

Orange County Sanitation District  
**Comprehensive Annual  
Financial Report**  
for the year ended June 30, 2019



Orange County, California



**ORANGE COUNTY SANITATION DISTRICT  
ORANGE COUNTY, CALIFORNIA**

COMPREHENSIVE ANNUAL FINANCIAL REPORT

FOR THE YEAR ENDED JUNE 30, 2019

Prepared By:  
Administrative Services Department  
Financial Management Division

Wally Ritchie  
Controller

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**ORANGE COUNTY SANITATION DISTRICT**  
 Comprehensive Annual Financial Report  
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**Serving:**

- Anaheim
- Brea
- Buena Park
- Cypress
- Fountain Valley
- Fullerton
- Garden Grove
- Huntington Beach
- Irvine
- La Habra
- La Palma
- Los Alamitos
- Newport Beach
- Orange
- Placentia
- Santa Ana
- Seal Beach
- Stanton
- Tustin
- Villa Park
- County of Orange
- Costa Mesa Sanitary District
- Midway City Sanitary District
- Irvine Ranch Water District
- Yorba Linda Water District

# Orange County Sanitation District

10844 Ellis Avenue, Fountain Valley, CA 92708  
714.962.2411 • www.ocsd.com

October 25, 2019

The Board of Directors of the  
Orange County Sanitation District,  
Orange County, California

Submitted herewith is the Comprehensive Annual Financial Report of the Orange County Sanitation District (OCSD), Orange County, California for the fiscal year ended June 30, 2019. This report includes the financial position and activity of individual revenue areas, as described within the Governmental Structure below, as of June 30, 2019 and was prepared by the Financial Management Division of OCSD's Administrative Services Department.

Responsibility for both the accuracy of the data, and the completeness and fairness of the presentation, including all disclosures, rests with OCSD. To the best of our knowledge and belief, the enclosed data is accurate in all material respects and is reported in a manner designed to present fairly the financial position and changes in the financial position of OCSD. All disclosures necessary to enable the reader to gain an understanding of the agency's financial activities have been included.

Included within the accompanying financial statements are all of the organizations, activities, and functions controlled by OCSD's Board of Directors in accordance with the Governmental Accounting Standards Board (GASB) Codification of Governmental Accounting and Financial Reporting. For the purpose of this evaluation, control was determined by the Board's responsibility for: (1) adoption of the budget and user charges, (2) taxing authority, and (3) establishment of policies. The reporting entity and its services are described in further detail in Note 1 of the financial statements.

An audit of the books, financial records and transactions of OCSD is conducted annually by independent certified public accountants. OCSD selected the accounting firm of Macias Gini & O'Connell LLP to perform the audit for the year ended June 30, 2019. The auditor's report on OCSD's basic financial statements and supplementary information is located on page 1 within the financial section of this report. This report renders an unmodified opinion on OCSD's basic financial statements for the year ended June 30, 2019.

Management's discussion and analysis (MD&A) immediately follows the independent auditor's report and provides a narrative introduction, overview, and analysis of the basic financial statements. The MD&A complements this letter of transmittal and should be read in conjunction with it.

## GOVERNMENTAL STRUCTURE

The Orange County Sanitation District encompasses the Northern section of Orange County. OCSD provides wastewater treatment for an area of the County covering 479 square miles and serving a population of approximately 2.6 million, or 81 percent of the County's population. OCSD was originally incorporated in 1954 as nine separate public corporations, or districts. In April of 1998, at OCSD's request, the Board of Supervisors of the County of Orange passed Resolution No. 98-140 ordering the consolidation of these nine County Sanitation Districts into a new, single sanitation district, to be known as the Orange County Sanitation District, effective July 1, 1998. This action was recommended to the Board by the Local Agency Formation Commission in order to simplify governance structures, reduce the size of the Board, ease administrative processes, streamline decision-making and consolidate accounting and auditing processes. The boundaries of the nine previous districts had remained intact for the purpose of collecting sewer user fees at the previously established rate schedules, and were referred to as nine individual revenue areas through June 30, 2000. Effective July 1, 2003, all Revenue Areas, except Revenue Area 14, consolidated user fee rates and all enterprise fund accounting and budgeting activities and are now known as the Consolidated Revenue Area.

*Our Mission: To protect public health and the environment by providing effective wastewater collection, treatment, and recycling.*



OCSD is managed by an administrative organization composed of directors appointed by the agencies or cities which are serviced by OCSD. Each of the two remaining Revenue Areas, the Consolidated Revenue Area and Revenue Area 14, has its own budget and is responsible for the construction and maintenance of its own collection system. All Revenue Areas, except Revenue Area 14 and the portion of the Consolidated Revenue Area previously known as Revenue Area 13, receive their own share of the one-percent ad valorem property tax levy. In addition, all Revenue Areas except Revenue Area 14, collect user fees from property owners. Revenue Area 14 receives all of its revenues from service charges to the Irvine Ranch Water District.

The purpose of OCSD's wastewater management program is to protect the public's health, preserve the beneficial uses of the coastal waters, and maintain air quality. The objectives of operating the treatment plants are to process and dispose of the treated wastewater and the separated solids in accordance with Federal, state, and local laws including the Environmental Protection Agency.

OCSD sewerage system includes approximately 389 miles of sewers that convey wastewater generated within OCSD's boundaries to OCSD's two wastewater treatment plants, Reclamation Plant No. 1 located in the City of Fountain Valley, and Treatment Plant No. 2 located in the City of Huntington Beach.

Plants No. 1 and No. 2 have secondary treatment capacities of 182 million gallons per day (mgd) and 150 mgd, respectively. In fiscal year 2019-20, both plants are projected to receive a combined average daily wastewater flow of 188 million gallons per day from residential, commercial, and industrial sources.

After wastewater receives secondary treatment at Plant No. 1, it flows to the Groundwater Water Replenishment System (GWRS) at the Orange County Water District, located adjacent to OCSD, where it undergoes a state-of-the-art purification process consisting of microfiltration, reverse osmosis, and ultraviolet light with hydrogen peroxide. The product water is near-distilled quality. Approximately 35 million gallons (132,500 cubic meters) per day of the GWRS water are pumped into injection wells to create a seawater intrusion barrier. Another 65 million gallons (246,000 cubic meters) are pumped daily to Orange County Water District's percolation basins in Anaheim where the GWRS water naturally filters through sand and gravel to the deep aquifers of the groundwater basin.

Remaining outflows of treated wastewater from Plants 1 and 2 are combined and discharged to the ocean off the Huntington Beach coast through an outfall pipe that is 120 inches in diameter and approximately five miles long. The last mile of the outfall pipe is a diffuser that dilutes the wastewater with seawater in a ratio of 148 parts seawater to one part treated wastewater at an average depth of 185 feet.

## **ECONOMIC CONDITIONS AND OUTLOOK**

According to the California Employment Development Department (EDD), Orange County generated a slight increase of approximately 0.3 percent in payroll jobs from August 2018 to August 2019. During this same time period, unemployment in Orange County decreased to 3.0 percent from 3.1 percent while the unemployment in California as a whole decreased to 4.2 percent from 4.3 percent. In June 2018, Chapman University forecasted Orange County's 2019 total payroll employment to increase 1.2 percent over the prior year, or the addition of 20,000 payroll jobs in 2019.

Despite the forecasted slowing in Orange County job growth, Chapman University continues to project an increase in housing appreciation of 1.2 percent. Short-run increases can occur when inventories remain tight. Longer-run economic and demographic forces will eventually dominate the pricing equation, especially when affordability, as measured by the median home price-to-median income ratio, is projected to continue increasing.

According to Chapman University, residential permit valuation in the County is forecasted to increase from a 13.4 percent decline in 2018 to 2.5 percent decline in 2019.

## MAJOR INITIATIVES

Following are the District's current major initiatives as outlined in the General Manager's work plan for FY 2019-20:

### 1. Safety and Security

- **Emergency Preparedness** – Develop and conduct an external emergency response and recovery drill by June 30, 2020 that tests the Integrated Emergency Response Plan (IERP).
- **Safety Engineering Solutions** – Complete six of the remaining eight Safety Improvement Construction Projects by June 30, 2020.
- **Voluntary Protection Plan (VPP) Certification** – Apply for the VPP certification for Plant No. 1 by June 30, 2020
- **Physical Security Plan** – Complete the development and implementation of a Physical Security Plan by June 30, 2020.
- **Cyber Security Plan** – Complete the development and implementation of a Cyber Security Plan by June 30, 2020.

### 2. Succession Planning

- **Leadership Development** – Provide at least two specialized trainings tailored to the Supervisory Level and one for the EMT/ Managers by June 30, 2020.

### 3. Resource Recovery

- **Groundwater Replenishment System (GWRS) Final Expansion** – Meet the following milestones to support the final expansion of GWRS:
  - Advertise for Construction of Project P2-122, Headworks Modifications at Plant No. 2 for GWRS Expansion by January 31, 2020.
  - Issue Construction Contract Notice to Proceed for Project P2-122, Headworks Modifications at Plant No. 2 for GWRS Expansion by June 30, 2020.
- **Emerging Contaminants** – Work with industry, academic, and agency partners to develop science-based regulations and an adaptive plan by June 30, 2020 to address the potential impact of PFAS to OCSD.
- **Food Waste Digestion Pricing Policy** – Present a draft policy and pricing plan to the Board of Directors by June 30, 2020.

### 4. Reliability

- **Asset Management Plan** – Develop an Asset Management Plan by December 31, 2019 that includes an inventory of critical assets for each process area and the collection system; an evaluation of their condition and performance; and an implementation plan to maintain, rehabilitate, and replace these assets to meet the required levels of service at the lowest life cycle cost and at an acceptable level of risk.
- **Central Generation Engines** – Implement an in-house heavy mechanical maintenance team and award a contract by December 31, 2019 to overhaul two Central Generation Engines.
- **Pump Station Bypass Exercises** – Bypass pump two Pump Stations to prove emergency readiness and use the exercise to do critical valve and electrical maintenance at those Pump Stations by June 30, 2020.

## 5. Operational Optimization

- **OCS D Headquarters Building** – Advertise for Construction for Headquarters Complex Site Preparation, Contract No. P1-128C by February 29, 2020. Obtain City of Fountain Valley approvals for the Headquarters Building by June 30, 2020.
- **Document Management** – Complete Records Management and Trusted System Needs Assessment by November 30, 2019.
- **Communications Audit** – Complete the audit and provide a report to the Legislative and Public Affairs Committee by March 30, 2020.
- **Capital Project Delivery** – Complete a formal design review framework by June 30, 2020. Complete a framework for regular updates of engineering policies and procedures, design guidelines, and engineering standards by June 30, 2020.
- **Solids Handling Optimization** – Complete commissioning and optimize performance of new solids handling facilities at each plant by December 31, 2019.
- **Strategic Plan** – Complete new Strategic Plan for adoption by the Board of Directors by November 30, 2019.
- **Two Year Budget** – Complete new two-year budget for adoption by the Board of Directors on June 24, 2020.

### **Strategic Planning**

In December 2017, the Board of Directors approved the biennium update to the rolling five-year strategic plan. This is a comprehensive strategic plan to steer OCS D's efforts and engage the organization to envision service levels and operational needs for the next five years. This annual process begins with the General Manager's Office initiating the planning effort with the Executive Management Team, and then soliciting input and ideas from managers and supervisors. A draft of the updated five-year strategic plan is then presented to the Board of Directors during a workshop, where Board Members discuss and deliberate changes and additions to the plan.

Driven by our Mission, Vision and Core Values, the 2017 Strategic Plan update maintains the District's aggressive efforts to meet the sanitation, health, and safety needs of the 2.6 million people being served in a cost effective manner, while protecting the environment where we live.

Since implementation of the first comprehensive strategic plan in 2007, 40 strategic goals have been established and completed. In December 2017, the District updated the Five-Year Strategic Plan and, as part of the strategic planning process, reaffirmed the following goals:

- Completion of the Odor Control Master Plan;
- Development of Future Biosolids Management Options;
- Research new energy efficiency and conversion technologies;
- Complete the transfer of 174 miles of local sewers to a local agency;
- Determine partnerships, needs, strategies, benefits and costs associated with recycling of Plant No. 2 effluent water; and
- Workforce planning and development to ensure that the right people with the right skills and abilities, are in the right place, at the right time.

This Strategic Plan continues to chart a focused roadmap of success for the future of the Orange County Sanitation District. It addresses critical operations and construction issues, financial and budgeting challenges, and gives a clear and concise direction to staff, ratepayers, regulatory agencies, and the general public. Every two years the Board of Directors revisits the Strategic Plan to assure that it captures the will of the Board of Directors and sets a proper planning basis for the two-year budgeting effort. The Board of Directors is scheduled to consider and adopt a finalized strategic plan in November 2019 to support the start of a new two-year budget in January 2020.

## SERVICE EFFORTS AND ACCOMPLISHMENTS

The following service efforts and accomplishments were achieved by OCSD during the year ended June 30, 2019:

- **Utility of the Future Award** – 2019 Water Environmental Research Foundation, National Association of Clean Water Agencies, Water Environment Federation and Environmental Protection Agency
- **Platinum Peak Performance Award** – 2019 National Association of Clean Water Agencies
- **2018 Excellence Award in Information Technology Practices** from the Municipal Information Systems Association of California (MISAC)
- **Honor Award** – 2019 Facilities Master Plan, American Academy of Environmental Engineers & Scientist
- **Superior Achievement Award** – 2019 Collections System Odor Control, American Academy of Environmental Engineers & Scientist
- **Silver Award** – 2019 GWRS Bottled Water Campaign, Mercury Excellence Awards
- **Certificate of Achievement for Excellence in Financial Reporting** from the Government Finance Officers Association (GFOA)
- **District Transparency Certificate of Excellence** from the Special District Leadership Foundation
- **Distinguished Budget Presentation Award** from GFOA
- **American Graphic Design Award** – Innovative, Resourceful, Reliable Annual Report, Graphic Design USA
- **Project Achievement Award** – 2019 Interplant Effluent Pipeline Rehabilitation, Orange County Engineering Council
- **Engineering Merit Award** – 2019 Orange County Engineering Council
- **OC Wastewater Treatment Project of the Year** – 2019 Newhope-Placentia Trunk Sewer Project (State College Sewer Construction, American Society of Civil Engineers)
- **Award of Excellence** – 2018 GWRS Bottled Water Campaign, Orange County Chapter of Public Relations Society of America
- **Achievement of Excellence in Procurement Award** from the National Procurement Institute.
- **SARBS/CWEA 2019**
  - **Quarter Century Award**, Tony Lee
  - **Community Engagement and Outreach Project of the Year**, Plant No. 2 Neighborhood Outreach Program (Project leads: Tanya Chong and Daisy Covarrubias)
  - **Supervisor of the Year 1st Place**, Ted Gerber
  - **Supervisor of the Year 2nd Place**, Kevin Schuler
  - **Mechanical Technician Person of the Year**, Gilbert Barela
  - **Operator of the Year**, April Frost
  - **SARBS Spotlight Award**, Dindo Carrillo

## ACCOUNTING AND BUDGETARY CONTROLS

OCSD's accounting records are maintained on the accrual basis. In developing and evaluating OCSD's accounting system, consideration is given to the adequacy of internal accounting controls. Internal accounting controls are designed to provide reasonable, but not absolute, assurance regarding: (1) the safeguarding of assets against loss from unauthorized use or disposition; and (2) the reliability of financial records for preparing financial statements and maintaining accountability for assets. The concept of reasonable assurance recognizes that: (1) the cost of a control should not exceed the benefits likely to be derived; and (2) the evaluation of costs and benefits requires estimates and judgments by management. We believe that OCSD's internal accounting controls adequately safeguard assets and provide reasonable assurance of proper recording of financial transactions.

Each year OCSD's Board of Directors adopts an annual operating plan. A joint works budget is first prepared that identifies the specific capital projects and operating activities to be undertaken by OCSD during the year. The budgetary level of control, the level at which expenses cannot exceed budget, is exercised at the individual district, or fund level. OCSD has adopted a Uniform Purchasing Policy that identifies the agreed upon purchasing standards.

## ACCUMULATED FUNDS AND RESERVES POLICY

The Board of Directors of the Orange County Sanitation District has established the following Accumulated Funds and Reserves Policy:

**Cash Flow Reserve:** is established to fund operations, maintenance and certificates of participation expenses for the first half of the fiscal year, prior to the receipt of the first installment of the property tax allocation and the sewer service user fees which are collected as a separate line item on the property tax bill. The level of this reserve will be established as the sum of an amount equal to six months operations and maintenance expenses and the total of the annual debt (COP) service payments due in August each year.

**Operating Contingency Reserve:** is established to provide for non-recurring expenditures that were not anticipated when the annual budget and sewer service fees were considered and adopted. The level of this reserve will be established at an amount equal to ten percent of the annual operating budget.

**Capital Improvement Reserve:** is established to fund annual increments of the capital improvement program. The long-term target is for one half of the capital improvement program to be funded from borrowing and for one half to be funded from current revenues and reserves. With this program in mind, the target level of this reserve has been established at one half of the average annual capital improvement program over the next ten years. Levels higher and lower than the target can be expected as a result of outlay variability in the annual capital improvement programs.

**Catastrophic Loss or Self-Insurance Reserves:** are established for property damage including fire, flood and earthquake; for general liability; and for workers' compensation. These reserves are intended to supplement purchased insurance policies, FEMA disaster reimbursements and State disaster reimbursements. The potential infrastructure loss from a major earthquake has been estimated at \$495 million. The level of this reserve has been set to fund the District's non-reimbursed costs, estimated to be \$57 million.

**Capital Replacement/Renewal Reserve Policy:** is established to provide thirty percent of the funding to replace or refurbish the current collection and treatment and disposal facilities at the end of their useful economic lives. The current replacement value of these facilities is estimated to be \$10.8 billion. The initial criterion level was established at \$50 million, which will be augmented by interest earnings and a small portion of the annual sewer user fees in order to meet projected needs over the next 20 years.

**Debt Service Reserves:** Provisions of the various Certificate of Participation (COP) issues require debt service reserves to be under the control of the Trustee for that issue. These reserve funds are not available

for the general needs of the District and must be maintained at specified levels. The District's Debt Service Reserve policy requires total debt service reserves to be ten percent of the total outstanding COP debt, or \$97 million at June 30, 2019.

Accumulated funds exceeding the levels specified by District policy will be maintained in a rate stabilization fund. These funds will be applied to future years' needs in order to maintain rates or to moderate annual fluctuations. There is no established target for this reserve.

