</b>	<b>\$ 94,540</b>	<b>\$ 203,215</b>	<b>\$ 299,105</b>	<b>\$ 184,795</b>	<b>\$ 87,685</b>	<b>\$ 98,945</b>	<b>\$ 197,395</b>	<b>\$ 183,155</b>	
<b>Debt Service Reserve Funds</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 9,732</b>	<b>\$ 9,732</b>
<b>Final Maturity FY</b>	<b>2020</b>	<b>2049</b>	<b>2016</b>	<b>2027</b>	<b>2031</b>	<b>2019</b>	<b>2034</b>	<b>2029</b>	<b>2021</b>	<b>2033</b>	<b>2038</b>	<b>2046</b>	

**Table 12.3**

Fiscal Year	Unamortized Premiums and Discounts	TOTAL DEBT OUTSTANDING (in Thousands)	% of Personal Income <sup>(11)</sup>	Debt Per Capita (in dollars) <sup>(11)</sup>
2019	\$ 166,627	\$ 1,943,102	0.92%	\$ 578
2018	167,118	2,003,433	0.99%	598
2017	181,348	2,064,893	1.07%	621
2016	195,579	2,120,684	1.16%	639
2015	97,009	1,898,594	1.07%	577
2014	105,863	1,998,088	1.19%	613
2013	114,717	2,038,882	1.29%	634
2012	69,809	2,085,339	1.37%	655
2011	39,402	2,009,047	1.38%	640
2010	41,603	2,035,368	1.49%	656

### Total Debt Outstanding, in Millions (\$)



## Direct and Overlapping Debt June 30, 2019

**Table 13**

2018-19 Assessed Valuation: \$508,577,696,294

### DIRECT AND OVERLAPPING TAX AND ASSESSMENT DEBT

	Total Debt Outstanding June 30, 2019	% Applicable <sup>(1)</sup>	Estimated Share of Overlapping Debt June 30, 2019
Metropolitan Water District	\$ 48,050,000	17.440%	\$8,379,920
Community College Districts	2,769,522,675	79.701-99.960	2,647,012,353
San Diego Unified School District	3,626,409,875	99.961	3,624,995,575
Other Unified School Districts	1,199,137,843	Various	1,195,414,419
High School Districts	1,411,707,327	Various	1,375,688,469
School Districts	1,022,843,229	Various	992,126,706
City of Escondido	56,810,000	99.487	56,518,565
City of La Mesa	20,040,000	99.985	20,036,994
City of National City	3,360,000	99.877	3,355,867
Grossmont Healthcare District	258,388,330	95.978	247,995,951
Palomar Pomerado Hospital District	431,124,259	98.073	422,816,495
Otay Water District, I.D. No. 27	2,755,000	100.000	2,755,000
Community Facilities Districts	1,294,200,899	100.000	1,294,200,899
1915 Act Bonds (Estimated)	106,894,062	100.000	106,894,062
<b>TOTAL DIRECT AND OVERLAPPING TAX AND ASSESSMENT DEBT</b>			<b>\$11,998,191,275</b>
<b>OVERLAPPING GENERAL FUND DEBT</b>			
San Diego County General Fund Obligations	\$ 255,365,000	96.68%	\$246,889,436
San Diego County Pension Obligation Bonds	508,765,000	96.681	491,879,090
San Diego Superintendent of Schools Certificates of Participation	10,085,000	96.681	9,750,279
Community College District Certificates of Participation	3,405,000	79.701-99.922	3,187,575
Unified School District General Fund Obligations	208,461,327	90.218-99.929	205,722,958
High School and School District General Fund Obligations	382,552,581	89.658-99.990	378,620,631
City of San Diego General Fund Obligations	523,668,982	99.949	523,401,911
Other City General Fund Obligations	352,867,461	99.159-99.997	352,057,225
San Miguel Consolidated Fire Protection District General Fund Obligations	1,727,000	99.546	1,719,159
Lakeside Fire General Fund Obligations	4,720,000	95.988	4,530,634
<b>TOTAL OVERLAPPING GENERAL FUND DEBT</b>			<b>\$2,217,758,898</b>
<b>OVERLAPPING TAX INCREMENT DEBT (Successor Agencies):</b>	\$1,115,212,968	0.838-100.0%	\$1,077,677,276
<b>TOTAL DIRECT DEBT</b>			<b>\$0</b>
<b>TOTAL OVERLAPPING DEBT</b>			<b>\$15,293,627,449</b>
<b>COMBINED TOTAL DEBT</b>			<b>\$15,293,627,449 <sup>(2)</sup></b>
<b>Ratios to 2017-18 Assessed Valuation:</b>			
<b>Direct Debt</b>	<b>0.00%</b>		
Total Direct and Overlapping Tax and Assessment Debt	2.36%		
Combined Total Debt	3.01%		
<b>Ratios to Redevelopment Successor Agencies Incremental Valuation (\$57,053,922,294):</b>			
Total Overlapping Tax Increment Debt	1.89%		

**Notes:**

- <sup>(1)</sup> The percentage of overlapping debt applicable to the Water Authority is estimated using taxable assessed property value. Applicable percentages were estimated by determining the portion of the overlapping district's assessed value that is within the boundaries of the Water Authority divided by the district's total taxable assessed value.
- <sup>(2)</sup> Excludes tax and revenue anticipation notes, enterprise revenue, mortgage revenue bonds and non-bonded capital lease obligations.

## General Information June 30, 2019

**Table 14**

Number of member agencies.....	24
Cities.....	6
Water districts.....	5
Irrigation districts.....	3
Municipal water districts.....	8
Public utility districts.....	1
Federal agency (military base).....	1

## Operating Indicators Last 10 Fiscal Years

**Table 15**

Fiscal Year	Water System Service Area <sup>(1)</sup>	Number of Primary Pipelines	Miles of Pipeline	Miles of Patrol Road Maintained	Number of Service Connections	Treated Water Pipeline Capacity <sup>(2)</sup>	Untreated Water Pipeline Capacity <sup>(2)</sup>	Average Daily Deliveries <sup>(2)</sup>	Total Regular Employees
2019	946,000	5	310	168	96	420	504	334	254.50
2018	946,000	5	310	168	96	420	504	350	254.50
2017	946,000	5	310	168	96	420	504	375	247.40
2016	951,000	5	310	168	96	420	504	349	247.40
2015	951,000	5	300	168	96	420	504	442	253.65
2014	951,000	5	300	168	96	420	504	442	254.65
2013	951,000	5	300	150	96	420	504	430	253.00
2012	947,288	5	300	150	106	420	504	395	254.50
2011	951,000	5	300	150	106	420	504	375	267.50
2010	951,000	5	300	150	131	420	504	440	267.50

Notes:

(1) Acres.

(2) Millions of gallons per day (mgd).