As of June 30, 2019, OCSD was in compliance with the Accumulated Funds and Reserves Policy with designated cash and investments totaling \$760 million, and have been earmarked for the following specific purposes in accordance with OCSD's reserve policy:

Designated Cash and Investments

Designated For Cash Flow Contingency	\$177 million
Designated For Self-Insurance	57 million
Designated For Capital Improvements	429 million
Designated For Debt Service Requirements	<u>97 million</u>
Total Designated Cash and Investments	<u>\$ 760 million</u>

**CERTIFICATE OF ACHIEVEMENT FOR EXCELLENCE  
IN FINANCIAL REPORTING**

The Government Finance Officers' Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Orange County Sanitation District for OCSD's comprehensive annual financial report for the year ended June 30, 2018. This was the twenty-fourth consecutive year that OCSD has received this award. In order to be awarded a Certificate of Achievement, a governmental unit must publish an easily readable and efficiently organized comprehensive annual financial report, whose contents conform to program standards. Such reports must satisfy both generally accepted accounting principles and applicable legal requirements.

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

**ACKNOWLEDGMENTS**

This report could not have been accomplished without the dedicated services of the Financial Management Division staff, and I would like to especially express my appreciation to Kim Cardenas, Accounting Supervisor, who assisted in its preparation. I would also like to thank OCSD's Board of Directors and the General Manager for their interest and support in conducting the financial operations of OCSD in a responsible and progressive manner.

Respectfully submitted,



Wally Ritchie  
Controller



Government Finance Officers Association

**Certificate of  
Achievement  
for Excellence  
in Financial  
Reporting**

Presented to

**Orange County Sanitation District  
California**

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended

**June 30, 2018**

*Christopher P. Morill*

Executive Director/CEO

**ORANGE COUNTY SANITATION DISTRICT**

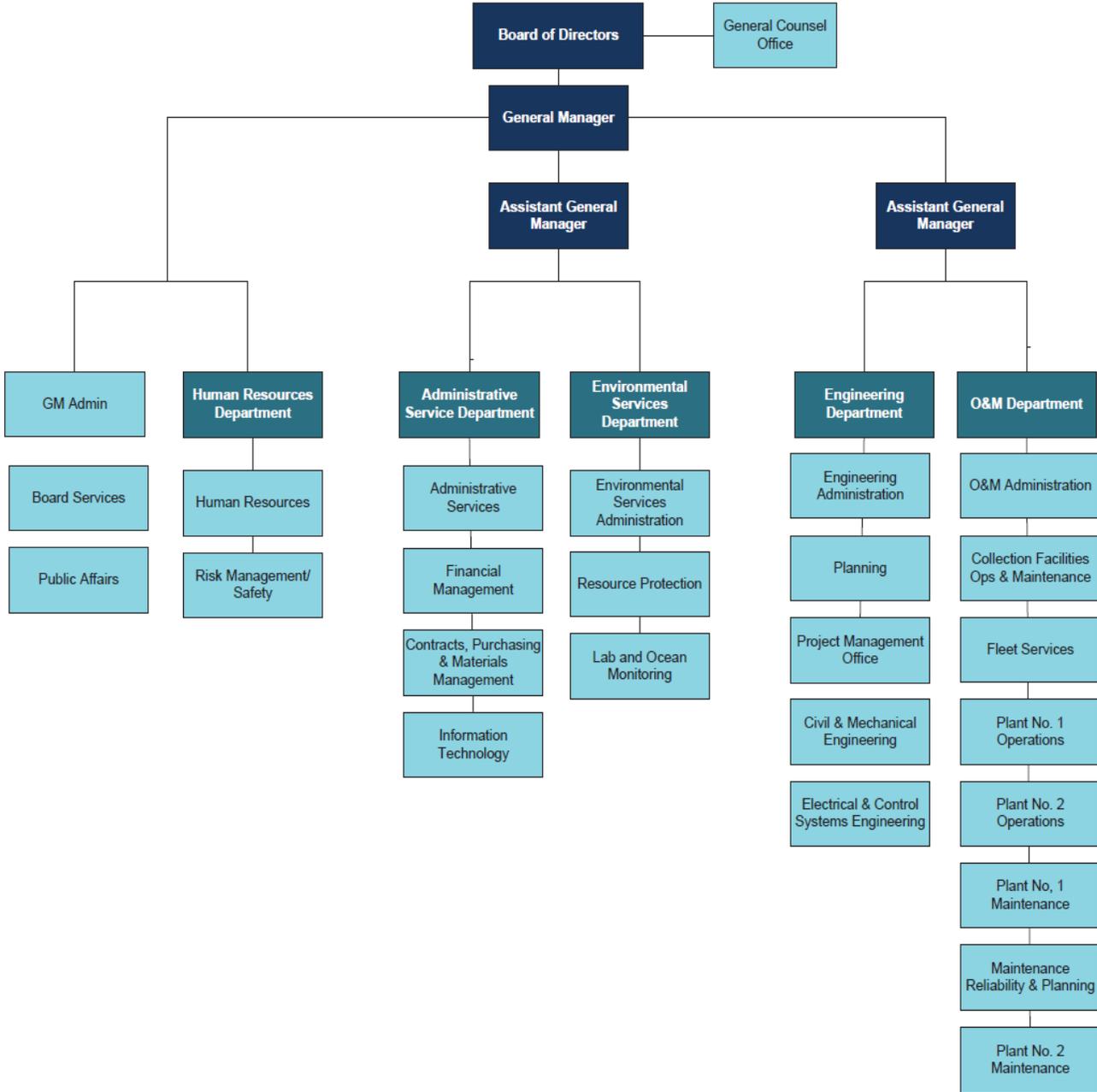
Board of Directors  
As of June 30, 2019

<u>Agency</u>	<u>Active Director</u>	<u>Alternate Director</u>
Cities:		
Anaheim	Lucille Kring	Denise Barnes
Brea	Glenn Parker	Steven Vargas
Buena Park	Fred Smith	Sunny Park
Cypress	Mariellen Yarc	Stacy Berry
Fountain Valley	Steve Nagel	Patrick Harper
Fullerton	Jesus Silva	Jan Flory
Garden Grove	Steve Jones	John O'Neill
Huntington Beach	Erik Peterson	Mike Posey
Irvine	Christina Shea	Anthony Kuo
La Habra	Tim Shaw	Tom Beamish
La Palma	Peter Kim	Marshall Goodman
Los Alamitos	Richard Murphy	Dean Grose
Newport Beach	Brad Avery	Joy Brenner
Orange	Mark Murphy	Kim Nichols
Placentia	Chad Wanke	Ward Smith
Santa Ana	Cecilia Iglesias	David Penaloza
Seal Beach	Sandra Massa-Lavitt	Schelly Sustarsic
Stanton	David Shawver	Carol Warren
Tustin	Allan Bernstein	Chuck Puckett
Villa Park	Robert Collacott	Chad Zimmerman
Sanitary Water Districts:		
Costa Mesa Sanitary District	James M. Ferryman	Robert Ooten
Midway City Sanitary District	Andrew Nguyen	Al Krippner
Irvine Ranch Water District	John Withers	Douglas Reinhart
Yorba Linda Water District	Phil Hawkins	Brooke Jones
County Areas:		
Member of the Board of Supervisors	Doug Chaffee	Michelle Steel

**ORANGE COUNTY SANITATION DISTRICT**

Organizational Chart

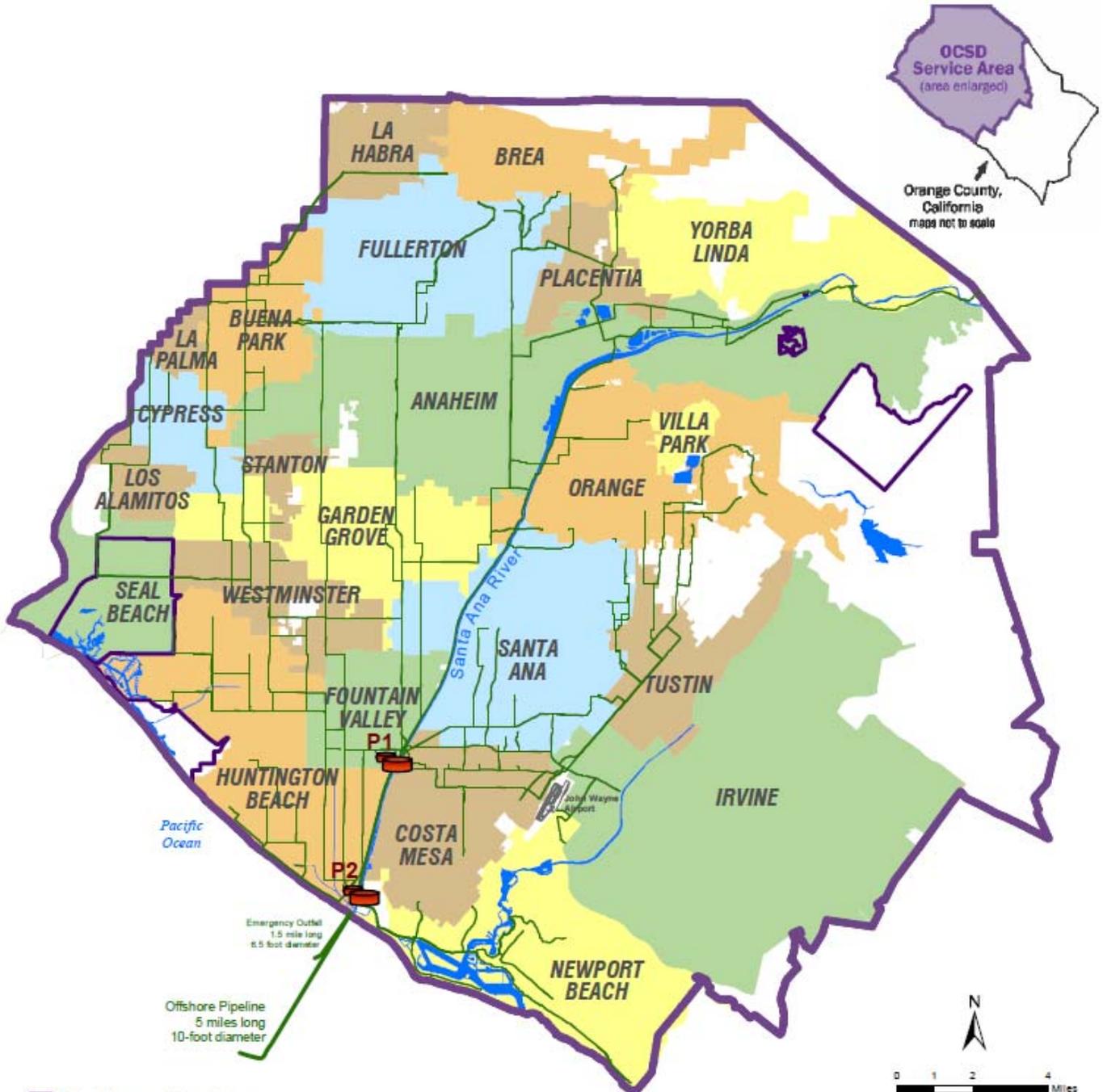
As of June 30, 2019



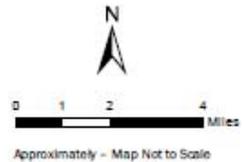
# ORANGE COUNTY SANITATION DISTRICT

Map of Service Area

As of June 30, 2019



-  Service area boundary
-  Sewer pipelines
-  Reclamation Plant No. 1 (P1)  
Treatment Plant No. 2 (P2)
-  Pump and lift stations
-  Unincorporated Orange County (white areas)



DISCLAIMER: Map prepared by the Orange County Sanitation District. This map is intended for graphical representation only. No level of accuracy is claimed. Portions of this derived product contain geographical information copyrighted by Rand McNally. All Rights Reserved.

Revised August 2019

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## Independent Auditor's Report

To the Board of Directors  
Orange County Sanitation District  
Fountain Valley, California

We have audited the accompanying financial statements of the Orange County Sanitation District (OCSD) as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise OCSD'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. 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 OCSD'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 OCSD'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 Orange County Sanitation District, as of June 30, 2019, and the changes in its financial position and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

## **Other Matters**

### *Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis, Schedule of Proportionate Share of the Net Pension Liability (Asset) – OCERS Pension Plan, Schedule of District Contributions – OCERS Pension Plan, Schedule of Total Pension Liability – Additional Retiree Benefit Account, Schedule of Changes in Total Pension Liability – Additional Retiree Benefit Account, Schedule of Total OPEB Liability – Post-Employment Medical Benefits Plan, and Schedule of Changes in Total OPEB Liability – Post-Employment Medical Benefits Plan, as listed in the table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

### *Other Information*

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise OCSD's basic financial statements. The separate "Combining Area" financial statements, introductory section, statistical section, and other data and trends are presented for purposes of additional analysis and are not a required part of the basic financial statements.

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

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

*Macias Gini & O'Connell LLP*

Newport Beach, California  
October 25, 2019

## **Management Discussion and Analysis** **June 30, 2019**

This section of the financial statements of the Orange County Sanitation District (OCSD) is management's narrative overview and analysis of the financial activities of OCSD for the fiscal year ended June 30, 2019. The information presented here is to be considered in conjunction with additional information provided within the letter of transmittal located in the Introductory Section of this report.

### **Financial Highlights**

- As of June 30, 2019, OCSD's assets and deferred outflows of resources exceeded its liabilities and deferred inflows of resources by \$2,360.5 million (net position). Of this amount, \$712.8 million represents unrestricted net position, which may be used to meet OCSD's ongoing obligations to citizens and creditors.
- Total net position increased \$165.7 million, or 7.6 percent over the prior year.
- Net capital assets, consisting of non-depreciable capital assets and depreciable capital assets net of accumulated depreciation, increased \$43.3 million, or 1.6 percent over the prior year.
- Net investment in capital assets increased \$79.6 million, or 5.1 percent over the prior year.
- Unrestricted net position increased \$86.1 million, or 13.7 percent over the prior year.
- Total outstanding bonded debt decreased by \$39.3 million from the prior year to \$972.8 million.

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

OCSD operates as a utility enterprise and presents its financial statements using the economic resources measurement focus and the full accrual basis of accounting. As an enterprise fund, OCSD's basic financial statements are comprised of two components: financial statements and notes to the financial statements. This report also contains other supplementary information in addition to the basic financial statements themselves.

In accordance with the GASB Codification of Governmental Accounting and Financial Reporting Standards, OCSD's financial statements include a Statement of Net Position; Statement of Revenues, Expenses, and Changes in Net Position; and a Statement of Cash Flows. The Statement of Net Position includes OCSD's assets, deferred outflow of resources, liabilities, and deferred inflows of resources; and provides information about the nature and amounts of investments in resources (assets) and the obligations to OCSD's creditors (liabilities). It also provides the basis for computing the rate of return, evaluating the capital structure of OCSD, and assessing the liquidity and financial flexibility of OCSD.

The Statement of Revenues, Expenses, and Changes in Net Position accounts for the current year's revenues and expenses. This statement measures the success of OCSD's operations over the past year and can be used to determine OCSD's creditworthiness. It also highlights OCSD's dependency on property tax revenues in supplementing user fees and other charges for recovering total cost.

The final required financial statement, the Statement of Cash Flows, reports cash receipts, cash payments, and net changes in cash resulting from operations, investments, and financial activities of the reporting period.

## Net Position

As previously noted, net position increased \$165.7 million, or 7.6 percent over the net position for FY 2017-18, to \$2,360.5 million in FY 2018-19.

*(Dollars in thousands)*

	June 30, 2019	June 30, 2018	Increase (Decrease)	Percentage Increase (Decrease)
<b>Assets</b>				
Current and other assets	\$ 789,769	\$ 750,084	\$ 39,685	5.3%
Net capital assets	2,669,309	2,626,015	43,294	1.6%
<b>Total assets</b>	<b>3,459,078</b>	<b>3,376,099</b>	<b>82,979</b>	<b>2.5%</b>
<b>Deferred outflows of resources</b>				
	122,683	83,940	38,743	46.2%
<b>Total assets and deferred outflows of resources</b>	<b>3,581,761</b>	<b>3,460,039</b>	<b>121,722</b>	<b>3.5%</b>
<b>Liabilities</b>				
Current liabilities	109,982	117,665	(7,683)	-6.5%
Noncurrent liabilities	1,065,679	1,083,311	(17,632)	-1.6%
<b>Total liabilities</b>	<b>1,175,661</b>	<b>1,200,976</b>	<b>(25,315)</b>	<b>-2.1%</b>
<b>Deferred inflows of resources</b>				
	45,598	64,274	(18,676)	-29.1%
<b>Total liabilities and deferred inflows of resources</b>	<b>1,221,259</b>	<b>1,265,250</b>	<b>(43,991)</b>	<b>-3.5%</b>
<b>Net position</b>				
Net investment in capital assets	1,647,723	1,568,118	79,605	5.1%
Unrestricted	712,779	626,671	86,108	13.7%
<b>Total net position</b>	<b>\$ 2,360,502</b>	<b>\$ 2,194,789</b>	<b>\$ 165,713</b>	<b>7.6%</b>

*Current and other assets* increased \$39.7 million, or 5.3 percent, due primarily to net cash provided by operations of \$141.1 million, proceeds from debt issuance of \$110.3 million, proceeds from property taxes of \$99.2 million, receipt of capital facilities capacity charges of \$23.2 million, interest received of \$13.7 million, and contributions from other governments of \$3.9 million, offset by bonded debt retirements of \$141.5 million, capital outlays of \$119.4 million, interest paid of \$42.9 million, local sewer service transfer of \$23.2 million, and net investment activities and other items of \$24.7 million.

*Net Capital assets* increased \$43.3 million, or 1.6 percent, due mostly to the ongoing capital improvement program construction in progress additions of \$134.4 million, land additions of \$18.4 million, and capital equipment of \$4.0 million, offset by depreciation of \$102.2 million, land sales of \$6.2 million, and \$3.7 million of prior capital project expenses that were written off as expense. Included in total capital outlay additions is the Sludge Dewatering and Odor Control Project at Plant No. 1 and Plant No. 2 with total project budgets of \$199.5 million and \$90.5 million, respectively. These projects construct primary sludge thickening facilities to improve solids handling capacity, replace aging sludge dewatering facilities, reduce biosolids handling and disposal, and rehabilitate obsolete solids handling odor control equipment. In FY 2018-19, OCSD incurred project costs of \$16.5 million at Plant No. 1 and \$11.9 million at Plant No. 2 bringing the total cost-to-date to \$191.3 million and \$80.7 million, respectively.

Collection system projects include the Newhope-Placentia Trunk Replacement. The Newhope-Placentia Trunk Replacement incurred outlays of \$27.2 million in FY 2018-19 with a total project budget of \$112.0 million through the projected completion in FY 2021-22. This project will increase the size of approximately 35,000 feet of the trunk line from Yorba Linda Boulevard to Orangewood Avenue. The upsized sewer will accommodate flows from the newly abandoned Yorba Linda Pump Station and the newly interconnected Atwood Sub-trunk.

See page 8 for the Schedule of Capital Assets and listing of other major capital additions for FY 2018-19.

*Deferred Outflows of Resources* increased \$38.7 million, or 46.2 percent from the prior year, primarily due to \$42.7 million increase in pension deferred outflows attributable to the change in projected and actual earnings on pension plan investments and changes of actuarial assumptions and other inputs, offset by a decrease of \$4.0 million for the difference between carrying amount of the retired debt and the acquisition price of COP Series.

*Deferred Inflows of Resources* decreased \$18.7 million, or 29.1 percent under the prior year, primarily due to the increase in pension expense as a result of the change in projected and actual earnings on pension plan investments and changes of assumptions or other inputs.

*Net Investment in capital assets* increased \$79.6 million, or 5.1 percent over the prior year, primarily as a result of the net increase in capital assets of \$43.3 million coupled with a \$36.3 million decrease in related debt.

*Unrestricted net position* increased \$86.1 million, or 13.7 percent, due to the overall increase in net position of \$165.7 million, offset by the increase in net investment in capital assets of \$79.6 million.

## Changes in Net Position

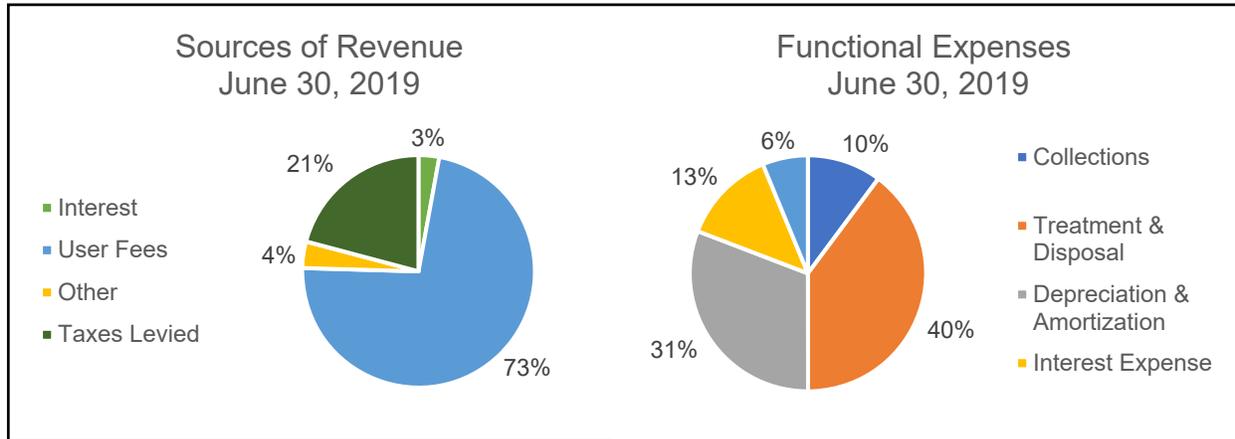
Net position increased \$4.6 million in FY 2018-19, or 2.8 percent over the prior year's increase in net position.

*(Dollars in thousands)*

	June 30, 2019	June 30, 2018	Increase (Decrease)	Percentage Increase (Decrease)
<b>Revenues:</b>				
Operating revenues				
Service charges	\$ 317,291	\$ 316,329	\$ 962	0.3%
Permit and inspection fees	1,199	1,170	29	2.5%
Total operating revenues	318,490	317,499	991	0.3%
Non-operating revenues				
Property taxes	99,534	94,188	5,346	5.7%
Investment and interest income	29,102	3,230	25,872	801.0%
Contrib. from other governments	27,800	6,802	20,998	308.7%
Other	2,162	809	1,353	167.2%
Total non-operating revenues	158,598	105,029	53,569	51.0%
<b>Total revenues</b>	<b>477,088</b>	<b>422,528</b>	<b>54,560</b>	<b>12.9%</b>
<b>Expenses:</b>				
Operating expense other than depreciation and amortization	166,586	145,556	21,030	14.4%
Depreciation and amortization	102,239	97,399	4,840	5.0%
Non-operating expense	63,582	36,494	27,088	74.2%
<b>Total expenses</b>	<b>332,407</b>	<b>279,449</b>	<b>52,958</b>	<b>19.0%</b>
<b>Income before capital     contributions</b>	<b>144,681</b>	<b>143,079</b>	<b>1,602</b>	<b>1.1%</b>
<b>Capital facilities capacity charges</b>	<b>21,032</b>	<b>18,077</b>	<b>2,955</b>	<b>16.3%</b>
<b>Increase in net position</b>	<b>165,713</b>	<b>161,156</b>	<b>4,557</b>	<b>2.8%</b>
Beginning net position	2,194,789	2,033,633	161,156	7.9%
<b>Ending net position</b>	<b>\$ 2,360,502</b>	<b>\$ 2,194,789</b>	<b>\$ 165,713</b>	<b>7.6%</b>

As previously stated, an enterprise fund is used to account for the operations of OCSD, which is financed and operated in a manner similar to private business enterprises. This allows OCSD to determine that the costs (expenses, including depreciation and amortization) of providing wastewater management services on a continuing basis are financed or recovered primarily through user charges.

Sewer service user fees are evaluated annually based primarily on budget requirements for total operation and maintenance expenses and capital outlays for providing wastewater management services. Property tax revenues are dedicated for the payment of debt service.



In FY 2018-19, operating revenues increased \$1.0 million, or 0.3 percent from the prior year, primarily due to a 1.2 percent increase in the average sewer user fee rate, offset by a slight increase in user fee rebates issued over the prior year.

The \$53.6 million, or 51.0 percent increase in non-operating revenues primarily consists of a \$25.9 million or 801.0 percent increase in investment and interest income, a \$21.0 million or 308.7 percent increase in contributions from other governments, a \$5.3 million or 5.7 percent increase in property taxes, and a \$1.4 million or 167.2 percent increase in other revenues. The increase in investment and interest income is a result of higher account balances and yields earned on securities held in the investment portfolios. The increase in contributions from other governments is reflective of the increase in the integration adjustment of Revenue Area 14's equity share in OCSD's Joint Works Treatment Facilities based on the flows discharged to OCSD. The increase in property taxes revenue is primarily the result of the increase in total assessed valuation of 6.4 percent over the prior year. The increase in other revenues is mainly attributable to a \$1.2 million increase in rents and leases from properties purchased for the new headquarters building.

Operating expense before depreciation and amortization increased \$21.0 million, or 14.4 percent from the prior year. The majority of this increase is attributable to the \$18.1 million or 26.8 percent increase in salaries and benefits and the \$2.7 million or 38.0 percent increase in other expenses. When including the salaries and benefits capitalized within the capital improvement program, total operating salaries and benefits costs were \$102.9 million, a \$18.9 million or 22.5 percent increase from the prior year total of \$84.0 million. This increase is reflective of the \$14.3 million or 358.3 percent increase in retirement expenses as a result of the change in projected and actual earnings on pension plan investments and changes of assumptions, and a \$3.9 million or 5.7 percent increase in salaries and wages. The increase in other expenses is primarily attributable to a \$2.0 million increase in reserves for claims and judgments.

Non-operating expense increased \$27.1 million, or 74.2 percent, and is primarily reflective of the \$23.2 million transfer of local sewer service fee assets and replacement funds to the City of Santa Ana and a \$5.5 million or 2706.2 percent increase in loss on disposal of capital assets. Somewhat offsetting this increase is the decrease in interest expense of \$0.5 million or 1.6 percent decrease from the prior year total of \$35.0 million.

Capital Facility Capacity Charges increased \$3.0 million, or 16.3 percent from the prior year, due to an increase in rates and connection fees collected from cities as well as more supplemental capital facilities capacity charges assessed to industrial dischargers than last year.

## Capital Assets

At June 30, 2019, OCSD had a net investment of \$2.7 billion in capital assets. This represents a net increase (including additions and deletions) of \$43.3 million, or 1.6 percent over the prior year.

### Schedule of Capital Assets (Net of Depreciation and Amortization)

*(Dollars in thousands)*

	June 30, 2019	June 30, 2018	Increase (Decrease)	Percentage Increase (Decrease)
Land	\$ 41,967	\$ 29,741	\$ 12,226	41.1%
Construction in progress	521,832	427,996	93,836	21.9%
Sewage collection facilities	508,164	494,171	13,993	2.8%
Sewage treatment facilities	1,485,491	1,557,473	(71,982)	-4.6%
Effluent disposal facilities	31,696	33,178	(1,482)	-4.5%
Solids disposal facilities	278	288	(10)	-3.5%
General and administrative facilities	79,881	83,168	(3,287)	-4.0%
<b>Capital assets, net</b>	<b>\$ 2,669,309</b>	<b>\$ 2,626,015</b>	<b>\$ 43,294</b>	<b>1.6%</b>

Major capital asset additions for the current fiscal year included the following:

- \$27.2 million Newhope-Placentia Trunk Replacement
- \$22.3 million Headquarters Complex at Plant No. 1 (includes land addition of \$18.4 million)
- \$16.5 million Sludge Dewatering and Odor control at Plant 1
- \$13.4 million Ocean Outfall System Rehabilitation
- \$13.3 million Consolidated Demolition & Utility Improvements at Plant No. 2
- \$11.9 million Sludge Dewatering and Odor Control at Plant 2
- \$ 7.0 million Headworks Rehabilitation at Plant No. 1
- \$ 6.8 million Primary Clarifiers Replacement at Plant No. 2
- \$ 3.3 million Digester Gas Facilities Rehabilitation

More detailed information about OCSD's capital assets is provided in Notes 1 and 3 of Notes to Basic Financial Statements.

## **Debt Administration**

At June 30, 2019, OCSD had \$972.8 million outstanding in bonded debt, a net decrease of \$39.3 million, or 3.9 percent from the prior year. This reduction consisted of the accumulation of principal payments made in accordance with the schedule of debt service payments.

During OCSD's most recent debt refunding, Moody's, Standard and Poor's, and Fitch Ratings all reaffirmed their AAA rating of the Orange County Sanitation District. OCSD's long-range financing plan is designed to maintain this high rating. Over the next five years, OCSD is projecting over \$1.3 billion in future treatment plant and collection system capital improvements. In accordance with OCSD's long-term debt fiscal policy, OCSD will restrict long-term borrowing to capital improvements that cannot be financed from current revenue. No new debt issuances are being proposed over the next five years to assist with the funding of the system improvements scheduled over this time period. During FY 2018-19, the Board of Directors of OCSD authorized and adopted Resolution No. OCSD 18-17 to issue the 2018A Certificate Anticipation Notes (CANs) of up to \$109,875,000 in November 2018 which allowed OCSD to repay the 2016B CANs, which were due and payable on December 15, 2018, and avoid using \$110 million of reserves for such purpose. For more information on long-term debt activities, see Note 4 of the Notes to Basic Financial Statements.

## **Economic Factors and Next Year's Budgets and Rates**

- The unemployment rate within the County of Orange is at 3.0 percent in June 2019, a slight decrease from the rate of 3.3 percent a year ago.
- Inflation for the Los Angeles-Riverside-Orange County area increased 3.2 percent in 2018 over the prior year based on the actual percentage change in the consumer price index according to the U. S. Department of Labor, Bureau of Labor Statistics.
- The yield on investments decreased from the 2.4 percent earnings rate in FY 2017-18 to 2.0 percent for FY 2018-19.

All of these factors are considered in preparing OCSD's biennium budget.

As part of OCSD's recently approved five-year rate schedule, user fees were increased by 1.2 percent for FY 2019-20 over the prior year. The Single Family Residential (SFR) fee, which is the underlying for all other user rates, is applicable to OCSD's largest customer base: the SFR fee, increased by \$4.00, from \$335.00 to \$339.00. This rate increase is necessary to finance OCSD's cash flow needs including \$168.2 million in operating costs, \$76.8 million in debt service costs and \$176.3 million in capital improvement outlays in 2019-20. Capital Improvement costs are projected to total \$2.5 billion over the next 10 years in order to rehabilitate and upgrade existing facilities and maintain full secondary treatment standards.

## **Requests for Information**

The financial report is designed to provide a general overview of OCSD's finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Financial Management Division, Orange County Sanitation District, 10844 Ellis Avenue, Fountain Valley, CA 92708-7018.

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**ORANGE COUNTY SANITATION DISTRICT  
BASIC FINANCIAL STATEMENTS**

**ORANGE COUNTY SANITATION DISTRICT**

## Statement of Net Position

June 30, 2019

Current assets:	
Cash and cash equivalents	\$ 75,930,213
Investments	684,538,124
Accounts receivable, net of allowance for uncollectibles \$349,973	13,701,223
Accrued interest receivable	3,801,257
Connection fees receivable	1,735,064
Property tax receivable	1,586,671
Inventories	6,005,074
Due from other governmental agency	465,886
Prepaid expenses	1,966,446
Total current assets	<u>789,729,958</u>
Noncurrent assets:	
Restricted:	
Cash and cash equivalents held by fiscal agents	28,766
Unrestricted:	
Non-depreciable capital assets	563,798,989
Depreciable capital assets, net of accumulated depreciation	2,105,509,917
Other noncurrent assets, net	10,344
Total noncurrent assets	<u>2,669,348,016</u>
Total assets	<u>3,459,077,974</u>
Deferred outflows of resources:	
Deferred losses on defeasances	28,888,051
Deferred outflows related to pensions	93,794,964
Total deferred outflows of resources	<u>122,683,015</u>
Total assets and deferred outflows of resources	<u>3,581,760,989</u>
Current liabilities:	
Accounts payable	16,909,092
Accrued expenses	16,630,416
Retentions payable	3,845,922
Interest payable	18,270,200
Current portion of long-term obligations	54,326,759
Total current liabilities	<u>109,982,389</u>
Noncurrent liabilities:	
Noncurrent portion of long-term obligations	1,011,058,609
Total OPEB liability	4,013,291
Net pension liability - OCERS	29,029,147
Total pension liability - ARBA	21,577,464
Total noncurrent liabilities	<u>1,065,678,511</u>
Total liabilities	<u>1,175,660,900</u>
Deferred inflows of resources:	
Deferred inflows related to pensions	45,597,614
Total liabilities and deferred inflows of resources	<u>1,221,258,514</u>
Net position:	
Net investment in capital assets	1,647,723,350
Unrestricted	712,779,125
Total net position	<u>\$ 2,360,502,475</u>

See Accompanying Notes to Basic Financial Statements.

**ORANGE COUNTY SANITATION DISTRICT**  
Statement of Revenues, Expenses, and Changes in Net Position  
For the Year Ended June 30, 2019

Operating revenues:	
Service charges	\$ 317,291,238
Permit and inspection fees	1,199,294
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Total operating revenues	318,490,532
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Operating expenses other than depreciation and amortization:	
Salaries and benefits	85,506,144
Utilities	7,733,225
Supplies, repairs and maintenance	31,769,669
Contractual services	26,082,243
Feasibility studies	5,850,461
Other	9,644,588
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Total operating expenses other than depreciation and amortization	166,586,330
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Operating income before depreciation and amortization	151,904,202
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Depreciation and amortization	102,238,914
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Operating income	49,665,288
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Non-operating revenues:	
Property taxes	99,534,027
Investment and interest income	29,101,612
Contributions from other governments	27,800,051
Other	2,162,262
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Total non-operating revenues	158,597,952
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Non-operating expenses:	
Interest	34,465,835
Local sewer service transfer	23,229,000
Other	392,996
Loss on disposal of assets	5,493,970
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Total non-operating expenses	63,581,801
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Income before capital contributions	144,681,439
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Capital contributions:	
Capital facilities capacity charges	21,031,628
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Change in net position	165,713,067
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Total net position - beginning	2,194,789,408
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Total net position - ending	\$ 2,360,502,475
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See Accompanying Notes to Basic Financial Statements.

**ORANGE COUNTY SANITATION DISTRICT**

Statement of Cash Flows

For the Year Ended June 30, 2019

Cash flows from operating activities:	
Receipts from customers and users	\$ 298,744,099
Payments to employees	(78,098,096)
Payments to suppliers	(79,534,001)
Net cash provided by operating activities	<u>141,112,002</u>
Cash flows from noncapital financing activities:	
Proceeds from property taxes	99,174,491
Payments for sewer service transfer and other obligations	(21,481,271)
Net cash provided by noncapital financing activities	<u>77,693,220</u>
Cash flows from capital and related financing activities:	
Capital facilities capacity charges	23,167,640
Additions to capital assets	(119,440,593)
Interest paid	(42,922,157)
Principal payments on debt obligations	(31,655,000)
Proceeds released to escrow account on defeased debt	(109,875,000)
Proceeds from debt issuance	110,302,416
Debt issuance costs	(402,429)
Contribution from other governments	3,904,107
Net cash used in capital and related financing activities	<u>(166,921,016)</u>
Cash flows from investing activities:	
Proceeds from the sale of investments	300,864,608
Purchases of investments	(431,416,584)
Interest received	13,694,416
Net cash used in investing activities	<u>(116,857,560)</u>
Net decrease in cash and cash equivalents	(64,973,354)
Cash and cash equivalents, beginning of year	<u>140,932,333</u>
Cash and cash equivalents, end of year	<u>\$ 75,958,979</u>
Reconciliation of operating income to net cash provided by operating activities:	
Operating income	\$ 49,665,288
Adjustments to reconcile operating income to net cash provided by operating activities:	
Depreciation and amortization	102,238,914
Bad debt expense (net recoveries)	(106,006)
(Increase)/decrease in operating assets:	
Accounts receivable	(392,277)
Inventories	595,820
Due from other governmental agency	(19,354,156)
Prepaid and other assets	(321,034)
Increase/(decrease) in operating liabilities:	
Accounts payable	(1,441,374)
Accrued expenses	882,405
Net pension/OPEB liabilities	6,923,368
Compensated absences	(3,185)
Claims and judgments	2,424,239
Net cash provided by operating activities	<u>\$ 141,112,002</u>
<u>Noncash activities:</u>	
Unrealized gain on the fair value of investments	\$ 14,464,176
Capital assets acquired through accounts payable	5,353,308
Capital facilities capacity charges acquired	(2,136,012)

See Accompanying Notes to Basic Financial Statements.

**ORANGE COUNTY SANITATION DISTRICT**  
Notes to Basic Financial Statements  
For the Year Ended June 30, 2019

(1) Summary of Significant Accounting Policies

Reporting Entity

The Orange County Sanitation District (OCSD) is a public agency which owns and operates certain wastewater facilities in order to provide regional wastewater collection, treatment, and disposal services to approximately 2.6 million people in the northern and central portion of the County of Orange, California. OCSD is overseen by a Board comprised of directors appointed by the agencies and cities which are serviced by OCSD.

OCSD's service area was originally formed in 1954 pursuant to the County Sanitation District Act and consisted of seven independent special districts. Two additional districts were formed and additional service areas were added in 1985 and 1986. These special districts were jointly responsible for the treatment and disposal facilities which they each used. In April of 1998, the Board of Supervisors of Orange County passed Resolution 98-140 approving the consolidation of the existing nine special districts into a new, single sanitation district. This action was taken in order to simplify the governance structures, reduce the size of OCSD's Board of Directors, ease administrative processes, streamline decision-making and consolidate accounting and auditing processes. Pursuant to the Resolution and Government Code Section 57500, the predecessor special districts transferred and assigned all of their powers, rights, duties, obligations, functions and properties to OCSD, including all assets, liabilities, and equity.