## Demographic and Economic Statistics Last Ten Calendar Years

**Table 16**

Year	County Population	(1)	Personal Income (in thousands)	(1)	Per Capita Personal Income (in dollars)	(1)	Unemployment Rate	(2)
2019	3,361,270	(4)	\$ 210,988,894	(4)	\$ 58,422	(4)	3.3%	
2018	3,343,364	(3)	202,800,000	(3)	57,473	(3)	3.6%	
2017	3,325,468		193,296,405		57,913		4.2%	
2016	3,317,749		186,149,364		56,116		5.0%	
2015	3,290,245		180,101,999		54,742		5.3%	
2014	3,258,856		169,896,807		52,166		6.5%	
2013	3,218,419		159,087,705		49,460		8.2%	
2012	3,181,513		153,444,873		48,256		9.5%	
2011	3,140,692		146,013,646		46,505		10.7%	
2010	3,104,346		136,918,739		44,113		10.7%	

Notes:

- (1) U.S. Department of Commerce, Bureau of Economic Analysis, Regional Data
- (2) CALMIS, Employment Development Department (EDD)
- (3) California Department of Transportation (estimates)
- (4) Estimate based on average increase over the last three years.

## Largest Employers in San Diego Fiscal Year 2018 and 2009

**Table 17**

2018 <sup>(1)</sup>				2009 <sup>(2)</sup>			
Industry Type	Rank	# of Employees	% of Total Employment	Industry Type	Rank	# of Employees	% of Total Employment
University of California, San Diego	1	34,448	2.32%	Federal Government	1	43,500	3.11%
United States Navy, San Diego	2	34,185	2.30%	United States Navy, San Diego	2	42,000	3.00%
Sharp Healthcare	3	18,364	1.24%	State of California	3	40,900	2.92%
County of San Diego	4	17,413	1.17%	University of California, San Diego	4	26,000	1.86%
Scripps Healthcare	5	14,941	1.01%	County of San Diego	5	20,500	1.46%
San Diego Unified School District	6	13,815	0.93%	City of San Diego	6	19,500	1.39%
Qualcomm	7	11,800	0.79%	San Diego Unified School District	7	15,881	1.13%
City of San Diego	8	11,462	0.77%	Sharp Healthcare	8	14,390	1.03%
Kaiser Foundation Hospital	9	9,606	0.65%	Scripps Healthcare	9	12,700	0.91%
UC San Diego Health	10	8,932	0.60%	Scripps Mercy Hospital	10	11,000	0.79%
<b>Total All Industries</b>		<b>174,966</b>	<b>11.78%</b>	<b>Total All Industries</b>		<b>246,371</b>	<b>17.60%</b>
2018 Total Number employed in San Diego County <sup>(3)</sup>			<b>1,486,300</b>	2009 Total Number employed in San Diego County <sup>(3)</sup>			<b>1,399,473</b>

Source:

- (1) San Diego Business Journal (FY2019 Information was not available)
- (2) The Daily Transcript, Sourcebook
- (3) California Employment Development Department

# Continuing Disclosure

1944 - 2019







**San Diego County Water Authority**

4677 Overland Avenue • San Diego, California 92123-1233  
(858) 522-6600 FAX (858) 522-6568 [www.sdcwa.org](http://www.sdcwa.org)

**MEMBER AGENCIES**

Carlsbad  
Municipal Water District

City of Del Mar

City of Escondido

City of National City

City of Oceanside

City of Poway

City of San Diego

Fallbrook  
Public Utility District

Helix Water District

Lakeside Water District

Olivenhain  
Municipal Water District

Otay Water District

Padre Dam  
Municipal Water District

Camp Pendleton  
Marine Corps Base

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

**OTHER  
REPRESENTATIVE**

County of San Diego

October 16, 2019

Dear friends and interested parties:

We are pleased to present the Continuing Disclosure Report (Report) for fiscal year ended June 30, 2019 for the San Diego County Water Authority (Water Authority).

The information provided in this Report speaks only as of its date, October 16, 2019 and the financial and operating data included therein is accurate only as of the dates specified therein. The delivery of this Report may not, under any circumstances, create an implication that there has been no other change to the information provided in any final official statement of the Water Authority. Other than as set forth in its Continuing Disclosure Agreements, the Water Authority has not undertaken to disclose financial or operating data or to provide notice of changes to the information in this Report.

This Report is provided solely pursuant to the Water Authority's Continuing Disclosure Agreements. The filing of this Report does not constitute or imply any representation (i) that all of the information provided is material to investors, (ii) regarding any other financial, operating or other information about the Water Authority or the referenced securities, or (iii) that no changes, circumstances, or events have occurred since the end of the fiscal year to which this Report relates (other than as contained in this Report), or any other date specified with respect to any of the information contained in this Report, or that no other information exists, which may have a bearing on the security for the referenced securities, or an investor's decision to buy, sell, or hold the referenced securities. The information contained in this Report has been obtained from sources which are believed to be reliable, but such information is not guaranteed as to accuracy or completeness. No statement in this Report should be construed as a prediction or representation about future financial performance of the Water Authority. Any statements regarding the referenced securities, other than a statement made by the Water Authority in an official release or subsequent notice published in a financial newspaper of general circulation and/or filed with the Municipal Securities Rulemaking Board are not authorized by the Water Authority. The Water Authority shall not be responsible for the accuracy, completeness, or fairness of any such unauthorized statement.

If you have any questions regarding this Report, please contact Lisa Marie Harris, Director of Finance at (858) 522-6671, or by email at [lharris@sdcw.org](mailto:lharris@sdcw.org).

Sincerely,

Lisa Marie Harris, Director of Finance/Treasurer

## General Information

### San Diego County Water Authority Management

Sandra L. Kerl	Acting General Manager
Dan Denham	Deputy General Manager
Lisa Marie Harris	Director of Finance/Treasurer
Mark Hattam	General Counsel

## A Guide to the Continuing Disclosure

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The Water Authority currently has 24 member agencies. A member of the San Diego County Board of Supervisors serves as a non-voting representative to the Water Authority Board of Directors. As a wholesale entity, the Water Authority serves only its member agencies and has no retail customers. The Water Authority has broad powers related to acquiring, developing, storing, transporting, selling, and delivering water both inside and outside its boundaries. The Water Authority is authorized to fix and collect rates or other charges for the purchase and delivery of water or the use of facilities for service. The Water Authority may borrow money, incur indebtedness, and issue bonds and other evidences of indebtedness.

The Water Authority currently receives a minor amount of revenue from hydroelectric energy sales. Legislation enacted in September 2000 expands the Water Authority's power generation authority to include the purchase, sale, and transmission of energy.

## Selected Financial Highlights

The Statement of Net Position and the Statement of Revenues, Expenses, and Changes in Net Position are located in the Financial Section, under the Financial Statements tab, pages 33 and 34, respectively.

The Water Authority's restricted and unrestricted cash and investments balances at June 30, 2019 were \$87.4 million and \$237.2 million, respectively. Approximately 73.1 percent of total cash is unrestricted.

TABLE 1. Cash and Investments, June 30, 2019 and 2018

	2019	2018
As of June 30, 2019 and 2018, restricted cash and investments balances were as follows:		
Construction	\$ -	\$ -
Debt Service Reserve <sup>(1)</sup>	22,038,315	22,665,917
Pay-As-You-Go	65,357,774	119,984,952
<b>Total</b>	<b><u>\$ 87,396,089</u></b>	<b><u>\$ 142,650,869</u></b>
As of June 30, 2019 and 2018, unrestricted cash and investments balances were as follows:		
Operating	\$ 77,527,558	\$ 74,765,603
Rate Stabilization	157,693,318	136,740,512
Equipment Replacement	2,019,635	919,490
Stored Water	-	-
<b>Total</b>	<b><u>\$ 237,240,511</u></b>	<b><u>\$ 212,425,605</u></b>

Note:

(1) The Debt Service Reserve balance includes the California Pollution Control Financing Authority (CPCFA) issued 2019 Pipeline Bond reserves.