Effective July 1, 1998, the organization became known as the Orange County Sanitation District. The boundaries of one of the previous districts, now known as Revenue Area No. 14, have been maintained separately because their use of OCSD's collection, treatment, and disposal system is funded by the Irvine Ranch Water District (IRWD). The boundaries of the other eight districts have been consolidated and are collectively referred to as the Consolidated Revenue Area. OCSD utilizes joint operating and capital outlay accounts to pay joint treatment, disposal, and construction costs. These joint costs are allocated to each revenue area based on gallons of sewage flow. The supplemental schedules and statements show internal segregations and are not intended to represent separate funds for presentation as major or non-major funds in the basic financial statements.

The accompanying financial statements present OCSD and its blended component unit, the Orange County Sanitation District Financing Corporation (Corporation). The Corporation is a legally separate entity although in substance it is considered to be part of OCSD's operations. OCSD is considered to be financially accountable for the Corporation which is governed by a board comprised entirely of OCSD's board members. There is no requirement for separate financial statements of the Corporation; consequently, separate financial statements for the Corporation are not prepared. The Corporation had no financial activity during the fiscal year ended June 30, 2019, other than principal and interest payments on outstanding certificates of participation/ revenue obligations and notes (see Note 4).

OCSD is independent of and overlaps other formal political jurisdictions. There are many governmental entities, including the County of Orange, that operate within OCSD's jurisdiction; however, financial information for these entities is not included in the accompanying financial statements in accordance with the Governmental Accounting Standards Board (GASB) Codification of Governmental Accounting and Financial Reporting Standards.

## ORANGE COUNTY SANITATION DISTRICT

Notes to Basic Financial Statements

For the Year Ended June 30, 2019

### Measurement Focus and Basis of Accounting

OCSD operates as an enterprise activity. Enterprise funds account for operations that are financed and operated in a manner similar to private business enterprises, where the intent of the Board of Directors is that the costs (expenses, including depreciation and amortization) of providing services to the general public on a continuing basis be financed or recovered primarily through user charges.

Basis of accounting refers to when revenues and expenses are recognized in the accounts and reported in the financial statements. Enterprise funds are accounted for on the flow of economic resources measurement focus and use the accrual basis of accounting, whereby revenues are recognized when earned and expenses are recognized when incurred, regardless of the timing of related cash flows.

The accounting policies of OCSD conform to accounting principles generally accepted in the United States of America (GAAP) as applicable to governments. The GASB is the accepted standard-setting body for establishing governmental accounting and financial reporting principles in the United States.

### Operating Plans

Each year, OCSD staff prepares an annual operating plan which is adopted by the Board of Directors. The annual operating plan is used to serve as a basis for monitoring financial progress, estimating the levy and collection of taxes, and determining future service charge rates. During the year, these plans may be amended as circumstances or levels of operation dictate.

### Cash and Cash Equivalents

Investments with original maturities of three months or less when purchased and money market mutual funds and external investment pools that can be withdrawn on demand are considered to be cash equivalents.

### Investments

Except for certain investments in monies held by fiscal agents as disclosed in Note 2, section "Fair Value of Investments", all other investments are stated at fair value (the price that would be received to sell an asset in an orderly transaction between market participants acting in their economic best interest at the measurement date). Changes in fair value that occur during the fiscal year are reported as part of investment and interest income. Investment and interest income includes interest earnings and realized and unrealized gains or losses in fair value. Investment and interest income are recorded as revenues and receivables when declared and realized gains or losses are recorded when the investment is sold.

### Accounts Receivable

Accounts receivable is reported net of the allowance for uncollectible receivables. Uncollectible receivables were \$349,973 at June 30, 2019. Unbilled sewer services through June 30, 2019 are recorded as revenue and receivables. Management determines the allowance for uncollectible receivables by evaluating individual accounts receivable at least one year past due and considering a customer's financial condition, credit history and current economic conditions. Accounts receivables are written off when deemed uncollectible. Recoveries of accounts receivables previously written off are recorded when received.

**ORANGE COUNTY SANITATION DISTRICT**  
Notes to Basic Financial Statements  
For the Year Ended June 30, 2019

Inventories

Inventories, which are held for consumption and not resale, are stated at cost on a weighted-average basis and are expensed when used.

Capital Assets

Outlays for property, plant, equipment, and construction in progress are recorded in the revenue area which will use the asset. Such outlays may be for individual revenue area assets or for a revenue area's share of joint assets.

Capital assets of property, plant, and equipment are defined as assets with an initial, individual cost of more than \$5,000 and an estimated useful life of at least three years. Such assets are recorded at cost, except for donated capital assets, donated works of art and similar items, and capital assets received in a service concession arrangement, which are recorded at acquisition value at the time received. Cost includes labor; materials; outside services; vehicle and equipment usage; other ancillary costs consisting of direct charges such as engineering, purchasing, supervision, or fringe benefits. Interest costs, net of interest earnings, have been capitalized on projects prior to fiscal year 2017-2018. Commencing with fiscal year 2017-2018, OCSD early implemented GASB Statement No. 89, where interest costs incurred before the end of the construction period are no longer capitalized.

Depreciation of plant and equipment is provided for over the estimated useful lives of the assets using the straight-line method in accordance with generally accepted accounting principles. OCSD also considers the guidelines of estimated useful lives as recommended in the State of California Controller's Uniform System of Accounts for Waste Disposal Districts, which range from 3 to 75 years. The following are estimated useful lives for major classes of depreciable assets: Sewage collection facilities – 50 years, Sewage treatment facilities – 40 years, Sewage disposal facilities – 40 years, General plant and administrative structures – 40 years, and other General plant and administrative facilities and equipment – 4 to 25 years.

Restricted Assets

Certain assets are classified as restricted because their use is limited by applicable debt covenants. Specifically, the assets are restricted for installment payments due on certificates of participation and revenue obligations or are maintained by a trustee as a reserve requirement for the certificates of participation and revenue obligations. When both restricted and unrestricted resources are available for use, it is OCSD's policy to use restricted resources first, then unrestricted resources as they are needed.

Amortization

Amortization of the excess purchase price over the book value of assets acquired is provided using the straight-line method over an estimated useful life of 30 years.

Premiums and discounts on certificate anticipation notes and wastewater refunding revenue obligations are amortized to interest expense over the respective terms of the installment obligations based on the effective interest method (Note 4).

**ORANGE COUNTY SANITATION DISTRICT**  
Notes to Basic Financial Statements  
For the Year Ended June 30, 2019

Deferred Charges on Defeasances

For advance refundings resulting in defeasance of debt, the difference between the reacquisition price and the net carrying amount of the old debt (i.e. deferred charges) is reported as a deferred outflow of resources and amortized to interest expense based on the effective interest method over the remaining life of the old debt or the life of the new debt, whichever is shorter. OCSD's deferred charges on the refunding debt at June 30, 2019 are \$28,888,051.

Net Position

Net position represents the total of assets and deferred outflows of resources less liabilities and deferred inflows of resources, and is classified into two categories:

Net Investment in Capital Assets – This amount consists of capital assets, net of accumulated depreciation, reduced by the outstanding balances of any borrowings used for the acquisition, construction or improvement of those assets and excludes unspent debt proceeds. Deferred outflows of resources that are attributable to the acquisition, construction or improvement of those assets or related debt also are included in this component of net position.

Unrestricted – This amount represents the residual of amounts not classified in the other category and represents the net equity available for OCSD.

Compensated Absences

OCSD's employees, other than operations and maintenance personnel, are granted vacation and sick leave in varying amounts with maximum accumulations of 200 hours and 560 hours for vacation and sick days earned but unused, respectively. Operations and maintenance personnel accrue between 80 and 250 personal leave hours per year depending on years of service, which can be accumulated up to a maximum of 440 hours.

Vacation and sick leave benefits and personal days are recorded as an expense and liability when earned by eligible employees. The distribution between current and long-term portions of the liability is based on historical trends.

Claims and Judgments

OCSD records estimated losses when it is probable that a claim liability has been incurred and when the amount of the loss can be reasonably estimated. Claims payable includes an estimate for incurred but unreported claims. The distribution between current and long-term portions of the liability is based on historical trends.

## ORANGE COUNTY SANITATION DISTRICT

Notes to Basic Financial Statements

For the Year Ended June 30, 2019

### Pensions

OCSD has two defined benefit pension plans for retirees: the plan maintained through and by the Orange County Employees' Retirement System (OCERS) and the Additional Retiree Benefit Account (ARBA) administered directly by OCSD. For purposes of measuring the net pension liability, deferred outflows of resources related to pensions, deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of OCSD's cost sharing multiple-employer plan with the OCERS plan (Plan) and additions to/deductions from the Plan's fiduciary net position have been determined on the same basis as they are reported by OCERS. Benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value. A deferred outflow of resources and deferred inflow of resources related to pensions result from changes in the components of the net pension liability and are applicable to a future reporting period (Note 5).

### Property Taxes

The County is permitted by State law (Proposition 13) to levy taxes at one percent of full market value (at time of purchase) and can increase the assessed value no more than two percent per year. OCSD receives a share of this basic levy, proportionate to what was received in the 1976 to 1978 period.

Property taxes are determined annually and attached as enforceable liens on real property as of January 1 and are payable in two installments which become delinquent after December 10 and April 10. The County bills and collects the property taxes and remits them to OCSD in installments during the year. Property tax revenues are recognized when levied. The Board of Directors has designated property tax revenue to be used for the annual debt service requirements prior to being used as funding for current operations.

### Capital Facilities Capacity Charges

Capital facilities capacity charges represent fees imposed at the time a structure is newly connected to OCSD's system, directly or indirectly, or an existing structure or category of use is increased. This charge is to pay for District facilities in existence at the time the charge is imposed or to pay for new facilities to be constructed that are of benefit to the property being charged.

### Operating and Non-operating Revenues and Expenses

Operating revenues and expenses result from collecting, treating, and disposing of wastewater and inspection and permitting services. OCSD's operating revenues consist of charges to customers for the services provided. Operating expenses include the cost of providing these services, administrative expenses, and depreciation and amortization expenses. All revenues and expenses not meeting these definitions and which are not capital in nature are reported as non-operating revenues and expenses.

**ORANGE COUNTY SANITATION DISTRICT**  
Notes to Basic Financial Statements  
For the Year Ended June 30, 2019

Self-Insurance Plans

For the year ended June 30, 2019, OCSD was self-insured for portions of workers' compensation, property damage, and general liability. The self-insurance portion of the workers' compensation exposure is the \$1,000,000 deductible per occurrence under the outside excess insurance coverage to statutory levels. The self-insurance portion of the property damage exposure covering fire and other perils is the \$500,000 per occurrence deductible (for most perils) under the outside excess property insurance coverage to \$1 billion. The self-insurance portion of the property damage exposure covering flood is the \$250,000 per occurrence deductible with outside excess property insurance coverage to \$300 million. The self-insurance portion of the property damage exposure covering earthquake is the 5% per structure, minimum \$5,000,000 deductible with outside excess insurance coverage to \$25 million on covered structures. OCSD has insured a number of key structures against the peril of earthquake, all other structures are completely self-insured. The self-insurance portion of the boiler & machinery exposure is the deductible ranging from \$25,000 to \$350,000 under the outside excess boiler & machinery insurance coverage to \$100 million per occurrence combined limit. The self-insurance portion of the general liability exposure is the \$500,000 per occurrence deductible under the outside excess liability coverage to \$40 million per occurrence and aggregate. The self-insurance portion of the pollution liability exposure is the \$75,000 per loss deductible under the outside pollution liability insurance coverage to \$10 million. There were no significant changes in insurance coverage during the fiscal year ended June 30, 2019.

During the past three fiscal years there have been no settlements in excess of covered amounts. Claims against OCSD are processed by General Counsel or an outside claim administrator. These claims are charged to claims expense based on estimated or known amounts which will ultimately be paid. Claims incurred but not yet reported have been considered in determining the accrual for loss contingencies. Workers' compensation reserves are actuarially determined and general liability estimated loss accruals are estimated using past experience adjusted for current trends and any other factors that would modify past experience. The estimate of the claims liability also includes any amounts for incremental and nonincremental claim adjustment expenses. OCSD management believes that there are no unrecorded claims as of June 30, 2019 that would materially affect the financial position of OCSD.

Deferred Compensation Plan

OCSD offers its employees a deferred compensation plan established in accordance with Internal Revenue Code Section 457. The plan permits all employees of OCSD to defer a portion of their salary until future years. The amount deferred is not available to employees until termination, retirement, death or for unforeseeable emergency. The assets of the plan are held in trust for the exclusive benefit of the participants and their beneficiaries. Since the plan assets are administered by an outside party and are not subject to the claims of OCSD's general creditors, in accordance with GASB Statement 32, the plan's assets and liabilities are not included within OCSD's financial statements.

New Accounting Pronouncements

OCSD implemented GASB Statement No. 83, *Certain Asset Retirement Obligations* and GASB Statement No. 88, *Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements* for the fiscal year ended June 30, 2019. Implementation of these Standards did not materially impact OCSD's financial statements.

**ORANGE COUNTY SANITATION DISTRICT**  
Notes to Basic Financial Statements  
For the Year Ended June 30, 2019

(2) Cash and Investments

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

Statement of Net Position:	
Current, Unrestricted:	
Cash and cash equivalents	\$ 75,930,213
Investments	684,538,124
Subtotal - current, unrestricted	760,468,337
Restricted:	
Cash and cash equivalents	28,766
Total cash and cash equivalents and investments	\$ 760,497,103

Cash and investments consist of the following as of June 30, 2019:

Cash on hand	\$ 3,000
Deposits with financial institutions	2,343,869
Managed portfolio - cash and investments	758,121,468
Subtotal - unrestricted cash and investments	760,468,337
Monies held by trustees:	
Cash and cash equivalents	28,766
Grand total cash and investments	\$ 760,497,103

**ORANGE COUNTY SANITATION DISTRICT**  
Notes to Basic Financial Statements  
For the Year Ended June 30, 2019

Investments Authorized by the California Government Code and OCSD's Investment Policy

The following table identifies the investment types that are authorized by the California Government Code and OCSD's investment policy. This table and the subsequent tables identify certain provisions of either the California Government Code or OCSD's investment policy (whichever is more restrictive) that address interest rate risk, credit risk, and concentration of credit risk.

Investment Type - Authorized by the California Government Code	Authorized by OCSD's Investment Policy?	Maximum Maturity <sup>(1)(3)</sup>	Maximum Percentage of Portfolio <sup>(1)</sup>	Maximum Investment in a Single Issuer <sup>(1)</sup>
Local Agency Bonds	Yes	5 years	10% <sup>(2)</sup>	5% <sup>(2)</sup>
U.S. Treasury Obligations	Yes	5 years	No limit	No limit
California State Treasury Obligations	Yes	5 years	No limit	No limit
U.S. Agency Securities	Yes	5 years	No limit	20% <sup>(2)</sup>
Banker's Acceptances	Yes	180 days	40%	5% <sup>(2)</sup>
Commercial Paper	Yes	270 days	25%	5% <sup>(2)</sup>
Negotiable Certificates of Deposit	Yes	5 years	30%	5% <sup>(2)</sup>
Repurchase Agreements	Yes	1 year	20% <sup>(2)</sup>	5% <sup>(2)</sup>
Reverse Repurchase Agreements	Yes	90 days <sup>(2)</sup>	5% <sup>(2)</sup>	5% <sup>(2)</sup>
Corporate Medium-Term Notes	Yes	5 years	30%	5% <sup>(2)</sup>
Mutual Funds	Yes	N/A	20%	10%
Money Market Mutual Funds	Yes	N/A	20%	20%
Mortgage Pass-Through Securities/ CMO/Asset-Backed Securities	Yes	5 years	20%	5% <sup>(2)</sup>
County Investment Pools	Yes	N/A	15% <sup>(2)</sup>	15% <sup>(2)</sup>
Local Agency Investment Fund (LAIF)	Yes	N/A	15% <sup>(2)</sup>	15% <sup>(2)</sup>
Supranational Obligations	Yes	5 years	30%	30%

Notes

(1) Restrictions are in accordance with the California Government Code unless indicated otherwise.

(2) The restriction is in accordance with OCSD's Investment Policy which is more restrictive than the California Government Code.

(3) As allowed by California Government Code Section 53601, the Board of Directors has adopted a policy of a maximum maturity of 5 years for investments purchased by OCSD's external money manager for the long-term investment portfolio. The duration of the long-term investment portfolio can never exceed 60 months. Investments purchased for the short-term portfolio are subject to the maturity restrictions noted in this table.

**ORANGE COUNTY SANITATION DISTRICT**  
Notes to Basic Financial Statements  
For the Year Ended June 30, 2019

Investments Authorized by Debt Agreements

The investment of debt proceeds held by trustees is governed by provisions of the debt covenant agreements, rather than the general provisions of the California Government Code or OCSD's investment policy. The following table identifies the investment types that are authorized for investments held by OCSD's debt trustees. This table and the subsequent tables identify certain provisions of the debt covenant agreements that address interest rate risk, credit risk, and concentration of credit risk.

Investment Type - Authorized by the Debt Covenant Agreement	Maximum Maturity	Maximum Percentage of Portfolio	Maximum Investment in a Single Issuer
State and Local Agency Bonds	5 years	No limit	No limit
U.S. Treasury Obligations	5 years	No limit	No limit
U.S. Agency Securities	5 years	No limit	No limit
Banker's Acceptances	180 days	40%	30%
Commercial Paper	270 days	40%	10%
Negotiable Certificates of Deposit	5 years	30%	30%
Repurchase Agreements	1 year	No limit	No limit
Corporate Medium-Term Notes	5 years	30%	30%
Mutual Funds	N/A	20%	10%
Money Market Mutual Funds	N/A	20%	20%
Local Agency Investment Fund (LAIF)	N/A	No limit	No limit
Guaranteed Investment Contracts	N/A	No limit	No limit

Disclosures Relating to Interest Rate Risk

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Generally, the longer an investment has before maturity, the greater the sensitivity of its fair value to changes in market interest rates. One of the ways that OCSD 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 coming close to maturity evenly over time, as necessary to provide the cash flow and liquidity needed for operations.

OCSD monitors the interest rate risk inherent in its managed portfolio by measuring the modified duration of its portfolio. The duration of monies held for shorter term purposes is recommended by OCSD's Treasurer and is based on OCSD's cash flow requirements in meeting current operating and capital needs. The average duration of monies invested for shorter term purposes may never exceed 180 days. The duration of monies held for longer term purposes is recommended annually by OCSD's Treasurer and is based on OCSD's five-year cash flow forecast. The average duration may not exceed 120 percent nor be less than 80 percent of the recommended duration. The average duration of monies invested for longer term purposes may never exceed 60 months. There is no stated maximum maturity for the Money Market Mutual Funds. The money market mutual funds for BlackRock Institutional Fund and First American Government Obligations Fund are daily liquid funds available on demand.

**ORANGE COUNTY SANITATION DISTRICT**  
Notes to Basic Financial Statements  
For the Year Ended June 30, 2019

Following is a table which summarizes OCSD's managed portfolio investments by purpose with the modified duration as of June 30, 2019.

Investment Type	Fair Value	Modified Duration (in years)	Modified Duration (in months)
<b>Short-Term Portfolio:</b>			
U.S. Treasury Notes	\$ 120,821,505	0.233	2.80
Local Agency Investment Fund	35,218,920	0.474	5.69
Corporate Medium-Term Notes	14,071,967	0.362	4.34
U.S. Agency Securities	8,326,426	0.129	1.55
Certificates of Deposit	7,304,306	0.321	3.85
Commercial Paper	7,246,498	0.265	3.18
Money Market Mutual Funds	5,955,570	-	-
U.S. Treasury Bills	3,629,890	0.563	6.76
Short-term portfolio subtotal	<u>\$ 202,575,082</u>	<u>0.283</u>	<u>3.40</u>
<b>Long-Term Portfolio:</b>			
U.S. Treasury Notes	\$ 161,747,910	2.753	33.04
Corporate Medium-Term Notes	140,474,618	2.664	31.96
U.S. Agency Securities*	132,290,121	2.632	31.58
Asset Backed Securities/CMO*	46,051,290	0.984	11.81
Supranationals	33,041,747	2.202	26.42
Money Market Mutual Funds	15,203,202	-	-
U.S. Treasury Inflation-Protected Securities (TIPS)**	11,171,448	5.020	60.24
Commercial Paper	11,089,623	0.135	1.62
Taxable Municipal Bonds	4,330,845	0.841	10.09
U.S. Govt. Backed Mortgage Pools (GNMA)*	145,582	3.362	40.34
Long-term portfolio subtotal	<u>\$ 555,546,386</u>	<u>2.425</u>	<u>29.10</u>
<b>Total Portfolio</b>	<u>\$ 758,121,468</u>		
* Includes highly sensitive securities.			
** The investment's duration in excess of five years was permitted by OCSD's Investment Policy at the time it was purchased.			

**ORANGE COUNTY SANITATION DISTRICT**  
Notes to Basic Financial Statements  
For the Year Ended June 30, 2019

OCSD monitors the interest rate risk inherent in its other investments using specific identification of the investments. Following is a table of these investments all held by trustees, as of June 30, 2019.

	Fair Value	Maturities
Cash equivalents held by fiscal agents:		
Money Market Mutual Funds:		
First American Government Obligations Fund	\$ 27,976	19 days
BlackRock Institutional Funds	790	30 days
Total fair value of investments held by fiscal agents	<u>\$ 28,766</u>	

Investments with Fair Values Highly Sensitive to Interest Rate Fluctuations

OCSD's investments (including investments held by trustees) include the following investments that are highly sensitive to interest rate fluctuations (to a greater degree than already indicated in the information provided above):

- **Mortgage-backed securities:** These securities are subject to early payment in a period of declining interest rates. The resulting reduction in expected total cash flows affects the fair value of these securities, making them highly sensitive to change in interest rates. At fiscal year end, the fair value of investments in mortgage-backed securities totaled \$3,346,950 including \$2,064,262 of mortgage pass-through securities, \$1,137,106 of U.S. agency securities, and \$145,582 of U.S. government backed mortgage pools.

Fair Value of Investments

OCSD measures and records its investments using fair value measurement guidelines established by generally accepted accounting principles. These guidelines recognize a three-tiered fair value hierarchy, as follows:

- Level 1: Quoted prices for identical investments in active markets;
- Level 2: Observable inputs other than quoted market prices; and
- Level 3: Unobservable inputs.

**ORANGE COUNTY SANITATION DISTRICT**  
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At June 30, 2019, OCSD had the following fair value measurements for its managed investment portfolio:

Investment Type	Fair Value	Quoted Prices in Active Markets for Identical Assets Level 1	Significant Other Observable Inputs Level 2	Unobservable Inputs Level 3
<b>Investments in Short-Term Portfolio:</b>				
U.S. Treasury Notes	\$ 120,821,505	\$ -	\$ 120,821,505	\$ -
Corporate Medium-term Notes	14,071,967		14,071,967	-
U.S. Agency Securities	8,326,426	-	8,326,426	-
Certificates of Deposits	7,304,306	-	7,304,306	-
Commercial Paper	7,246,498	-	7,246,498	-
U.S. Treasury Bills	3,629,890	-	3,629,890	-
<b>Investments in Long-Term Portfolio:</b>				
U.S. Treasury Notes	161,747,910	-	161,747,910	-
Corporate Medium-term Notes	140,474,618	-	140,474,618	-
U.S. Agency Securities	132,290,121	-	132,290,121	-
Asset Backed Securities/CMO	46,051,290	-	46,051,290	-
Supranationals	33,041,747	-	33,041,747	-
US Treasury Inflation Protected Securities (TIPS)	11,171,448	-	11,171,448	-
Commercial Paper	11,089,623	-	11,089,623	-
Taxable Municipal Bonds	4,330,845	-	4,330,845	-
U.S. Government Backed Mortgage Pools	145,582	-	145,582	-
<b>Fair Value Hierarchy Totals</b>		<b>\$ -</b>	<b>\$ 701,743,776</b>	<b>\$ -</b>
<b>Investments Not Subject To Fair Value Hierarchy:</b>				
Local Agency Investment Fund (LAIF)*	35,218,920			
Money Market Mutual Funds*	5,955,570			
Money Market Mutual Funds**	15,203,202			
<b>Total Portfolio</b>	<b>\$ 758,121,468</b>			

\* Invested in Short-Term Portfolio

\*\* Invested in Long-Term Portfolio

US Bank is the custodial bank for all of OCSD's investments shown above in the managed portfolio, except for LAIF. Investments classified as Level 2 are valued using US Bank's fair value hierarchy matrix based on the asset type classification. The fair value hierarchy level matrix is based on discussions with (1) pricing vendors, (2) broker/dealers, (3) investment managers, (4) industry groups, and (5) independent accounting firms.

Monies held by trustees (fiscal agents) that are invested in money market mutual funds are reported at carrying cost.

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. The following table presents the minimum rating as required by the California Government Code, OCSD's investment policy, or debt agreements, and the actual rating as of year-end for each investment type.

**ORANGE COUNTY SANITATION DISTRICT**  
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Investment Type and the Lowest Rating Reported at Year End	Fair Value
Investments with no legal minimum rating & no required disclosure:	
U.S. Treasury Obligations	\$ 297,370,753
U.S. Agency Securities - GNMA	145,582
Subtotal	\$ 297,516,335
Investments with no legal minimum rating:	
U.S. Agency Securities (other than GNMA):	
Rating of AA+ (Standard & Poor's)	132,290,121
Rating of P-1 (Moody's)	8,326,426
Municipal Bonds:	
Rating of Aa3 (Moody's)	2,892,163
Rating of Aa1 (Moody's)	1,438,682
Certificates of Deposits:	
Rating of Aa2 (Moody's)	3,003,150
Rating of A-1 (Standard and Poor's)	2,300,276
Rating of P-1 (Moody's)	2,000,880
Local Agency Investment Fund (LAIF):	
Not rated	35,218,920
Subtotal	187,470,618
Investments with a legal minimum rating (or its equivalent) of A:	
Corporate Medium-Term Notes:	
Rating of Aa1 (Moody's)	7,104,610
Rating of AA+ (Standard and Poor's)	3,008,310
Rating of AA+ (Fitch)	3,019,087
Rating of Aa2 (Moody's)	10,212,776
Rating of Aa3 (Moody's)	1,062,450
Rating of AA- (Standard & Poor's)	5,245,600
Rating of A1 (Moody's)	13,366,926
Rating of A+ (Fitch)	6,652,520
Rating of A+ (Standard and Poor's)	499,530
Rating of A2 (Moody's)	38,262,689
Rating of A (Standard & Poor's)	17,523,943
Rating of A (Fitch)	9,818,790
Rating of A3 (Moody's)*	6,278,802
Rating of A- (Standard & Poor's)*	29,505,524
Rating of BBB+ (Standard & Poor's)*	2,974,888
Not rated	10,140
Money Market Mutual Funds:	
Rating of P-1 (Moody's)	21,158,772
Invested with fiscal agents:	
Rating of Aaa-mf (Moody's)	28,766
Subtotal	175,734,123
Investments with a legal minimum rating (or its equivalent) of AA:	
Asset Backed Securities/CMO:	
Rating of Aaa (Moody's)	34,200,405
Rating of AAA (Standard & Poor's)	9,772,451
Rating of AA+ (Standard and Poor's)	1,933,793
Rating of BBB (Fitch)*	130,469
Rating of B (Fitch)*	14,172
Supranational Obligations:	
Rating of Aaa (Moody's)	26,551,367
Rating of AAA (Fitch)	6,490,380
Subtotal	79,093,037
Investments with a legal minimum rating (or its equivalent) of "Prime":	
Commercial Paper:	
Rating of P-1 (Moody's)*	1,976,340
Rating of A-1 (Standard & Poor's)*	16,359,781
Subtotal	18,336,121
Total	\$ 758,150,234

\* Investment was in compliance with legal requirements at the time it was purchased.

**ORANGE COUNTY SANITATION DISTRICT**  
Notes to Basic Financial Statements  
For the Year Ended June 30, 2019

Concentration of Credit Risk

Limitations on the amount that OCSD is allowed to invest in any one issuer have been identified previously in the section “Investments Authorized by the California Government Code and OCSD’s Investment Policy” and in the section “Investments Authorized by Debt Agreements.” OCSD follows whichever guideline is the most restrictive.

As of June 30, 2019, OCSD had the following investments representing five percent or more of total investments:

Name of Issuer	Fair Value	% of Total
Federal Home Loan Bank System (FHLB)	\$ 60,810,641	8.02%
Federal National Mortgage Association (FNMA)	\$ 49,603,962	6.54%

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 California Government Code and OCSD’s investment policy contain legal requirements that limit the exposure to custodial credit risk for deposits as follows: a financial institution must 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 fair value of the pledged securities in the collateral pool must equal at least 110% of the total amount deposited by the public agencies. California law also allows financial institutions to secure deposits by pledging first trust deed mortgage notes having a value of 150% of the secured public deposits.

Custodial credit risk for investments is the risk that in the event of the failure of the counterparty (e.g., broker-dealer) to a transaction, a government will not be able to recover the value of its investment or collateral securities that are in the possession of another party. The California Government Code and OCSD’s investment policy do not contain legal or policy requirements that would limit the exposure to custodial credit risk for investments. As of June 30, 2019, in accordance with OCSD’s investment policy, none of OCSD’s investments were held with a counterparty. All of OCSD’s investments were held with an independent third party custodian bank registered in the name of OCSD. OCSD uses US Bank as a third party custody and safekeeping service for its investment securities.

Investment in State Investment Pool

OCSD is a voluntary participant in the Local Agency Investment Fund (LAIF) that is regulated by California Government Code Section 16429 under the oversight of the Treasurer of the State of California. The fair value of OCSD’s investment in this pool is reported in the accompanying financial statements at amounts based upon OCSD’s pro-rata share of the fair value provided by LAIF for the entire LAIF portfolio (in relation to the amortized cost of that portfolio). The balance available for withdrawal is based on the accounting records maintained by LAIF, which are recorded on an amortized cost basis. Included in LAIF’s investment portfolio are mortgage-backed securities, other asset-backed securities, loans to certain state funds, securities with interest rates that vary according to changes in rates greater than a one-for-one basis, and structured notes. The amounts invested in LAIF are recorded as cash and cash equivalents at June 30, 2019.

**ORANGE COUNTY SANITATION DISTRICT**  
Notes to Basic Financial Statements  
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**(3) Capital Assets**

Capital asset activity for the year ended June 30, 2019 is as follows:

	Beginning Balance at July 1, 2018	Additions / Transfers	Deletions / Transfers	Ending Balance at June 30, 2019
<b>Capital assets not depreciated:</b>				
Cost:				
Land	\$ 29,741,243	\$ 18,422,112	\$ (6,196,000)	\$ 41,967,355
Construction in progress	427,995,850	134,421,652	(40,585,868)	521,831,634
Total nondepreciable assets	<u>457,737,093</u>	<u>152,843,764</u>	<u>(46,781,868)</u>	<u>563,798,989</u>
<b>Depreciable capital assets:</b>				
Cost:				
Sewage collection facilities	860,710,368	34,905,828	(8,825,693)	886,790,503
Sewage treatment facilities	2,477,357,509	1,386,759	(17,334)	2,478,726,934
Effluent disposal facilities	97,014,820	-	(42,804)	96,972,016
Solids disposal facilities	3,463,236	-	-	3,463,236
General and administrative facilities	253,129,772	4,558,340	(519,767)	257,168,345
Excess purchase price over book value on acquired assets	19,979,000	-	-	19,979,000
Subtotal	<u>3,711,654,705</u>	<u>40,850,927</u>	<u>(9,405,598)</u>	<u>3,743,100,034</u>
Accumulated depreciation:				
Sewage collection facilities	(366,539,393)	(19,557,558)	7,471,311	(378,625,640)
Sewage treatment facilities	(919,884,146)	(73,369,661)	17,334	(993,236,473)
Effluent disposal facilities	(63,837,052)	(1,439,304)	-	(65,276,356)
Solids disposal facilities	(3,175,690)	(9,718)	-	(3,185,408)
General and administrative facilities	(169,961,690)	(7,862,673)	537,123	(177,287,240)
Excess purchase price over book value on acquired assets	(19,979,000)	-	-	(19,979,000)
Subtotal	<u>(1,543,376,971)</u>	<u>(102,238,914)</u>	<u>8,025,768</u>	<u>(1,637,590,117)</u>
Net depreciable assets	<u>2,168,277,734</u>	<u>(61,387,987)</u>	<u>(1,379,830)</u>	<u>2,105,509,917</u>
Net capital assets	<u>\$2,626,014,827</u>	<u>\$ 91,455,777</u>	<u>\$ (48,161,698)</u>	<u>\$2,669,308,906</u>

*For the fiscal year ended June 30, 2019, capital asset additions of \$40.9 million in depreciable capital assets are \$0.3 million more than the \$40.6 million transferred from Construction in Progress due to capital equipment purchases of \$4.0 million, partially offset by \$3.7 million of prior capital project expenses that were written off as expense. Also, the removal of land of \$6.2 million was due to the sale of property in May 2019.*

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**(4) Long-Term Liabilities**

The following is a summary of the changes in long-term liabilities for the year ended June 30, 2019:

	Beginning Balance, July 1	Additions	Deletions	Ending Balance, June 30	Due w ithin one year	Long-term amount
Compensated absences	\$ 8,025,854	\$ 7,590,606	\$ (7,593,791)	\$ 8,022,669	\$ 7,367,217	\$ 655,452
Claims and judgments	4,436,087	2,820,028	(395,789)	6,860,326	673,070	6,187,256
Certificates of participation, revenue obligations & notes	1,012,110,000	102,200,000	(141,530,000)	972,780,000	32,730,000	940,050,000
Unamortized premium	83,627,610	8,102,416	(14,007,653)	77,722,373	13,556,472	64,165,901
<b>Totals</b>	<b>\$ 1,108,199,551</b>	<b>\$ 120,713,050</b>	<b>\$ (163,527,233)</b>	<b>\$ 1,065,385,368</b>	<b>\$54,326,759</b>	<b>\$ 1,011,058,609</b>

Compensated Absences

OCSD's policies related to compensated absences are described in Note 1. OCSD's liability at June 30, 2019 is \$8,022,669 with an estimated \$7,367,217 to be paid or used within the next fiscal year.

Claims and Judgments Payable

OCSD is self-insured in a number of areas as described in Note 1. The following is a summary of the change in claims and judgments payable for the years ended June 30, 2019 and 2018:

	2018-19	2017-18
Claims and judgments payable at July 1	\$ 4,436,087	\$ 4,052,668
Claims incurred during the fiscal year	2,820,028	971,427
Payments on claims during the fiscal year	(395,789)	(588,008)
Claims and judgments payable at June 30	6,860,326	4,436,087
Less: current portion	(673,070)	(732,040)
<b>Total long-term claims and judgments payable</b>	<b>\$ 6,187,256</b>	<b>\$ 3,704,047</b>

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Certificates of Participation/ Revenue Obligations and Notes

OCSD issues certificates of participation, revenue obligations and notes in order to finance construction of the treatment facilities. Each issuance represents a direct and proportionate interest in the semi-annual interest payments. Installment payments for the issues are payable from any source of lawfully available funds of OCSD. Certificates of participation, revenue obligations, and notes at June 30, 2019 are summarized as follows:

	Amount
2010A wastewater revenue obligations	\$ 80,000,000
2010C wastewater revenue obligations	157,000,000
2011A wastewater refunding revenue obligations	75,370,000
2012A wastewater refunding revenue obligations	100,645,000
2012B wastewater refunding revenue obligations	46,475,000
2014A wastewater refunding revenue obligations	71,330,000
2015A wastewater refunding revenue obligations	127,510,000
2016A wastewater refunding revenue obligations	145,880,000
2017A wastewater refunding revenue obligations	66,370,000
2018A revenue refunding certificate anticipation notes	102,200,000
Total certificates of participation, revenue obligations, and notes	<u>\$ 972,780,000</u>

Outstanding Certificates of Participation / Revenue Obligations and Notes

All of the outstanding debt of OCSD is senior lien debt with rate covenants that require a minimum coverage ratio of 1.25. The minimum coverage ratio is the ratio of net annual revenues available for debt service requirements to total annual debt service requirements. As of June 30, 2019, the coverage ratio for senior lien debt was 4.08.

May 2010 Wastewater Revenue Obligations, Series 2010A

On May 18, 2010, OCSD completed the sale of \$80,000,000 of wastewater revenue obligations under the federally taxable Build America Bonds program. The obligations were issued to finance and to reimburse OCSD for the acquisition, construction, and installation of additional improvements made to the wastewater system. The stated interest rate on the obligations is fixed and will range from 5.56 percent to 5.58 percent, however, in accordance with their designation as Build America Bonds, OCSD expects to receive a cash subsidy from the United States Treasury equal to 35 percent of the interest payable with respect to these revenue obligations. The expected net interest rate on the obligations is fixed and will range from 3.614 percent to 3.627 percent. Annual principal payments are due on February 1, beginning February 1, 2034 through February 1, 2040.

The trust agreement for the revenue obligations does not require the establishment of a reserve.