## Summary of Outstanding Debt

The Water Authority continues to hold long-term senior lien credit ratings of AA+, and Aa2 from Fitch and Moody's, and was upgraded from AA+ to AAA by Standard & Poor's in May 2016. Long-term subordinate lien credit ratings are usually 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 by Standard & Poor's, Fitch, and Moody's, respectively.

### San Diego County Water Authority Bond Rating<sup>1</sup>

Rating Agency	Senior Lien Ratings <sup>2</sup>	Subordinate Lien Ratings	Outlook
Standard & Poor's	AAA	AA+	Stable
Fitch	AA+	AA	Stable
Moody's	AA2	Aa3	Stable

(1) This table accurate as of June 30, 2019

(2) Senior Lien includes the Water Authority's Revenue Bonds and Certificates of Participation.

## Long-Term Senior Lien Fixed-Rate Debt

The table below summarizes the Water Authority's outstanding long-term, fixed-rate debt as of June 30, 2019, which includes final maturities, original par amounts, amounts outstanding, and applicable debt service reserve fund requirements. All reserve requirements are fully funded by either reserves or surety bonds.

**TABLE 2. Long-Term, Fixed-Rate Debt Outstanding, Fiscal Year June 30, 2019 \***

Issue Name	Final Maturity	Original Par Amount	Amount Outstanding	Debt Service Reserve Funds	(1)
<b>Water Revenue Certificates of Participation:</b>					
Series 1998A	2028	\$ 180,000,000	\$ 11,685,000	\$ 12,240,775	
Series 2005A	2022	107,455,000	13,800,000	10,745,500	(2)
Series 2008A	2020	558,015,000	8,825,000	23,670,625	(2)
<b>Water Revenue Bonds:</b>					
Series 2010A	2020	98,495,000	4,695,000	n/a	
Series 2010B (Taxable Build America Bonds)	2049	526,135,000	526,135,000	n/a	
Series 2011A	2027	139,945,000	86,670,000	n/a	
Series 2011B	2031	94,540,000	94,540,000	n/a	
Series 2013A	2034	299,105,000	285,100,000	n/a	
Series 2015A	2029	184,795,000	177,845,000	n/a	
Series 2016A	2033	98,945,000	98,945,000	n/a	
Series 2016B	2038	197,395,000	197,395,000	n/a	
<b>Total</b>		<b>\$ 2,484,825,000</b>	<b>\$ 1,505,635,000</b>	<b>\$ 46,656,900</b>	

\* The CPCFA issued 2019 Pipeline Bond is not shown as it is a super-subordinate bond and therefore not included in debt service coverage calculations. The 2016S-1 bond is also not shown as it is subordinate and therefore not included in debt service coverage calculations.

(1) Amounts stated reflect the minimum balance required.

(2) Balance satisfied with surety bond.

## Short-Term and Subordinate Lien Fixed-Rate Debt

The Water Authority currently has three forms of short-term debt: five-year fixed-rate bonds, Tax-Exempt Commercial Paper (TECP) and Extendable Commercial Paper (ECP).

The Water Authority issued \$87,685,000 of Subordinate Lien Water Revenue Refunding Bonds, Series 2016S-1 in June 2016. These bonds mature May 1, 2021.

The Water Authority established its commercial paper program in 1995. Commercial paper is a form of variable-rate debt, and is issued with maturities of 1 to 270 days. When the commercial paper matures, it is rolled over to new investors by the Water Authority's commercial paper dealers. The Water Authority has authorized the issuance of up to \$100,000,000 of ECP and \$245,000,000 of TECP. The TECP has been issued in two series – Series 9 (\$135,000,000), and Series 10 (\$110,000,000). Series 9 was issued in 2016 and extended in 2019. Series 10 was issued in 2019. Each of these series is supported with a bank “revolving credit and term loan agreement”. As of June 30, 2019, no advances have been made under any of the revolving credit and term loan agreements.

The Water Authority has remarketing agreements with seven separate broker-dealers, all of which serve on all series for TECP: Bank of America Securities LLC/Merrill Lynch, Citigroup Global Markets Inc., Goldman Sachs and Co., JP Morgan Securities, LLC, Morgan Stanley and Co. LLC, LOOP Capital Markets, LLC, and RBC Capital Markets, LLC.

The Water Authority established an ECP Program in June 2014. ECP is considered a market access product and therefore does not require bank liquidity to back stop the notes. This allows the Water Authority to save on bank costs for revolving credit and term loan agreements which support the TECP program. ECP is issued with a final maturity between 1 and 120 days. If the notes cannot be remarketed at their maturity date, the notes will be automatically extended to 270 days from the initial issuance and bear interest at a penalty rate until the notes can be remarketed or redeemed. The product's final maturity of 270 days assures that ECP complies with SEC Rule 2a-7, making the notes eligible investments for money market funds. The ECP has been issued as Series 1, for \$100,000,000 par amount.

The Water Authority has remarketing agreements with Bank of America Merrill Lynch, Morgan Stanley & Co. LLC, and JP Morgan Securities, LLC who serve as the dealers for ECP.

**TABLE 3. Subordinate Lien Fixed-Rate Debt, Fiscal Year June 30, 2019**

Issue Name	Final Maturity	Original Par Amount	Amount Outstanding
Water Revenue Refunding Bonds, Series 2016S-1	2021	\$ 87,685,000	\$ 87,685,000

**TABLE 4. TECP and ECP Program Summary, Fiscal Year June 30, 2019**

Short-Term Active Debt Instruments	Size	Liquidity Provider	Liquidity Provider Agreement Expiration
Series 1 (ECP)	\$ 100,000,000	n/a	n/a
Series 9	135,000,000	Bank of America, N.A.	June 22, 2022 <sup>(1)</sup>
Series 10	110,000,000	Bank of the West	June 19, 2024 <sup>(2)</sup>
<b>Total</b>	<b>\$ 345,000,000</b>		

<sup>(1)</sup> The Series 9 Remarketing Agreement was amended in June of 2019 and extended to June 2022.

<sup>(2)</sup> The Series 10 Remarketing Agreement expires in June 2024.

## Member Agency Voting Entitlements

The 24 voting member agencies currently served by the Water Authority consist of six cities, seventeen special districts, and one federal agency. Under the County Water Authority Act (Act), California Statutes 1943, Chapter 545, 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) excluding charges for water treatment. The Act authorizes each member agency to cast one vote for each \$5 million, or major fractional part thereof, of the total financial contribution paid by the member agency.

**TABLE 5. Member Agency Voting Entitlements, Effective as of January 1, 2019 \***

Member Agency	Total Financial Contribution <sup>(1)</sup>	Vote Entitlement <sup>(2)</sup>	Percentage
Carlsbad Municipal Water District	\$ 487,779,337	97.556	3.62%
City of Del Mar	39,898,724	7.980	0.30%
City of Escondido	476,820,518	95.364	3.54%
Fallbrook Public Utility District	309,815,064	61.963	2.30%
Helix Water District	908,962,011	181.792	6.76%
Lakeside Water District	99,884,084	19.977	0.74%
City of National City	100,026,281	20.005	0.74%
City of Oceanside	692,989,041	138.598	5.15%
Olivenhain Municipal Water District	440,610,807	88.122	3.27%
Otay Water District	781,085,134	156.218	5.80%
Padre Dam Municipal Water District	363,120,638	72.624	2.70%
Camp Pendleton Marine Corps Base	12,261,668	2.452	0.09%
City of Poway	287,018,932	57.404	2.13%
Rainbow Municipal Water District	537,402,273	107.480	3.99%
Ramona Municipal Water District	200,905,337	40.181	1.49%
Rincon del Diablo Municipal Water District	195,741,065	39.148	1.45%
City of San Diego	5,352,910,275	1,070.582	39.76%
San Dieguito Water District	143,990,366	28.798	1.07%
Santa Fe Irrigation District	214,211,770	42.842	1.59%
South Bay Irrigation District	270,971,483	54.194	2.01%
Vallecitos Water District	380,701,241	76.140	2.83%
Valley Center Municipal Water District	700,073,099	140.015	5.20%
Vista Irrigation District	409,239,269	81.848	3.04%
Yuima Municipal Water District	57,830,202	11.566	0.43%
<b>Total</b>	<b>\$ 13,464,248,619</b>	<b>2,692.850</b>	<b>100.00%</b>

(1) Total Cumulative Financial Contribution equals Cumulative Total Financial Contribution as of June 30, 2017 plus total Member Agency Financial Contribution for fiscal year ended June 30, 2018.

(2) Vote Entitlement amount is calculated as a Member Agency's Total Cumulative Financial Contribution divided by \$5,000,000.

## Water Source and Use

**TABLE 6. Member Agency Gross Water Sales by Fiscal Year, Thousands of Dollars \* (1)**

<b>Member Agency</b>	<b>2015</b>	<b>2016 <sup>(2)</sup></b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
Carlsbad Municipal Water District	\$ 23,192	\$ 20,929	\$ 26,133	\$ 29,386	\$ 27,895
City of Del Mar	1,140	1,133	1,212	1,393	1,308
City of Escondido	22,427	20,765	20,198	14,611	18,266
Fallbrook Public Utility District	15,480	12,665	12,657	15,093	12,211
Helix Water District	33,721	30,279	32,216	35,110	34,723
Lakeside Water District	4,124	3,758	4,197	4,607	4,387
City of Oceanside	28,676	27,204	29,432	32,012	28,150
Olivenhain Municipal Water District	22,376	20,483	22,868	25,657	23,646
Otay Water District	42,890	39,233	42,722	47,799	45,599
Padre Dam Municipal Water District	14,944	13,427	14,800	16,528	15,364
Camp Pendleton Marine Corps Base	76	86	82	125	124
City of Poway	12,295	10,980	11,179	13,641	12,432
Rainbow Municipal Water District	25,622	23,418	24,513	28,015	22,778
Ramona Municipal Water District	7,672	6,874	6,858	7,909	7,714
Rincon del Diablo Municipal Water District	8,046	7,249	7,870	8,775	7,922
City of San Diego	217,734	194,692	211,989	215,688	218,586
San Dieguito Water District	5,628	4,307	4,928	4,038	4,952
Santa Fe Irrigation District	10,173	7,524	9,512	8,559	9,339
Sweetwater Authority <sup>(3)</sup>	14,117	13,085	15,512	6,274	10,742
Vallecitos Water District	21,639	20,912	25,754	28,925	27,103
Valley Center Municipal Water District	32,816	27,224	28,828	33,042	26,620
Vista Irrigation District	18,100	17,564	22,646	9,822	16,209
Yuima Municipal Water District	5,075	4,367	5,673	8,179	6,704
<b>Total</b>	<b>\$ 587,964</b>	<b>\$ 528,157</b>	<b>\$ 581,779</b>	<b>\$ 595,188</b>	<b>\$ 582,775</b>

\* Numbers may not total due to rounding.

(1) Gross water sales represent total water sales invoiced less adjustments for certain items such as agricultural and reclaimed water, treatment credits, and infrastructure access charges. In addition to gross water sales revenues, 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.

(2) Numbers have been adjusted to account for the adjustments stated in Note 1.

(3) Represents sales to the city of National City and South Bay Irrigation District for which Sweetwater Authority acts as a purchasing agent.

In Fiscal Year 2019, the Water Authority member agencies' combined imported and local water use totaled 463,329 acre-feet. Imported supplies accounted for 365,083 acre-feet or 79 percent of the total water used, excluding estimated water savings from conservation programs. Approximately 339,527 acre-feet or 93 percent of imported water supplies was used for municipal and industrial (M&I) needs, with the balance going to meet agricultural demands.

**TABLE 7. Water Source and Use (in Acre-Feet), Fiscal Years 2015-2019**

Member Agency	2015	2016	2017	2018	2019	Change from prior year
Carlsbad Municipal Water District	20,609	17,391	18,324	20,527	18,135	-11.65%
City of Del Mar	1,097	1,016	1,061	1,195	1,050	-12.15%
City of Escondido	22,265	18,518	18,672	22,021	20,656	-6.20%
Fallbrook Public Utility District	12,331	10,175	9,863	10,830	8,605	-20.54%
Helix Water District	31,145	27,118	28,717	30,258	27,898	-7.80%
Lakeside Water District	3,739	3,185	3,380	3,650	3,326	-8.87%
City of National City	5,676	5,014	5,210	5,251	5,312	1.16%
City of Oceanside	26,449	22,789	22,723	24,969	22,509	-9.85%
Olivenhain Municipal Water District	22,222	18,167	20,007	22,271	19,233	-13.64%
Otay Water District	34,485	29,128	30,734	33,794	30,742	-9.03%
Padre Dam Municipal Water District	11,322	9,371	10,138	11,053	10,090	-8.71%
Camp Pendleton Marine Corps Base <sup>(1)</sup>	8,026	6,277	6,206	7,580	7,545	-0.46%
City of Poway	11,127	8,806	9,800	10,898	9,318	-14.50%
Rainbow Municipal Water District	20,173	17,050	16,983	19,240	14,831	-22.91%
Ramona Municipal Water District	6,142	4,867	5,042	5,580	4,775	-14.42%
Rincon del Diablo Municipal Water District	8,882	7,488	7,572	8,212	6,553	-20.21%
City of San Diego <sup>(2)</sup>	191,674	164,228	171,883	181,661	169,154	-6.89%
San Dieguito Water District	7,110	5,895	6,110	6,872	6,047	-12.01%
Santa Fe Irrigation District	11,199	8,482	9,851	11,022	9,428	-14.47%
South Bay Irrigation District	13,555	11,987	12,484	12,128	11,750	-3.12%
Vallecitos Water District	15,297	12,985	14,410	16,134	14,224	-11.84%
Valley Center Municipal Water District	25,985	20,025	20,606	22,905	16,899	-26.22%
Vista Irrigation District <sup>(3)</sup>	17,833	15,812	17,190	18,031	16,044	-11.02%
Yuima Municipal Water District	4,894	9,191	10,058	12,315	9,208	-25.23%
<b>Total</b>	<b>533,237</b>	<b>454,965</b>	<b>477,024</b>	<b>518,397</b>	<b>463,329</b>	<b>-10.62%</b>
<b>Allocation of Water Use</b>						
Residential	338,162	296,379	306,757	335,136	305,952	-8.71%
Commercial & Industrial	80,311	74,049	80,668	85,553	76,307	-10.81%
Agricultural <sup>(4)</sup>	55,360	44,675	45,167	50,323	36,866	-26.74%
Public & Other	65,528	39,860	44,432	47,385	44,204	-6.71%
<b>Total</b>	<b>539,361</b>	<b>454,963</b>	<b>477,024</b>	<b>518,397</b>	<b>463,329</b>	<b>-10.62%</b>

(1) Includes Water Authority deliveries via South Coast Water District System.