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December 2010 Wastewater Revenue Obligations, Series 2010C

On December 8, 2010, OCSD completed the sale of \$157,000,000 of wastewater revenue obligations under the federally taxable Build America Bonds program. The obligations were issued to finance and to reimburse OCSD for the acquisition, construction, and installation of additional improvements made to the wastewater system. The stated interest rate on the obligations is fixed and will range from 6.35 percent to 6.40 percent, however, in accordance with their designation as Build America Bonds, OCSD expects to receive a cash subsidy from the United States Treasury equal to 35 percent of the interest payable with respect to these revenue obligations. The expected net interest rate on the obligations is fixed and will range from 4.1275 percent to 4.16 percent. Annual principal payments are due on February 1, beginning February 1, 2031 through February 1, 2044.

The trust agreement for the revenue obligations does not require the establishment of a reserve.

October 2011 Wastewater Refunding Revenue Obligations, Series 2011A

On October 3, 2011, OCSD completed the sale of \$147,595,000 of wastewater refunding revenue obligations. The obligations were issued to refund \$89,800,000 of the outstanding principal balance of 2000 Series A and B refunding certificates of participation, and \$83,320,000 of the outstanding principal balance of 2003 certificates of participation. The stated interest rate on the obligations is fixed and will range from 3 percent to 5 percent. Annual principal payments are due on August 1 and February 1, beginning August 1, 2012 through February 1, 2026.

The trust agreement for the revenue obligations does not require the establishment of a reserve.

March 2012 Wastewater Refunding Revenue Obligations, Series 2012A

On March 22, 2012, OCSD completed the sale of \$100,645,000 of wastewater refunding revenue obligations. The obligations were issued to refund the \$108,180,000 outstanding principal balance of the 2003 certificates of participation. The stated interest rate on the obligations is fixed and will range from 3 percent to 4 percent. Annual principal payments are due on February 1, beginning February 1, 2031 through February 1, 2033.

The trust agreement for the revenue obligations does not require the establishment of a reserve.

August 2012 Wastewater Refunding Revenue Obligations, Series 2012B

On August 16, 2012, OCSD completed the sale of \$66,395,000 of wastewater refunding revenue obligations. The obligations were issued to refund the remaining \$91,900,000 outstanding principal balance of the Series 2000A and 2000B refunding certificates of participation. The stated interest rate on the obligations is fixed and will range from 3 to 5 percent. Annual principal payments are due on February 1, beginning February 1, 2019 through February 1, 2026.

The trust agreement for the revenue obligations does not require the establishment of a reserve.

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August 2014 Wastewater Refunding Revenue Obligations, Series 2014A

On August 7, 2014, OCSD completed the sale of \$85,090,000 of wastewater refunding revenue obligations. The obligations were issued to partially refund an amount of \$93,930,000 of the outstanding principal balance of 2007 Series B certificates of participation. The stated interest rate on the obligations is fixed at 5 percent. Annual principal payments are due on February 1, beginning February 1, 2018 through February 1, 2027.

The trust agreement for the revenue obligations does not require the establishment of a reserve.

February 2015 Wastewater Refunding Revenue Obligations, Series 2015A

On February 12, 2015, OCSD completed the sale of \$127,510,000 of wastewater refunding revenue obligations. The obligations were issued to partially refund an amount of \$152,990,000 of the outstanding principal balance of 2007 Series B certificates of participation. The stated interest rate on the obligations is fixed at 5 percent. Annual principal payments are due on February 1, beginning February 1, 2028 through February 1, 2037.

The trust agreement for the revenue obligations does not require the establishment of a reserve.

March 2016 Wastewater Refunding Revenue Obligations, Series 2016A

On March 30, 2016, OCSD completed the sale of \$145,880,000 of wastewater refunding revenue obligations. The obligations were issued to partially refund an amount of \$162,780,000 of the outstanding principal balance of 2009 Series A certificates of participation. The stated interest rate on the obligations is fixed and will range from 4 to 5 percent. Annual principal payments are due on February 1, beginning February 1, 2020 through February 1, 2039.

The trust agreement for the revenue obligations does not require the establishment of a reserve.

February 2017 Wastewater Refunding Revenue Obligations, Series 2017A

On February 1, 2017, OCSD completed the sale of \$66,370,000 of wastewater refunding revenue obligations. The obligations were issued to refund \$91,620,000 of the outstanding principal balance of 2007 Series A certificates of participation. The stated interest rate on the obligations is fixed at 5 percent. Annual principal payments are due on February 1, beginning February 1, 2021 through February 1, 2030.

The trust agreement for the revenue obligations does not require the establishment of a reserve.

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November 2018 Revenue Refunding Certificate Anticipation Notes, Series 2018A

On November 1, 2018, OCSD completed the sale of \$102,200,000 of revenue refunding certificate anticipation notes. The notes were issued to fully refund the \$109,875,000 outstanding principal balance of the 2016 Series B revenue refunding certificate anticipation notes. The interest rate on the notes is fixed at 5 percent. The notes will mature on August 15, 2021. OCSD expects the principal and interest on the notes to be paid from proceeds of the sale, prior to the maturity date, of a future series of certificates of participation, notes or other obligations.

The aggregate difference in debt service between the refunding debt and the refunded debt is a negative amount of approximately \$7,052. The total future payments for the new debt provide a net present value loss of approximately \$534,127 to refund the old debt.

The trust agreement for the certificates does not require the establishment of a reserve.

Annual Amortization Requirements

The annual requirements to amortize all debt related to certificates of participation, revenue obligations, and anticipation notes as of June 30, 2019, including the Revenue Refunding Certificate Anticipation Notes, Series 2018A that currently matures in August 2021, are as follows:

<u>Year Ending June 30,</u>	<u>Principal</u>	<u>Estimated Interest</u>	<u>Total</u>
2020	\$ 32,730,000	\$ 44,044,869	\$ 76,774,869
2021	30,430,000	42,408,369	72,838,369
2022	130,605,000	38,331,869	168,936,869
2023	29,805,000	34,371,619	64,176,619
2024	31,140,000	33,041,769	64,181,769
2025-2029	175,555,000	142,236,946	317,791,946
2030-2034	257,560,000	94,348,085	351,908,085
2035-2039	214,870,000	39,392,596	254,262,596
2040-2044	70,085,000	6,378,599	76,463,599
Total	<u>\$ 972,780,000</u>	<u>\$ 474,554,721</u>	<u>\$ 1,447,334,721</u>

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(5) Pension Benefits

OCSD has two defined benefit pension plans for retirees: the plan maintained through and by the Orange County Employees' Retirement System (OCERS) and the Additional Retiree Benefit Account (ARBA) administered directly by OCSD.

A summary of pension amounts for OCSD's plans at June 30, 2019 is presented below:

	OCERS	ARBA	Total
Net pension liability - OCERS	\$ 29,029,147	\$ -	\$ 29,029,147
Deferred outflows - pensions	91,463,662	2,331,302	93,794,964
Total pension liability - ARBA	-	21,577,464	21,577,464
Deferred inflows - pensions	45,597,614	-	45,597,614
Pension expenses	16,730,225	1,695,688	18,425,913

A. Orange County Employees' Retirement System (OCERS)

Plan Description: All qualified permanent and probationary employees are eligible to participate in OCSD's Employee Pension Plan (Plan), which is a cost-sharing multiple employer defined benefit pension plan administered by the Orange County Employees Retirement System (OCERS). OCERS was established in 1945 under the provisions of the County Employees Retirement Law of 1937 (CERL). The Plan operates under the provisions of the CERL, the California Public Employees' Pension Reform Act of 2013 (PEPRA), and the regulations, procedures and policies adopted by OCERS' Board of Retirement. The Plan's authority to establish and amend the benefit terms are set by the CERL and PEPRA and may be amended by the California state legislature. The Plan is a tax qualified plan under Section 401(a) of the Internal Revenue Code

Benefits Provided: OCERS provides service retirement, disability, death and survivor benefits to plan members who may be public employees or beneficiaries. The CERL and PEPRA establish benefit terms. Benefits are based on years of credited service equal to one year of full time employment. Members of plans B, G and H with ten years of service credit are entitled to receive a retirement allowance beginning at age 50; members of plan U with 5 years of service are eligible to receive a retirement allowance at age 52. Members attaining age 70 are eligible to retire regardless of credited service.

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Benefits are determined by plan formula, age, years of service and final average salary (FAS) as follows:

	Plan G	Plan H	Plan B	Plan U
Hire Date	Prior to 9/21/79	After 9/21/79 Prof/Sup*: Before 10/1/10 OCEA*: Before 8/1/11 501*: Before 7/1/11	Prof/Sup: After 10/1/10 OCEA: After 8/1/11 501: After 7/1/11 All: Before 1/1/2013	On or after 1/1/2013
Final Average Compensation (FAS)	Highest 12 months	Highest 36 months	Highest 36 months	Highest 36 months
Normal Retirement Age	Age 55	Age 55	Age 57.5	Age 67
Service Requirement Eligibility	Age 70, any years Age 50, 10 years	Age 70, any years Age 50, 10 years	Age 70, any years Age 50, 10 years	Age 70, any years Age 52, 5 years
Benefit percent per year of service for normal retirement age	2.5% per year of FAS for every year of service credit	2.5% per year of FAS for every year of service credit	1.667% per year of FAS for every year of service credit	2.5% per year of FAS for every year of service credit
Benefit Adjustments	Reduced before age 55	Reduced before age 55	Reduced before age 57.5	Reduced before age 67
FAS Limitation	Internal Revenue Code Section 401(a)(17)	Internal Revenue Code Section 401(a)(17)	Internal Revenue Code Section 401(a)(17)	Public Employees Pension Reform Act (PEPRA): 120% of Social Security wage base per year

\* Prof/Sup: Professional and Supervisor employee groups, bargaining unit SPMG.

\* OCEA: Administrative, Clerical, Engineering, and Technical Services employee groups, bargaining unit OCEA.

\* 501: Operations and Maintenance employee groups, bargaining unit International Union of Operating Engineers Local 501.

A cost of living adjustment is provided to benefit recipients based on changes in the Consumer Price Index (CPI) up to a maximum of 3% per year. Any increase greater than 3% is banked and may be used in years when the CPI is less than 3%. The increase is established and approved annually by the Board of Retirement.

The Plan also provides disability and death benefits to eligible members and their beneficiaries, respectively. For retirees the death benefit is determined by the retirement benefit option chosen. For all other members the beneficiary is entitled to benefits based on the member's years of service and whether or not the cause of death is service related.

At the December 31, 2018 measurement date, the following employees were covered by the benefit terms:

Inactive employees or beneficiaries currently receiving benefits	486
Inactive employees entitled to but not yet receiving benefits	117
Active employees	<u>616</u>
Total	<u><u>1,219</u></u>

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Contributions: Participating employers and active members are required by statute to contribute a percentage of covered salary to the Plan. CERL requires that the employer contribution rates for all public employers be determined on an annual basis by the actuary and be effective on the July 1 following notice of a change in rate. Funding contributions are determined annually on an actuarial basis as of December 31 by OCERS. 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.

Contributions to the Plan from OCSD were \$7,769,431 for the year ended June 30, 2019.

Contribution rates in effect for the fiscal year ended June 30, 2019 are as follows:

	Plan G	Plan H	Plan B	Plan U
Employer Contribution Rate, 7/1/18 - 6/30/19	12.28%	12.28%	10.21%	9.27%
Employee Contribution Rate, 7/1/18 - 6/30/19 (2)	6.35-12.22% (1)	5.88-12.22% (1)	6.76-12.37%	6.42-13.65%
Paid by Employer for Employee	3.50%	3.50%	0.00%	0.00%

(1) Net of employer paid portion of 3.5%.

(2) Employee rates are determined by the age of entry into the retirement system.

For the year ended June 30, 2019, the contributions and average employer's contribution rate as a percentage of covered payroll were as follows:

Plans	Employer Contributions	Employee (Paid by Employer) Contributions	Average Employer Contribution Rate (%)
Plan G	\$ 18,141	\$ 5,171	0.03%
Plan H	5,259,549	1,486,230	9.76%
Plan B	666,923	-	0.97%
Plan U	1,824,818	-	2.64%
Total	<u>\$ 7,769,431</u>	<u>\$ 1,491,401</u>	

Pension Liabilities: As of June 30, 2019, OCSD reported a net pension liability of \$29,029,147 for its proportionate share of OCERS' net pension liability. The net pension liability was measured as of December 31, 2018 and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. OCSD's proportion of the net pension liability was based on a projection of OCSD's long-term share of contributions to the pension plan relative to the projected contribution of all participating employers, actuarially determined.

At December 31, 2018, OCSD's proportion of the net pension liability was 0.468%, which was an increase of 1.267% from its proportion measured as of December 31, 2017. The change in OCSD's proportion of the net pension liability during the fiscal year ended June 30, 2019 was caused by the contributions and projections noted above.

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Pension Expense and Deferred Outflows/Inflows of Resources Related to Pensions: For the year ended June 30, 2019, OCSD recognized pension expense of \$16,730,225 for its proportionate share of the pension expense. At June 30, 2019 OCSD reported its share of deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	\$ 2,740,145	\$ 10,405,119
Net difference between projected and actual investment earnings on pension plan investments	59,867,140	32,687,002
Changes of assumptions (1)	16,401,122	2,445,073
Changes in proportion and differences between employer contributions and proportionate share of contributions	872,851	60,420
Employer contributions paid to OCERS subsequent to the measurement date	11,582,404	-
<b>Total</b>	<b>\$ 91,463,662</b>	<b>\$ 45,597,614</b>

(1) The monetary effects of changes in actuarial assumptions and method totals \$16,401,122 for deferred outflows and \$2,445,073 for deferred inflows of resources. These changes include:

- adjustments to the mortality tables,
- retirement assumptions for deferred vested members (age at retirement 59, increase of 4.25% in reciprocity, and an increase in compensation increases),
- % in the rate of marriage for male and female members at retirement or pre-retirement death,
- an increase in the Consumer Price Index of 2.75% per year, maximum increase is 3%,
- and a slight increase of .50% in salaries per year.

Detail for these changes is available in the Segal Actuarial Valuation for December 31, 2018, Section 3. This report is available on the OCERS website at [www.ocers.org](http://www.ocers.org).

The \$11,582,404 reported as deferred outflows of resources related to pensions resulting from OCSD's contributions to OCERS subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended June 30, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OCERS pensions will be recognized in pension expense as follows:

Year ended June 30	Amount
2020	\$ 6,841,613
2021	3,479,359
2022	6,546,883
2023	16,876,166
2024	539,623
<b>Total</b>	<b>\$ 34,283,644</b>

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Actuarial Assumptions and Methods: The total pension liability in the December 31, 2018 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Investment rate of return	7.00% of net pension plan investment expenses, including inflation
Discount rate	7.00%
Inflation rate	2.75%
Projected salary increases	4.25% to 12.25%
Cost of living adjustment	2.75% of retirement income

OCERS Economic and Demographic Assumptions: On October 16, 2017, the OCERS Board adopted the following significant changes to the economic and demographic actuarial assumptions, which will be used to establish retirement contribution rates effective July 1, 2019:

- Reduced the assumed investment rate of return from 7.25% to 7%
- Reduced the assumed rate of price inflation from 3.00% to 2.75%
- Adopted the use of generational tables, which have identified reduced rates of mortality for members

Additionally, the OCERS Board adopted a three-year phase-in of the impact to the contribution rates associated with the Unfunded Actuarially Accrued Liability. The cumulative effect of these changes will have the impact of increasing contribution rates for members and plan sponsors.

The mortality assumptions used in the total pension liability at December 31, 2018 were based on the Headcount-Weighted RP-2014 Healthy Annuitant Mortality Table as a starting point, projected generationally using the two-dimensional Scale MP-2016, with age adjustments, and adjusted separately for healthy and disabled members. The basis for determining the mortality assumptions used were based on the results of the actuarial experience study for the period January 1, 2014 through December 31, 2016.

Further details of the experience study can be found in the OCERS CAFR, available on their website at [www.ocers.org](http://www.ocers.org).

Long-Term Expected Real Rate of Return: 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 inflation) are developed for each major asset class. These returns 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 and deducting expected investment expenses.

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The target allocation and projected arithmetic real rates of return for each major asset class, after deducting inflation, but before investment expenses, used in the derivation of the long-term expected investment rate of return assumption are summarized in the following table for the calendar year ended December 31, 2018:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return (Arithmetic)
Global Equity	35.00%	6.38%
Core Bonds	13.00%	1.03%
High Yield Bonds	4.00%	3.52%
Bank Loan	2.00%	2.86%
TIPS	4.00%	0.96%
Emerging Markets Debt	4.00%	3.78%
Real Estate	10.00%	4.33%
Core Infrastructure	2.00%	5.48%
Natural Resources	10.00%	7.86%
Risk Mitigation	5.00%	4.66%
Mezzanine/Distressed Debts	3.00%	6.53%
Private Equity	8.00%	9.48%
<b>Total</b>	<b>100.00%</b>	

Discount Rate: The discount rate used to measure the total pension liability was 7.00% for the year ended December 31, 2018. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the actuarially determined contribution rates. For this purpose, only employer contributions that are intended to fund benefits for current plan members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs for future plan members and their beneficiaries, as well as projected contributions from future plan members, are not included. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments for current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability as of December 31, 2018.

Sensitivity of the Proportionate Share of Net Pension Liability to Changes in the Discount Rate: The following table represents OCSD's proportionate share of the net pension liability calculated using the discount rate of 7.00%, as well as what OCSD's proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower (6.00%) or 1 percentage point higher (8.00%) than the current rate:

Net Pension Liability	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
December 31, 2018	\$ 131,317,068	\$ 29,029,145	\$ (54,119,840)

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Pension Plan Fiduciary Net Position: Detailed information about OCERS' fiduciary net position is available in a separately issued OCERS comprehensive annual financial report. That report may be obtained from OCERS at 2223 Wellington Avenue, Santa Ana, California 92708 or at their web site ([www.ocers.org](http://www.ocers.org)).

**B. Additional Retiree Benefit Account (ARBA)**

Plan Description: The OCSD ARBA plan is a single-employer defined benefit plan which was administered by OCERS until February 29, 2008, when OCSD began direct administration. This benefit was established by the OCSD Board of Directors on October 25, 1992. It provides a monthly payment to retirees towards the premium costs of health insurance for the retiree and eligible dependents. The retiree is not required to use this amount for health insurance premium or to remain on the OCSD medical plan. The plan is currently paying benefits to 357 retirees. The ARBA plan is not subject to the reporting requirements of GASB 68 and 71 because a trust has not been set up for the plan. However, GASB 73 has been implemented for the ARBA plan in the fiscal year ended June 30, 2016. The plan is a funded on a pay-as-you-go plan from general funds and is administered by OCSD. Stand-alone financial statements are not issued for the plan.