(2) Excludes City of San Diego local surface water use outside of Water Authority service area.

(3) Excludes land outside of Water Authority service area.

(4) Agricultural use based on member agencies' estimated sector weightings.

**TABLE 8. Water Source and Use -  
Current Year Breakout, Fiscal Year Ended June 30, 2019**

	Source of Water (Supply) (Acre-feet)			Type of Supply (Acre-feet)		Gross Area (Acres)
	Local <sup>(1)</sup>	Water Authority (Imported) <sup>(2)</sup>	Total	Ag Use <sup>(3)</sup>	M & I Use	
Carlsbad Municipal Water District	6,040	12,095	18,135	-	12,095	20,682
City of Del Mar	88	961	1,050	-	961	1,442
City of Escondido	8,220	12,435	20,656	1,644	10,791	18,560
Fallbrook Public Utility District	840	7,766	8,605	1,843	5,922	27,988
Helix Water District	3,418	24,480	27,898	-	24,480	31,350
Lakeside Water District	684	2,643	3,326	-	2,643	11,488
City of National City	4,818	495	5,312	-	495	4,812
City of Oceanside	2,607	19,902	22,509	201	19,701	26,983
Olivenhain Municipal Water District	2,416	16,817	19,233	80	16,738	30,942
Otay Water District	3,357	27,385	30,742	-	27,385	80,320
Padre Dam Municipal Water District	790	9,300	10,090	84	9,216	54,402
Camp Pendleton Marine Corps Base <sup>(4)</sup>	7,344	201	7,545	-	201	134,625
City of Poway	784	8,535	9,318	26	8,509	25,047
Rainbow Municipal Water District	-	14,831	14,831	6,002	8,830	47,670
Ramona Municipal Water District	484	4,291	4,775	713	3,578	45,868
Rincon del Diablo Municipal Water District	1,814	4,738	6,553	-	4,738	10,596
City of San Diego <sup>(5)</sup>	25,603	143,551	169,154	136	143,415	213,121
San Dieguito Water District	2,665	3,382	6,047	-	3,382	5,660
Santa Fe Irrigation District	2,993	6,435	9,428	-	6,435	10,359
South Bay Irrigation District	8,219	3,531	11,750	-	3,531	13,837
Vallecitos Water District	3,500	10,724	14,224	611	10,112	28,363
Valley Center Municipal Water District	399	16,500	16,899	10,327	6,173	64,557
Vista Irrigation District	6,704	9,340	16,044	53	9,287	21,152
Yuima Municipal Water District	4,461	4,747	9,208	3,399	1,348	13,460
<b>Total <sup>(6)</sup></b>	<b>98,246</b>	<b>365,083</b>	<b>463,329</b>	<b>25,118</b>	<b>339,965</b>	<b>943,284</b>

(1) Includes surface, recycled, seawater desalination, and groundwater supplies; does not reflect conserved water.

(2) Water use in a given year may differ from Water Authority sales due to utilization of storage.

(3) Includes only amounts certified through the Transitional Special Agricultural Water Program (TSAWR).

(4) Includes Water Authority deliveries via South Coast Water District System.

(5) Excludes City of San Diego local surface water use outside of Water Authority service area.

(6) Numbers may not total due to rounding.

## Operating Results

**TABLE 9. Historical Operating Results by Fiscal Year, Thousands of Dollars \***

	2015	2016	2017	2018	2019
<b>Operating Revenue</b>					
Water Sales <sup>(1)</sup>	\$584,173	\$524,935	\$579,057	\$591,809	\$579,606
Standby Charges	11,107	11,088	11,091	11,103	11,154
Capacity Charges	22,560	15,839	21,081	28,154	19,809
Infrastructure Access Charges <sup>(2)</sup>	29,896	30,434	31,145	32,482	33,203
<b>Total Operating Revenue</b>	<b>\$647,736</b>	<b>\$582,296</b>	<b>\$642,374</b>	<b>\$663,548</b>	<b>\$643,772</b>
Plus Withdrawals from or Minus Deposits to the Rate Stabilization Fund	(28,500)	(10,300)	(8,673)	(18,399)	8,100
BABs Interest Rate Subsidy <sup>(3)</sup>	10,476	10,544	10,527	10,546	10,587
Nonoperating Revenue <sup>(4)</sup>	7,204	6,724	6,013	15,691	14,323
<b>Total Revenue <sup>(5)</sup></b>	<b>\$636,916</b>	<b>\$589,264</b>	<b>\$650,240</b>	<b>\$671,386</b>	<b>\$676,782</b>
<b>Operating Expenses <sup>(6)</sup></b>					
Cost of Sales	411,038	387,123	430,561	442,369	450,184
Other Maintenance and Operations Costs <sup>(7)</sup>	44,898	41,123	42,626	50,314	47,386
<b>Total Operating Expense</b>	<b>\$455,936</b>	<b>\$428,246</b>	<b>\$473,187</b>	<b>\$492,683</b>	<b>\$497,570</b>
Application of Net Tax Receipts	11,476	12,067	12,913	13,754	14,666
<b>Net Operating Expense</b>	<u><b>\$444,460</b></u>	<u><b>\$416,179</b></u>	<u><b>\$460,273</b></u>	<u><b>\$478,929</b></u>	<u><b>\$482,904</b></u>
Net Water Revenue Available for Debt Service	<b>\$192,456</b>	<b>\$173,085</b>	<b>\$189,967</b>	<b>\$192,456</b>	<b>\$193,878</b>

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

(1) Water sales represent accrued sales to member agencies, as well as revenues from treatment of raw water and certain miscellaneous income items.

(2) Infrastructure access charge was implemented January 1999 and is levied on retail water meters within the service area.

(3) Taxable Build America Bonds (BABs) receive a 35 percent subsidy of interest payable from the United States Treasury. In Fiscal Year 2014, due to Congressionally -mandated sequestration, the IRS reduced the subsidy payments to issuers of BABs. The first semi-annual payment was reduced by 8.7 percent and the second semi-annual payment was reduced by 7.2 percent. In Fiscal Years 2018, 2019, and 2020 both semi-annual payments were reduced by 6.6 percent, 6.2 percent, and 6.1 percent respectively.

(4) Nonoperating 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.).

(5) Total revenue includes amounts transferred to and from the Rate Stabilization Fund, and excludes property taxes, contributions in aid of capital assets, and CIP grant reimbursements.

(6) Operating expenses exclude depreciation and amortization expenses.

(7) Includes operations, maintenance, planning, and general and administrative costs; excludes capital equipment purchases.

(8) Includes only debt service on Water Authority indebtedness payable from net water revenues and excludes debt service paid from tax revenues. Senior lien debt service does not include trust fees.

(9) Total debt service excludes the CPCFA issued 2012 & 2019 Pipeline Bonds.