Benefits Provided: Employees who retire receive \$10 per month for every year of service up to a maximum of 25 years, or \$250 per month. This amount is independent of salary and is fixed at retirement. Because OCSD cannot ensure the use of the benefit for payment of eligible health insurance expenses, the benefit is taxable to the retiree. Survivor benefits are provided in the event that a retiree pre-deceases his/her spouse. For retirees hired prior to July 1, 1988, OCSD provides health insurance coverage for 2½ months per year of service (see Note 6 – Other Postemployment Benefits). ARBA benefits begin immediately after this benefit ends. For those hired on or after July 1, 1988, ARBA benefits begin immediately upon retirement and continue for life. Employees hired into the OCEA bargaining group after August 1, 2011 are ineligible for this benefit.

Benefits are determined by hire date, bargaining unit and years of service as follows:

Hire date	All: Prior to 7/1/88	All: After 7/1/88 OCEA*: Before 8/1/11
Benefit amount per year of service for normal retirement age	\$10 per month x years of service up to a maximum of 25 years	\$10 per month x years of service up to a maximum of 25 years
Service requirement eligibility	Age 50 or over with 10 or more years Any age with 30 or more years Age 70 or over, any years	Age 50 or over with 10 or more years Any age with 30 or more years Age 70 or over, any years
Benefit payments	Monthly for life	Monthly for life
Benefit schedule	Immediately after retiree health insurance coverage ends	Immediately upon retirement

\* OCEA: Administrative, Clerical, Engineering, and Technical Services employee groups, bargaining unit OCEA.

No cost of living adjustment is provided to benefit recipients.

**ORANGE COUNTY SANITATION DISTRICT**  
Notes to Basic Financial Statements  
For the Year Ended June 30, 2019

At June 30, 2019, the following employees were covered by the benefit terms:

Inactive employees or beneficiaries currently receiving benefits	357
Inactive employees entitled to but not yet receiving benefits	44
Active employees	564
Total	965

Contributions: There are no employee contributions for this plan; OCSD covers 100% of the cost. OCSD utilizes a pay-as-you-go method for funding the plan. Contributions to the plan from OCSD were \$816,450 for the year ended June 30, 2019.

Pension Liabilities: As of June 30, 2019, OCSD reported total pension liability of \$21,577,464 for its ARBA plan. The total pension liability was determined by an actuarial valuation as of July 1, 2017. OCSD funds benefits on a “pay as you go” basis and elected not to pre-fund its pension obligation. As a result, there are no plan assets and the total pension liability is equal to the net pension liability. Standard actuarial update procedures were used to project/discount from July 1, 2017 to the measurement date of June 30, 2019.

The actuarial valuation performed as of July 1, 2017, used the entry age, level percent of pay cost method. This method represents the present value of all benefits accrued through the valuation date assuming that each employee’s liability is expensed from hire date until retirement date as a level percentage of pay.

The following table shows the changes in the total pension liability:

	Total Pension Liability Increase (Decrease)
Beginning balance at July 1, 2018	\$ 20,831,172
Changes in the year:	
Service cost	570,409
Interest on total pension liability	663,852
Changes of benefit terms	-
Difference between expected and actual experience	-
Changes of assumptions	328,481
Benefit payments (1)	(816,450)
Net changes	746,292
Ending balance at June 30, 2019	\$ 21,577,464

(1) As part of the July 1, 2017 actuarial valuation report, Demsey, Filliger & Associates prepared a projection of the expected annual cost to the District to pay ARBA benefits.

**ORANGE COUNTY SANITATION DISTRICT**  
Notes to Basic Financial Statements  
For the Year Ended June 30, 2019

Pension Expense and Deferred Outflows/Inflows of Resources Related to Pension: For the year ended June 30, 2019, OCSD recognized pension expense of \$1,695,688 for its ARBA plan. At June 30, 2019 OCSD reported its share of deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	\$ 1,316,766	\$ -
Changes of assumptions (1)	1,014,536	-
Net difference between projected and actual investment earnings on pension plan investments	-	-
Employer contributions over actuary projections	-	-
<b>Total</b>	<b>\$ 2,331,302</b>	<b>\$ -</b>

(1) The monetary effects of changes in actuarial assumptions and method totals \$1,014,536. These changes include passage of time, a change in the discount rate from 3.25% to 3.13%, change in actuarial system, census and other losses.

Amounts reported as deferred outflows of resources related to ARBA pensions will be recognized in pension expense as follows:

Year ended June 30	Amount
2020	\$ 461,427
2021	461,427
2022	461,427
2023	461,427
2024	346,923
2025	138,671
<b>Total</b>	<b>\$ 2,331,302</b>

Actuarial Assumptions and Methods: The total pension liability in the July 1, 2017 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Investment rate of return	3.25% per annum
Discount rate	3.25% per annum as of July 1, 2017 (valuation date) 3.13% per annum as of June 30, 2019 (measurement date)
Inflation rate	3.00% per annum
Projected salary increases	3.00% per annum (for service cost only; benefits not pay-related)

The mortality assumptions used in the total pension liability at July 1, 2017 were based on the RP-2014 Employee Mortality and Health Annuitant Mortality Tables for Males or Females, as appropriate, without projection.

**ORANGE COUNTY SANITATION DISTRICT**  
Notes to Basic Financial Statements  
For the Year Ended June 30, 2019

Discount Rate: The discount rate used to measure the total pension liability was 3.25% as of the valuation date, July 1, 2017, and 3.13% as of the measurement date, June 30, 2019. Because there are no assets held in a trust that meets GASB 68 or 71, the discount rate is based on the 20-year, tax exempt general obligation municipal bonds with an average rating of AA or higher.

Sensitivity of the Total Pension Liability to Changes in the Discount Rate: The following table represents the total pension liability calculated using the discount rate of 3.13% as of the measurement date, as well as what total pension liability would be if it were calculated using a discount rate that is 1 percentage point lower (2.13%) or 1 percentage point higher (4.13%) than the current rate:

Total Pension Liability	1% Decrease (2.13%)	Current Discount Rate (3.13%)	1% Increase (4.13%)
June 30, 2019	\$ 24,631,326	\$ 21,577,464	\$ 19,061,942

(6) Other Postemployment Benefits (OPEB)

Plan Description: The post-employment medical benefits plan is a single-employer defined benefit plan administered by OCSD. This plan was established and may be modified only by action of the OCSD Board of Directors. Stand-alone financial statements are not issued.

Benefits Provided: OCSD offers medical insurance to active and retired employees, as well as their qualified dependents. All retirees may choose coverage in an OCSD medical plan, with retirees paying the full premium. However, for employees hired prior to July 1, 1988, medical benefits begin immediately at retirement with OCSD paying 2.5 months of premium for each year of continuous service toward the cost of coverage under OCSD medical plans. At the termination of this period the retiree may elect to continue coverage at his/her own expense. For the fiscal year ended June 30, 2019, premiums ranged between \$225 and \$4,067 per month, depending on the plan and number of dependents covered.

At June 30, 2019, the following employees were covered by the benefit terms:

Inactive employees or beneficiaries currently receiving benefits (includes 105 paying premiums and 44 with premiums paid by OCSD)	149
Inactive employees entitled to but not yet receiving benefits	0
Active employees (includes 5 eligible for premiums paid by OCSD)	605
Total	<u>754</u>

Contributions: There are no employee contributions to this plan; OCSD covers 100% of the cost for qualifying employees as stated above. Retirees opting to remain with the plan after employment pay 100% of the premium cost, except for those for whom OCSD pays for a period (see above). OCSD utilizes a pay-as-you-go method for funding the plan. Contributions to the plan from OCSD were \$819,779 and the estimated implicit subsidy was \$446,944, resulting in total payments of \$1,266,723, and retirees contributed \$1,060,261 for the year ended June 30, 2019.

**ORANGE COUNTY SANITATION DISTRICT**  
Notes to Basic Financial Statements  
For the Year Ended June 30, 2019

OPEB Liabilities: As of June 30, 2019, OCSD reported total OPEB liability of \$4,013,291 for its post-employment retiree medical benefits plan. The total OPEB liability was determined by an actuarial valuation as of July 1, 2017. OCSD funds benefits on a “pay as you go” basis and elected not to pre-fund its OPEB obligation. As a result, there are no plan assets and the total OPEB liability is equal to the net OPEB liability. Standard actuarial update procedures were used to project/discount from July 1, 2017 to the measurement date of June 30, 2019.

The actuarial valuation performed as of July 1, 2017 used the entry age, level percent of pay cost method. This method represents the present value of benefits accrued through the valuation date, assuming that each employee’s liability is expensed from hire date until retirement date as a level percentage of pay.

The following table shows the changes in the total OPEB liability:

	Total OPEB Liability Increase (Decrease)
Beginning balance at July 1, 2018	\$ 5,025,395
Changes in the year:	
Service cost	16,489
Interest on total OPEB liability	159,195
Changes of benefit terms	
Changes of assumptions	78,935
Benefit payments (1)	(1,266,723)
Net changes	(1,012,104)
Ending balance at June 30, 2019	\$ 4,013,291

(1) As part of the July 1, 2017 actuarial valuation report, Demsey, Filliger & Associates prepared a projection of the expected annual cost to the District to pay OPEB benefits.

OPEB Expense and Deferred Outflows/Inflows of Resources Related to OPEB: For the year ended June 30, 2019, OCSD recognized OPEB expense of \$254,619 for its post-employment retiree medical benefits plan. At June 30, 2019 OCSD reported \$0 for its share of deferred outflows/inflows of resources related to OPEB.

Actuarial Assumptions and Methods: The total OPEB liability in the July 1, 2017 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Investment rate of return	4.00% per annum
Discount rate	3.13% per annum
Inflation rate	3.00% per annum
Healthcare cost trend rate	6.00% for 2017; 5.00% for 2018 and later years
Projected salary increases	3.00% per annum

**ORANGE COUNTY SANITATION DISTRICT**  
Notes to Basic Financial Statements  
For the Year Ended June 30, 2019

The mortality assumptions used in total OPEB liability at July 1, 2017 were based on the RP-2014 Employee Mortality Table for Males or Females, as appropriate, without projection for pre-retirement mortality rates and RP-2014 Health Annuitant Mortality Table for Males or Females, as appropriate, without projection for post-retirement mortality rates.

Actuarial assumptions used in the July 1, 2017 valuation were based on a review of plan experience during the period July 1, 2015 through June 30, 2017.

Discount Rate: The discount rate used to measure the total OPEB liability was 3.13% as of the valuation date, July 1, 2017, and 3.13% as of the measurement date, June 30, 2019. Because there are no assets held in a trust, for GASB 75 reporting purposes, the discount rate is based on a yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher.

Sensitivity of the Total OPEB Liability to Changes in the Discount Rate: The following table represents the total OPEB liability calculated using the discount rate of 3.13% as of the measurement date, as well as what total OPEB liability would be if it were calculated using a discount rate that is 1 percentage point lower (2.13%) or 1 percentage point higher (4.13%) than the current rate:

Total OPEB Liability	1% Decrease (2.13%)	Current Discount Rate (3.13%)	1% Increase (4.13%)
June 30, 2019	\$ 4,181,167	\$ 4,013,291	\$ 3,854,570

Sensitivity of the Total OPEB Liability to Changes in the Healthcare Cost Trend Rates: The following table represents the total OPEB liability calculated using the healthcare cost trend rate of 6.00% decreasing to 5.00% as of the measurement date, as well as what total OPEB liability would be if it were calculated using a healthcare cost trend rate that is 1 percentage point lower (5.00% decreasing to 4.00%) or 1 percentage point higher (7.00% decreasing to 6.00%) than the current rate:

Total OPEB Liability	1% Decrease (5.00% decreasing to 4.00%)	Current Trend Rate (6.00% decreasing to 5.00%)	1% Increase (7.00% decreasing to 6.00%)
June 30, 2019	\$ 3,767,993	\$ 4,013,291	\$ 4,278,841

**ORANGE COUNTY SANITATION DISTRICT**  
Notes to Basic Financial Statements  
For the Year Ended June 30, 2019

(7) Transactions with Irvine Ranch Water District – Revenue Area No. 14

Formation of Revenue Area No. 14 & Excess Purchase Price Over Book Value of Acquired Assets

On July 1, 1985, Revenue Area No. 14 was formed as an independent special district as a result of a negotiated agreement between OCSD and Irvine Ranch Water District (IRWD). At the time of Revenue Area 14's creation, OCSD consisted of eight independent special districts (see Note 1 – Reporting Entity). The eight existing districts sold a portion of the joint treatment facilities and land to the newly created district and recorded capacity rights revenue at the time of the sale.

In accordance with the negotiated agreement between OCSD and IRWD, IRWD paid OCSD \$34,532,000 for an initial 15,000,000 gallons per day capacity in OCSD's joint treatment facilities (with an ultimate collection capacity of 32,000,000 gallons per day) and for a pro-rata interest in real property (based on flow of 32,000,000 gallons per day). The book value of the assets acquired was determined to be \$14,553,000 as of June 30, 1986; these assets were recorded at book value in Revenue Area 14. The excess of the purchase price over the assets' book value was \$19,979,000 and was recorded as an intangible asset in Revenue Area 14. The excess of the purchase price over the assets' book value was amortized over useful lives of the original assets acquired. As of June 30, 2019, the excess of purchase price over the assets' book value was fully amortized.

Annual Transactions

IRWD entered into a separate agreement with Revenue Area 14 on January 1, 1986 whereby IRWD agreed to fund quarterly payments of Revenue Area 14's proportionate share of OCSD's joint capital outlay revolving fund budget requirements and certain capital improvements during the term of the agreement, for which contributions of \$4,213,751 were recorded as contribution from other government during the fiscal year ended June 30, 2019. IRWD also agreed to fund the annual integration adjustment of Revenue Area 14's equity share in OCSD's Joint Works Treatment Facilities based on the flows discharged to OCSD. Integration contributions of \$19,682,194 to Revenue Area 14 were recognized and reported as reductions to contributions from other government during the fiscal year ended June 30, 2019. These contributions received from or credited to IRWD for their agreed-upon share of capital assets and equity share in OCSD's Joint Works Treatment Facilities are calculated as prescribed in the agreements.

In addition, a separate agreement for transfer of IRWD's wastewater solids residuals to OCSD was entered on April 28, 2010. IRWD agreed to pay OCSD a charge for interim solids handling charge which include annual capital and quarterly operating expense components designed to compensate OCSD for IRWD's share of the cost of operating and maintaining the existing facilities for the treatment of solids. As a result, \$2,866,745 in annual solids capital handling charges were reported as operating revenue in Consolidated Revenue Area, and \$7,115,846 in quarterly solids operating and maintenance charges were reported as operating revenue in Revenue Area No. 14 during the fiscal year ended June 30, 2019.

Any amounts credited to IRWD are not refunded in cash but are held as a credit to satisfy future contributions required of IRWD. Amounts owed from IRWD are invoiced on a quarterly or annual basis. As a result, a balance of \$465,886 was reported in due from other governmental agency as of June 30, 2019.

Annual Cash Reserve Requirement

The cash reserve contribution requirement from IRWD at June 30, 2019; in accordance with Amendment No. 2 to the Agreement between IRWD and OCSD Acquiring Ownership Interests, Assigning Rights, and Establishing Obligations; is \$14.0 million. This cash reserve requirement is recognized as a liability to IRWD.

**ORANGE COUNTY SANITATION DISTRICT**  
Notes to Basic Financial Statements  
For the Year Ended June 30, 2019

(8) Commitments and Contingencies

Pollution Remediation: An Underground Storage Tank (UST) at Plant No. 1 failed the pressure test to ensure its tank integrity. As a result of the test failure, OCSD voluntarily took this UST out of service and tested the immediate surrounding area and determined that both gasoline and diesel were present. During the fiscal year ended June 30, 2017, OCSD completed an analysis of remediation alternatives resulting in a less costly remediation plan for the contaminated soil than the plan developed during the previous fiscal year. The new remediation plan received approval from the Orange County Health Care Agency, and based upon their feedback a final design is now completed. This new remediation plan calls for removal and disposal of approximately 2,200 tons of contaminated soil, and some limited groundwater treatment. This work was issued a construction contract in March 2019 and is anticipated to be completed by January 2020. As of June 30, 2019, actual costs of \$374,112 were incurred. Total remaining costs are estimated not to exceed \$5,000,000, including post-remediation monitoring costs for a five-year period and a project contingency of 50 percent for the remediation effort.

Construction Commitments: OCSD has active construction projects to add additional capacity, improve treatment, or replace/ rehabilitate existing assets. At June 30, 2019, the outstanding commitments with contractors totaled \$143,791,502.

Litigation: Certain claims involving disputed construction costs have arisen in the ordinary course of business. Additionally, OCSD is a defendant in lawsuits. Although the outcome of these matters is not presently determinable, management does not expect that the resolution of these matters will have a material adverse impact on the financial condition of OCSD.

(9) Local Sewer Facilities Transfer

On February 5, 2019, OCSD entered into an agreement to transfer 44,400 linear feet (8.5 miles) of local sewer facilities to the City of Santa Ana. In accordance with this agreement, OCSD made a one-time disbursement of \$23.2 million of local sewer accumulated capital repair and replacement funds to the City of Santa Ana during fiscal year 2018-19. Local sewer capital assets transferred had an approximate book value net of depreciation of approximately \$33,617.

**ORANGE COUNTY SANITATION DISTRICT  
REQUIRED SUPPLEMENTARY INFORMATION**

**ORANGE COUNTY SANITATION DISTRICT**  
 Proportionate Share of the Net Pension Liability (Asset)  
 Orange County Employees Retirement System (OCERS) Pension Plan  
 Last 10 Fiscal Years (1)

	Fiscal Year Ended June 30,				
	2015	2016	2017	2018	2019
OCSD's proportion of the net pension liability (asset)	1.13%	0.74%	(0.20%)	(0.80%)	0.47%
OCSD's proportionate share of the net pension liability (asset)	\$ 57,418,760	\$ 42,439,759	\$ (10,384,508)	\$ (39,571,100)	\$ 29,029,147
OCSD's covered payroll (2)	\$ 58,641,163	\$ 59,789,927	\$ 60,000,017	\$ 62,341,796	\$ 66,475,479
OCSD's proportionate share of the net pension liability (asset) as a percentage of covered payroll	97.92%	70.98%	(17.31%)	(63.47%)	43.67%
OCERS' fiduciary net position as a percentage of the total pension liability	89.61%	92.74%	101.70%	105.96%	95.86%

(1) The amounts presented were determined as of the measurement date December 31. Data for fiscal years ended June 30, 2010 through 2014 is not available in a comparable format.

(2) Covered payroll represents compensation earnable and pensionable compensation for the measurement period ended December 31. Only compensation earnable and pensionable compensation that would possibly go into the determination of retirement benefits are included.