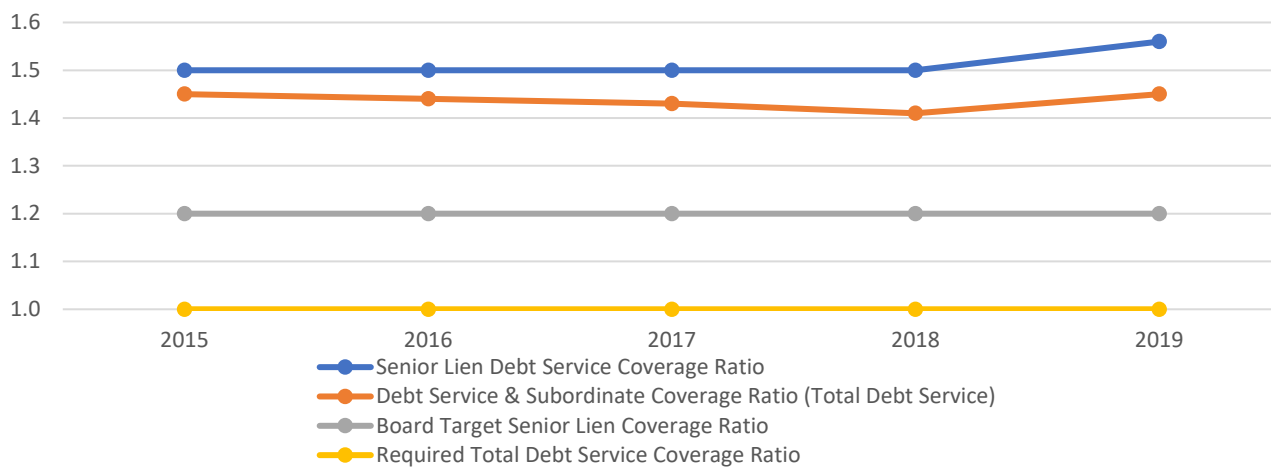
(10) Commercial paper (CP) costs include interest and related program fees.

(11) Coverage ratios do not include program fee.

**TABLE 9. Historical Operating Results by Fiscal Year, Thousands of Dollars\*, (continued)**

Revenue Supported Debt Service <sup>(8)</sup>	2015	2016	2017	2018	2019
1998 Certificates	\$ 555	\$ 555	\$ 555	\$ 555	\$ 555
2004 Certificates	1,262	-	-	-	-
2005 Certificates	17,113	16,771	17,157	16,057	725
2008 Certificates	37,819	19,504	16,832	18,899	9,103
2010A&B Bond	39,497	38,505	37,145	37,143	37,138
2011A Bond	13,232	13,230	13,224	13,234	13,219
2011B Bond	4,707	4,707	4,707	4,707	4,707
2013A Bond	13,982	13,982	13,982	13,982	27,883
2015A Bond	-	6,905	8,910	8,910	15,802
2016A&B Bond	-	1,054	14,093	14,817	14,817
<b>Total Debt Service<sup>(9)</sup></b>	<b>\$128,167</b>	<b>\$115,213</b>	<b>\$126,605</b>	<b>\$128,304</b>	<b>\$123,949</b>
<b>Subordinate Obligation Payments</b>					
Commercial Paper <sup>(10)</sup>	1,708	1,925	3,853	4,944	6,702
2011S-1 Bond	4,272	3,916	-	-	-
2016S-1 Bond	-	290	3,885	4,084	4,084
<b>Total Subordinate Obligation Payments</b>	<b>\$ 5,980</b>	<b>\$ 6,131</b>	<b>\$ 7,738</b>	<b>\$ 9,028</b>	<b>\$ 10,786</b>
Balance Available after Debt Service and Subordinate Obligation Payments	<u>\$ 58,311</u>	<u>\$ 51,741</u>	<u>\$ 55,625</u>	<u>\$ 55,124</u>	<u>\$ 59,143</u>
Revenue Supported Debt Service Coverage Ratio	1.50X	1.50X	1.50X	1.50X	1.56X
Debt Service and Subordinate Obligation Coverage Ratio <sup>(11)</sup>	1.45X	1.44X	1.43X	1.41X	1.45X

**Chart 1, Water Authority Debt Service Coverage Ratios by Fiscal Year**



## Summary of Water Rates

Water rates are established by the Board of Directors and are not subject to regulation by the California Public Utilities Commission or by any other local, state, or federal agency. Under the General Resolution, the Water Authority is required to fix rates that are reasonably fair and nondiscriminatory. The Water Authority assesses five different charges for the supply and delivery of water; the fixed Customer Service, Storage, and Supply Reliability Charges, and the variable Transportation Rate and Supply and Treatment Rates. The Customer Service Charge recovers operating and capital costs associated with the overall functioning of the Water Authority, the Storage Charge recovers costs associated with the Emergency and Carryover Storage Program, the Supply Reliability Charge recovers a portion of costs associated with desalinated water and IID transfer water, and the Transportation Rate recovers costs associated with the conveyance of water through the Water Authority's aqueducts.

TABLE 10. Summary of Water Rates, Effective January 1 - December 31

San Diego County Water Authority									Metropolitan Water District <sup>(1)</sup>			
Calendar Year	Melded Supply		TSAWR <sup>(2)</sup>		Transport Rate	Customer Service	Storage	Supply Reliability	Full Service Tier 1		Full Service Tier 2	
	UTR	TR	UTR	TR					UTR	TR	UTR	TR
2013	\$ 714	\$ 970	\$ 593	\$ 849	\$ 93	\$ 26,400,000	\$ 60,200,000	n/a	\$ 593	\$ 847	\$ 743	\$ 997
2014	732	1,006	593	867	97	26,400,000	63,200,000	n/a	593	890	735	1032
2015	764	1,042	582	860	101	26,400,000	63,200,000	n/a	582	923	714	1055
2016	780	1,060	594	874	105	26,400,000	63,200,000	\$ 26,000,000	594	942	728	1076
2017	855	1,145	666	956	110	26,400,000	65,000,000	24,800,000	666	979	760	1073
2018	894	1,194	695	995	115	26,400,000	65,000,000	28,600,000	695	1015	781	1101
2019	909	1,185	731	1,007	120	25,600,000	65,000,000	30,200,000	731	1050	817	1136

UTR=Untreated Water  
TR=Treated Water  
IAWP=Interim Agricultural Water Program  
TSAWR=Transitional Special Agricultural Water Rate

(1) MWD rates are shown as the rates adopted by MWD.

(2) TSAWR was adopted on December 10, 2008 for customers opting out of MWD's IAWP, and continues through December 31, 2020. Customers that are participating in the TSAWR program are considered M&I customers by MWD.

## Summary of Investments

**TABLE 11. Summary of Investments, Fiscal Year Ended June 30, 2019 <sup>(1)</sup>**

Investment Type	Permitted by Board Policy	Maximum Maturity	Maximum Financial Institution Concentration	Actual Percentage	Actual Amount Book Value <sup>(2)</sup>
Local Agency Investment Fund (LAIF)	\$65 Million	n/a	n/a	4.68%	\$ 13,824,992
Treasury Securities	100%	5 years	n/a	25.66%	75,875,102
Agency Securities	100%	5 years	no limit	25.69%	75,971,492
Asset-Backed, Mortgage-Backed, Mortgage Pass-Through Securities, & Collateralized Mortgage	20%	5 years	no limit	2.87%	8,498,520
Obligations Supranational Securities	10%	5 years	5%	2.63%	7,790,040
Commercial Paper	25%	270 days	5%	1.01%	2,980,800
Medium Term Notes/Corporates	30%	5 years	5%	17.61%	52,065,335
JPA Pools (CAMP)	25%	n/a	n/a	9.58%	28,337,896
Money Market Funds	20%	n/a	n/a	10.27%	30,367,102
				<b>100%</b>	<b>295,711,279</b>
Accrued Interest (unavailable for investing)					137,650
Checking/Petty Cash/Available Funds (unavailable for investing)					249,500
<b>Subtotal for Pooled Funds:</b>					<b>296,098,429</b>
<b>Debt Service Reserve (DSR) Funds Excluded from Portfolio Percentages <sup>(3)</sup>:</b>					
Trinity Plus - Reserve (GIC) - Series 1998A COPs					12,240,775
<b>Subtotal for Debt Service Reserve Funds (unavailable for CIP expenditures):</b>					<b>12,240,775</b>
<b>Total Cash and Investments</b>					<b>\$ 308,339,204</b>

(1) Includes only investment types with balances at June 30, 2019.

(2) Book value of investments differs from fair market values contained in financial statements. Book value of investments represents cost.

(3) Debt Service Reserve does not include the CPCFA issued 2019 Pipeline Bond.

## Investment Policy

The Water Authority's investment policy is defined and approved annually. The purpose is to identify various policies and procedures that enhance opportunities for a prudent and systematic investment policy, and to organize and formalize investment-related activities. The Water Authority's Board of Directors has delegated investment responsibility to the Water Authority's Treasurer, who is primarily responsible for implementing the investment policy. The Board and the Treasurer adhere to the guidance provided by the "prudent investor rule." The Treasurer presents an investment report to the Board monthly. The objectives of the investment policy are as follows:

A. Safety: Each investment transaction shall seek to avoid capital losses. Diversification of the portfolio will be used to reduce exposure to principal loss.

B. Liquidity: An adequate percentage of the portfolio will be maintained in liquid, short-term securities that can be converted to cash to meet disbursement requirements. Investment in securities with active secondary markets will be utilized. These securities will have a low sensitivity to market risk.

C. Yield: Yield should become a consideration only after the basic requirements of safety and liquidity have been met.

D. Public Trust: All participants in the investment process shall act as custodians of the public trust. The overall program shall be designed and managed with a degree of professionalism that is worthy of the public trust.

The investment portfolio will be diversified to avoid incurring unreasonable and avoidable risks regarding specific security types or individual financial institutions. Portfolio diversification is employed as a way to control risk.

The Water Authority strives to maintain an efficient portfolio by providing for the lowest level of risk for a given level of return. This acceptable level of return has been quantified as a return that is consistent with the two-year U.S. Treasury constant maturity.

The Water Authority is governed by the California Government Code, Sections 53600 et seq. Within the context of these limitations, investments are authorized for the Water Authority's operating and reserve funds as indicated in the Summary of Investments table.

The Water Authority does not invest in derivative instruments. Securities such as yield curve notes, interest only, principal only, range notes, and inverse floaters are prohibited. Callable bonds, step-up bonds, and floating rate securities (with a positive spread) are permitted investments. No security will be purchased that could result in a zero interest accrual if held to maturity. Investments such as common stocks, futures, and the writing of options are prohibited from use in the Water Authority's portfolio. The use of short positions is also prohibited.

## Litigation

### MWD Litigation

The Water Authority has sued MWD in various related cases, mainly pertaining to alleged rate overcharges by MWD. The Water Authority has been paying the disputed MWD rates over the years, so the cases generally relate to potential damages to be awarded to the Water Authority, not additional new payments or damages to MWD. The general status of these cases:

**2010/2012 Rate Cases:** The Water Authority won a trial court award from MWD on rate overcharges, interest, and attorney's fees for years 2011-2014. On June 21, 2017, the First District Court of Appeal issued its decision in the MWD appeal of that trial award. The Court of Appeal decision may be found at 12 Cal.App.5th 1124. The Court of Appeal sided with the Water Authority on most issues, but allowed MWD to charge the Water Authority certain State Water Project costs for water being transported under an exchange agreement, thereby potentially significantly reducing the ultimate monetary award to the Water Authority. That Court of Appeal decision was subject to a Petition for Review to the California Supreme Court, which was filed by the Water Authority on July 31, 2017. The Supreme Court, however, denied review on September 27, 2017. The Court of Appeal opinion therefore becomes final, and the case has returned to the trial court for further proceedings consistent with the Court of Appeal's ruling. The case is proceeding at the trial court.

**2014 Rate Case:** This case challenges MWD's rates adopted in 2014 for 2015 and 2016, was transferred to San Francisco Superior Court, and currently remains stayed. However, the stay may be lifted in the future, given the above result in the 2010/2012 cases.

**2016 Rate Case:** This case challenges MWD's rates adopted in 2016 for 2017 and 2018, and was transferred to San Francisco Superior Court. The Water Authority, MWD, and the eight MWD member agencies who answered the 2016 complaint entered into a stipulation (1) allowing the Water Authority to amend the 2016 complaint to add claims under the Exchange Agreement and for monetary damages; and (2) staying the 2016 case pending the outcome

of the appeal in the 2010 and 2012 cases. On November 14, 2016, the Water Authority filed its amended complaint, and the 2016 case remains stayed. However, the stay may be lifted in the future, given the above result in the 2010/2012 cases.

**2017 Rate Case:** This case challenges MWD's rates adopted in 2017 for 2018 and has been transferred to San Francisco Superior Court, where it is stayed. The stay may be lifted in the future, given the above result in the 2010/2012 cases.

**2018 Rate Case:** This case challenges MWD's rates adopted in 2018 for 2019/2020 and was transferred to San Francisco Superior Court, where it is stayed. The stay may be lifted in the future, given the above result in the 2010/2012 cases.

All the above cases have been the subject of settlement talks between the parties. To date no settlement has been reached, but though the litigation continues the parties will also continue to consider ways to potentially resolve their disputes.

For detailed information on the Water Authority's rate litigation, visit: <http://www.sdcwa.org/mwdrate-challenge>.

## Member Agency Detachment

The Water Authority has 24 member agencies. Two of those members at the north end of the Water Authority service area, Fallbrook Public Utilities District and Rainbow Municipal Water District, have informed the Water Authority that they plan to file applications with the San Diego Local Agency Formation Commission ("LAFCO") to detach from the Water Authority and annex into Eastern Municipal Water District in Riverside County. As of the date of this report, such applications have not yet been filed. Should the requests be made, the Water Authority anticipates there may be a multi-year process to review the requests and for the LAFCO to reach a decision which would likely then go to the voters. The Water Authority cannot predict when such applications might be filed and if filed, whether or when the applications would be denied, or approved, or conditioned by the LAFCO.

## Cybersecurity

The Water Authority strives to be an innovative industry leader and uses technology to better administer systems, inform business decisions, and communicate with stakeholders. The constant expansion of technology is evident today in the rapid advancement of Internet of Things IoT-enabled devices and cloud computing. While these emerging technologies provide improved capability, they also pose new risks. Hackers, motivated by financial gain or ideology, regularly exploit the weaknesses exposed by these widely used technologies.

In recognition of the increasing level of urgency that cyber threats pose to our agency, the Water Authority performed a resource deployment assessment. The results of that assessment informed our decision to reassign resources to a new cybersecurity division and appoint an Information Security Officer to oversee our information security program. This realignment promises to enhance the performance of both information technology and operations technology groups.

Our cybersecurity program makes use of many elements of the National Institute of Standards and Technology's Framework for Improving Critical Infrastructure Cybersecurity (Cybersecurity Framework), National Initiative for Cybersecurity Education (NICE) Cybersecurity Workforce Framework (NICE Framework), and the Center for Internet Security's Critical Controls. These guidance documents outline various suggested technical and administrative controls which the Water Authority is working to implement, recognizing the new cyber landscape and the importance of our mission.

## Economy of San Diego County

Two of the San Diego region's greatest assets are its geography and climate. The average annual rainfall is only ten inches, so the county is highly reliant on imported water. For these reasons, the health of the regional economy is inextricably linked to the long-term success of the San Diego County Water Authority.

San Diego County has an estimated population of just over 3.3 million people; the estimated average growth between 2019 and 2050 is approximately 53 percent. Estimated unemployment for San Diego County as of July 2019 is averaging at 3.6 percent according to CALMIS.

The San Diego region continues to see employment growth in the professional and business services with two back to back year over year gains. One of the fastest growing sectors has been healthcare, indicating continued demand. Industries that continue to underperform are trade, transportation and utilities, and financial activities, including real estate, and rental and leasing. According to the Federal Reserve Bank of St. Louis, Gross Domestic Product (GDP) increased by 4.0 percent in 2017.

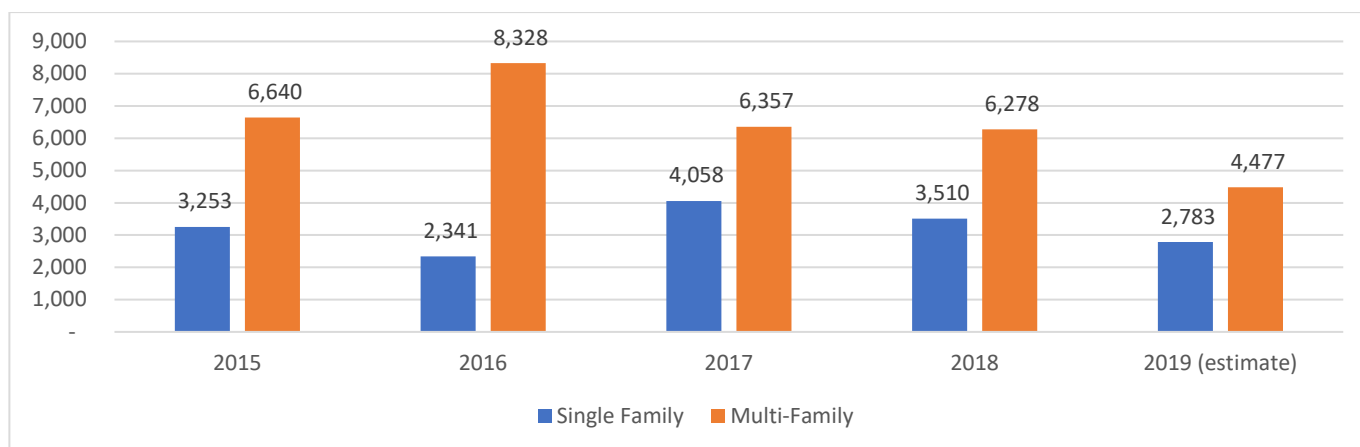
Housing prices continue to pose a problem as San Diego continues to remain one of the least affordable housing markets in the nation, second only to the San Francisco area. Building units authorized for construction have risen with an expectation of continued improvement; and home building has shifted from single family to multi-family housing of five or more units.

TABLE 12. San Diego County Annual Building Permit Activity, Calendar Year <sup>(1)</sup>

	2015	2016	2017	2018	2019 (est.) <sup>(3)</sup>
Single Family	3,253	2,341	4,058	3,510	2,783
Multi-Family <sup>(2)</sup>	6,640	8,328	6,357	6,278	4,477
<b>Total</b>	<b>9,893</b>	<b>10,669</b>	<b>10,415</b>	<b>9,788</b>	<b>7,260</b>

2019 year-to-date	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Single Family	248	192	257	289	244	252	292	244
Multi-Family <sup>(2)</sup>	96	91	234	623	1,080	440	79	698

Chart 3. Building Permit Activity, 2015-2019 (est.), Calendar Year <sup>(1)</sup>



(1) Table 12 and Chart 3 source: U.S. Census Bureau.

(2) Measured in individual dwelling units.

(3) Assumes the same monthly permit rate from January through August will continue through the year end.

**TABLE 13. Labor Force Rate Trends, Calendar Year**

YEAR	AREA	CIVILIAN LABOR FORCE	EMPLOYMENT	UNEMPLOYMENT	PERCENTAGE of UNEMPLOYMENT
2015	San Diego County	1,550,059	1,469,475	80,584	5.2%
	California	18,921,354	17,841,873	1,079,481	5.7%
	United States	157,130,000	148,834,000	8,296,000	5.3%
2016	San Diego County	1,564,339	1,490,482	73,857	4.7%
	California	19,125,390	18,113,717	1,011,673	5.3%
	United States	159,187,000	151,436,000	7,751,000	4.9%
2017	San Diego County	1,574,601	1,511,423	63,178	4.0%
	California	19,252,711	18,402,974	849,737	4.4%
	United States	160,320,000	153,337,000	6,982,000	4.4%
2018	San Diego County	1,592,193	1,539,530	52,663	3.3%
	California	19,507,556	18,704,962	802,594	4.1%
	United States	162,075,000	155,761,000	6,314,000	3.9%
2019	San Diego County <sup>(1)</sup>	1,598,876	1,541,798	57,078	3.6%
	California <sup>(2)</sup>	19,380,070	18,589,252	790,818	4.1%
	United States <sup>(2)</sup>	163,922,000	157,878,000	6,044,000	3.7%

Source: Bureau of Labor Statistics.

(1) Preliminary July numbers.

(2) Preliminary August numbers.

**TABLE 14. San Diego County Employment by Industry, Calendar Year <sup>(1)</sup>**

Industry	2015	2016	2017	2018	2019 <sup>(2)</sup>
Farm Production	9,100	8,900	8,600	9,100	9,100
Mining and Logging	300	300	300	300	400
Construction	69,900	76,300	79,500	84,200	92,100
Manufacturing	106,600	108,400	109,400	112,700	117,400
Trade, Transportation, and Utilities	219,300	220,900	224,700	225,300	222,100
Information	23,800	23,700	24,000	24,000	23,800
Financial Activities	71,400	73,000	74,600	75,900	75,300
Professional and Business Services	229,300	234,500	238,800	248,800	257,400
Educational and Health Services	192,700	198,700	204,500	210,500	215,800
Leisure and Hospitality	182,400	190,400	195,600	199,900	208,100
Other Services	53,200	54,400	55,000	55,400	57,000
Government	236,200	242,200	246,300	247,600	243,300
<b>Total</b>	<b>1,394,200</b>	<b>1,431,700</b>	<b>1,461,300</b>	<b>1,493,700</b>	<b>1,521,800</b>

Source: CALMIS

(1) Table uses the North American Industry Classification System (NAICS).

(2) Current year is based on August statistics.

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