**ORANGE COUNTY SANITATION DISTRICT**  
Schedule of District Contributions  
Orange County Employees Retirement System (OCERS) Pension Plan  
Last 10 Fiscal Years (1)

	Fiscal Year Ended June 30,				
	2015	2016	2017	2018	2019
Contractually required contribution	\$ 17,201,569	\$ 12,222,849	\$ 7,709,734	\$ 7,525,655	\$ 7,769,431
Contributions in relation to the contractually required contribution	<u>(17,201,569)</u>	<u>(12,222,849)</u>	<u>(7,709,734)</u>	<u>(7,525,655)</u>	<u>(7,769,431)</u>
Contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered payroll (2)	\$ 60,025,942	\$ 60,595,474	\$ 62,266,907	\$ 65,390,144	\$ 69,101,109
Contributions as a percentage of covered payroll	28.66%	20.17%	12.38%	11.51%	11.24%

(1) Data for fiscal years ended June 30, 2010 through 2014 is not available in a comparable format.

(2) Covered payroll represents compensation earnable and pensionable compensation for the fiscal year ended June 30. Only compensation earnable and pensionable compensation that would possibly go into the determination of retirement benefits are included.

**ORANGE COUNTY SANITATION DISTRICT**

Total Pension Liability (3)  
 Additional Retiree Benefit Account (ARBA)  
 Last 10 Fiscal Years (1)

	Fiscal Year Ended June 30,				
	2015	2016	2017	2018	2019
Total pension liability	\$ 16,680,614	\$ 18,313,122	\$ 18,467,361	\$ 20,831,172	\$ 21,577,464
Covered-employee payroll (2)	\$ 62,139,375	\$ 62,977,577	\$ 65,120,945	\$ 68,126,103	\$ 71,948,599
Total pension liability as a percentage of covered-employee payroll	26.84%	29.08%	28.36%	30.58%	29.99%

- (1) The amounts presented for each fiscal year were determined as of July 1. Data for fiscal years ended June 30, 2010 through 2014 is not available in a comparable format.
- (2) This plan is not administered through a trust or equivalent arrangement, thus covered-employee payroll is used. Covered-employee payroll represents total payroll of employees that are provided benefits through the pension plan for the fiscal year ended June 30.
- (3) There are no assets in a trust compliant with GASB codification P22.101. OCSD funds benefits on a “pay as you go” basis and elected not to pre-fund its pension obligation. As a result, there are no plan assets and the total pension liability is equal to the net pension liability.

**ORANGE COUNTY SANITATION DISTRICT**  
 Changes in Total Pension Liability (3)  
 Additional Retiree Benefit Account (ARBA)  
 Last 10 Fiscal Years (1)

	Fiscal Year Ended June 30,			
	2016	2017	2018	2019
Beginning balance at July 1	\$ 16,680,614	\$ 18,313,122	\$ 18,467,361	\$ 20,831,172
Changes in the year:				
Service cost	270,223	278,330	553,795	570,409
Interest on total pension liability	626,386	593,711	649,192	663,852
Changes of benefit terms	-	-	-	-
Changes of assumptions	1,230,327	(70,952)	1,889,274	328,481
Benefit payments (2)	(494,428)	(646,850)	(728,450)	(816,450)
Net changes	1,632,508	154,239	2,363,811	746,292
Ending balance at June 30	\$ 18,313,122	\$ 18,467,361	\$ 20,831,172	\$ 21,577,464

- (1) The amounts presented for each fiscal year were determined as of July 1. Data for fiscal years ended June 30, 2010 through 2015 is not available in a comparable format.
- (2) As part of the July 1, 2017 actuarial valuation report, Demsey, Filliger & Associates prepared a projection of the expected annual cost to OCSD to pay ARBA benefits. OCSD elected to use actual costs rather than the projected annual costs to pay ARBA benefits.
- (3) OCSD funds benefits on a “pay as you go” basis and elected not to pre-fund its pension obligation. As a result, there are no plan assets and the total pension liability is equal to the net pension liability.

**ORANGE COUNTY SANITATION DISTRICT**

Total OPEB Liability (3)  
Post-Employment Medical Benefits Plan  
Last 10 Fiscal Years (1)

	Fiscal Year Ended June 30,		
	<u>2017</u>	<u>2018</u>	<u>2019</u>
Total OPEB liability	\$ 6,398,694	\$ 5,025,395	\$ 4,013,291
Covered-employee payroll (2)	\$ 65,120,945	\$ 68,126,103	\$ 71,948,599
Total OPEB liability as a percentage of covered-employee payroll	9.83%	7.38%	5.58%

- (1) The amounts presented for each fiscal year were determined as of July 1. Data for fiscal years ended June 30, 2010 through 2016 is not available in a comparable format.
- (2) This plan is not administered through a trust or equivalent arrangement, thus covered-employee payroll is used. Covered-employee payroll represents total payroll of employees that are provided benefits through the OPEB plan for the fiscal year ended June 30.
- (3) There are no assets in a trust compliant with GASB codification P52.101. OCSD funds benefits on a "pay as you go" basis and elected not to pre-fund its OPEB obligation. As a result, there are no plan assets and the total OPEB liability is equal to the net OPEB liability.

**ORANGE COUNTY SANITATION DISTRICT**  
 Changes in Total OPEB Liability (3)  
 Post-Employment Medical Benefits Plan  
 Last 10 Fiscal Years (1)

	Fiscal Year Ended June 30,	
	2018	2019
Beginning balance at July 1	\$ 6,398,694	\$ 5,025,395
Changes in the year:		
Service cost	18,182	16,489
Interest on total OPEB liability	177,395	159,195
Changes of benefit terms	-	-
Changes of assumptions	(95,279)	78,935
Benefit payments (2)	(1,473,597)	(1,266,723)
Net changes	(1,373,299)	(1,012,104)
Ending balance at June 30	\$ 5,025,395	\$ 4,013,291

- (1) The amounts presented for each fiscal year were determined as of July 1. Data for fiscal years ended June 30, 2010 through 2017 is not available in a comparable format.
- (2) Benefit payments include implicit subsidy associated with benefits paid.
- (3) OCSD funds benefits on a “pay as you go” basis and elected not to pre-fund its OPEB obligation. As a result, there are no plan assets and the total OPEB liability is equal to the net OPEB liability.

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**ORANGE COUNTY SANITATION DISTRICT  
SUPPLEMENTARY INFORMATION**

**ORANGE COUNTY SANITATION DISTRICT**

Combining Area Schedule of Net Position

June 30, 2019

	Revenue Area No. 14	Consolidated Revenue Area	Eliminations	Totals
<b>Current assets:</b>				
Cash and cash equivalents	\$ -	\$ 75,930,213	\$ -	\$ 75,930,213
Investments	-	684,538,124	-	684,538,124
Accounts receivable, net of allowance for uncollectibles \$349,973	-	13,701,223	-	13,701,223
Accrued interest receivable	-	3,801,257	-	3,801,257
Connection fees receivable	-	1,735,064	-	1,735,064
Property tax receivable	-	1,586,671	-	1,586,671
Inventories	-	6,005,074	-	6,005,074
Due from other revenue area	-	465,886	(465,886)	-
Due from other governmental agency	465,886	-	-	465,886
Prepaid expenses	-	1,966,446	-	1,966,446
<b>Total current assets</b>	<b>465,886</b>	<b>789,729,958</b>	<b>(465,886)</b>	<b>789,729,958</b>
<b>Noncurrent assets:</b>				
<b>Restricted:</b>				
Cash and cash equivalents held by fiscal agents	-	28,766	-	28,766
<b>Unrestricted:</b>				
Non-depreciable capital assets	22,266,597	541,532,392	-	563,798,989
Depreciable capital assets, net of accumulated depreciation	90,118,506	2,015,391,411	-	2,105,509,917
Other noncurrent assets, net	-	10,344	-	10,344
<b>Total noncurrent assets</b>	<b>112,385,103</b>	<b>2,556,962,913</b>	<b>-</b>	<b>2,669,348,016</b>
<b>Total assets</b>	<b>112,850,989</b>	<b>3,346,692,871</b>	<b>(465,886)</b>	<b>3,459,077,974</b>
<b>Deferred outflows of resources:</b>				
Deferred losses on defeasances	-	28,888,051	-	28,888,051
Deferred outflows related to pensions	-	93,794,964	-	93,794,964
<b>Total deferred outflows of resources</b>	<b>-</b>	<b>122,683,015</b>	<b>-</b>	<b>122,683,015</b>
<b>Total assets and deferred outflows of resources</b>	<b>112,850,989</b>	<b>3,469,375,886</b>	<b>(465,886)</b>	<b>3,581,760,989</b>
<b>Current liabilities:</b>				
Accounts payable	-	16,909,092	-	16,909,092
Accrued expenses	-	16,630,416	-	16,630,416
Due to other revenue area	465,886	-	(465,886)	-
Retentions payable	-	3,845,922	-	3,845,922
Interest payable	-	18,270,200	-	18,270,200
Current portion of long-term obligations	-	54,326,759	-	54,326,759
<b>Total current liabilities</b>	<b>465,886</b>	<b>109,982,389</b>	<b>(465,886)</b>	<b>109,982,389</b>
<b>Noncurrent liabilities:</b>				
Noncurrent portion of long-term obligations	-	1,011,058,609	-	1,011,058,609
Total OPEB liability	-	4,013,291	-	4,013,291
Net pension liability - OCERS	-	29,029,147	-	29,029,147
Total pension liability - ARBA	-	21,577,464	-	21,577,464
<b>Total noncurrent liabilities</b>	<b>-</b>	<b>1,065,678,511</b>	<b>-</b>	<b>1,065,678,511</b>
<b>Total liabilities</b>	<b>465,886</b>	<b>1,175,660,900</b>	<b>(465,886)</b>	<b>1,175,660,900</b>
<b>Deferred inflows of resources:</b>				
Deferred inflows related to pensions	-	45,597,614	-	45,597,614
<b>Total liabilities and deferred inflows of resources</b>	<b>465,886</b>	<b>1,221,258,514</b>	<b>(465,886)</b>	<b>1,221,258,514</b>
<b>Net position:</b>				
<b>Net investment in capital assets:</b>				
Collection system	14,850,908	506,835,384	-	521,686,292
Treatment and disposal -land	1,930,045	36,096,353	-	38,026,398
Treatment and disposal system	95,604,150	2,013,992,066	-	2,109,596,216
Capital assets related debt	-	(1,021,585,556)	-	(1,021,585,556)
<b>Subtotal</b>	<b>112,385,103</b>	<b>1,535,338,247</b>	<b>-</b>	<b>1,647,723,350</b>
Unrestricted	-	712,779,125	-	712,779,125
<b>Total net position</b>	<b>\$ 112,385,103</b>	<b>\$ 2,248,117,372</b>	<b>\$ -</b>	<b>\$ 2,360,502,475</b>

**ORANGE COUNTY SANITATION DISTRICT**  
Combining Area Schedule of Revenues, Expenses, and Changes in Net Position  
For the Year Ended June 30, 2019

	Revenue Area No. 14	Consolidated Revenue Area	Totals
<b>Operating revenues:</b>			
Service charges	\$ 9,308,233	\$ 307,983,005	\$ 317,291,238
Permit and inspection fees	17,499	1,181,795	1,199,294
Total operating revenues	<u>9,325,732</u>	<u>309,164,800</u>	<u>318,490,532</u>
<b>Operating expenses other than depreciation and amortization:</b>			
Salaries and benefits	2,806,581	82,699,563	85,506,144
Utilities	254,308	7,478,917	7,733,225
Supplies, repairs and maintenance	1,511,365	30,258,304	31,769,669
Contractual services	7,715,970	18,366,273	26,082,243
Feasibility studies	171,966	5,678,495	5,850,461
Other	491,935	9,152,653	9,644,588
Total operating expenses other than depreciation and amortization	<u>12,952,125</u>	<u>153,634,205</u>	<u>166,586,330</u>
Operating income (loss) before depreciation and amortization	(3,626,393)	155,530,595	151,904,202
Depreciation and amortization	<u>3,724,401</u>	<u>98,514,513</u>	<u>102,238,914</u>
Operating income (loss)	<u>(7,350,794)</u>	<u>57,016,082</u>	<u>49,665,288</u>
<b>Non-operating revenues:</b>			
Property taxes	3,027,217	96,506,810	99,534,027
Investment and interest income	437,514	28,664,098	29,101,612
Contributions from other governments	24,017,885	3,782,166	27,800,051
Other	64,292	2,097,970	2,162,262
Total non-operating revenues	<u>27,546,908</u>	<u>131,051,044</u>	<u>158,597,952</u>
<b>Non-operating expenses:</b>			
Interest	-	34,465,835	34,465,835
Local sewer service transfer	-	23,229,000	23,229,000
Other	3,033	389,963	392,996
Loss on disposal of assets	45,743	5,448,227	5,493,970
Total non-operating expenses	<u>48,776</u>	<u>63,533,025</u>	<u>63,581,801</u>
Income before capital contributions	20,147,338	124,534,101	144,681,439
<b>Capital contributions:</b>			
Capital facilities capacity charges	-	21,031,628	21,031,628
Change in net position	20,147,338	145,565,729	165,713,067
Total net position - beginning	<u>92,237,765</u>	<u>2,102,551,643</u>	<u>2,194,789,408</u>
Total net position - ending	<u>\$ 112,385,103</u>	<u>\$ 2,248,117,372</u>	<u>\$ 2,360,502,475</u>

**ORANGE COUNTY SANITATION DISTRICT**

Combining Area Schedule of Cash Flows

For the Year Ended June 30, 2019

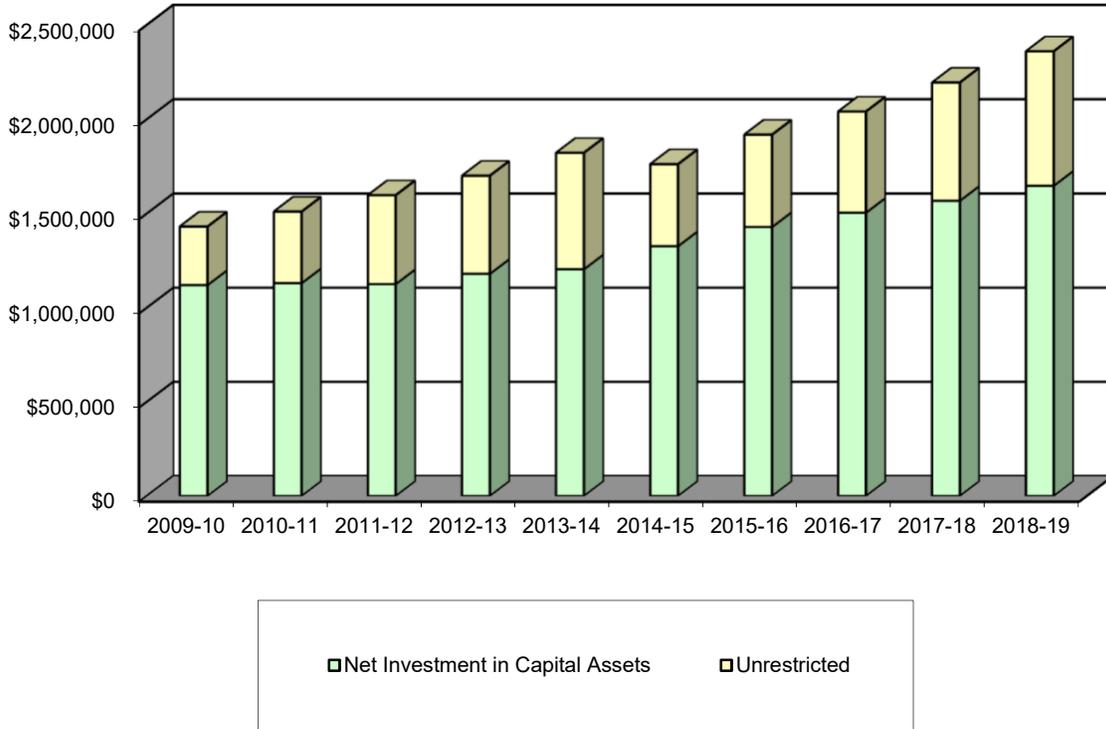
	Revenue Area No. 14	Consolidated Revenue Area	Eliminations	Totals
<b>Cash flows from operating activities:</b>				
Receipts from (refunds to) customers and users	\$ (9,562,055)	\$ 308,306,154	\$ -	\$ 298,744,099
Payments to employees	(2,806,581)	(75,291,515)	-	(78,098,096)
Payments to suppliers	(10,145,544)	(69,388,457)	-	(79,534,001)
Net cash provided by (used in) operating activities	<u>(22,514,180)</u>	<u>163,626,182</u>	<u>-</u>	<u>141,112,002</u>
<b>Cash flows from noncapital financing activities:</b>				
Proceeds from property taxes	3,027,217	96,147,274	-	99,174,491
Receipts (payments) for sewer service transfer and other obligations	39,722	(21,520,993)	-	(21,481,271)
Net cash provided by noncapital financing activities	<u>3,066,939</u>	<u>74,626,281</u>	<u>-</u>	<u>77,693,220</u>
<b>Cash flows from capital and related financing activities:</b>				
Capital facilities capacity charges	-	23,167,640	-	23,167,640
Additions to capital assets	(23,895,944)	(99,758,399)	4,213,750	(119,440,593)
Disposal of capital assets	-	(19,682,194)	19,682,194	-
Interest paid	-	(42,922,157)	-	(42,922,157)
Principal payments on debt obligations	-	(31,655,000)	-	(31,655,000)
Proceeds released to escrow account on defeased debt	-	(109,875,000)	-	(109,875,000)
Proceeds from debt issuance	-	110,302,416	-	110,302,416
Debt issuance costs	-	(402,429)	-	(402,429)
Contributions from other government	24,017,885	3,782,166	(23,895,944)	3,904,107
Net cash provided by (used in) capital and related financing activities	<u>121,941</u>	<u>(167,042,957)</u>	<u>-</u>	<u>(166,921,016)</u>
<b>Cash flows from investing activities:</b>				
Proceeds from the sale of investments	15,085,667	285,778,941	-	300,864,608
Purchases of investments	-	(431,416,584)	-	(431,416,584)
Interest received	437,514	13,256,902	-	13,694,416
Net cash provided by (used in) investing activities	<u>15,523,181</u>	<u>(132,380,741)</u>	<u>-</u>	<u>(116,857,560)</u>
Net decrease in cash and cash equivalents	(3,802,119)	(61,171,235)	-	(64,973,354)
Cash and cash equivalents, beginning of year	3,802,119	137,130,214	-	140,932,333
Cash and cash equivalents, end of year	<u>\$ -</u>	<u>\$ 75,958,979</u>	<u>\$ -</u>	<u>\$ 75,958,979</u>
<b>Reconciliation of operating income (loss) to net cash provided</b>				
<b>by (used in) operating activities:</b>				
Operating income (loss)	\$ (7,350,794)	\$ 57,016,082	\$ -	\$ 49,665,288
<b>Adjustments to reconcile operating income (loss)</b>				
<b>to net cash provided by operating activities:</b>				
Depreciation and amortization	3,724,401	98,514,513	-	102,238,914
Bad debt expense (net recoveries)	-	(106,006)	-	(106,006)
<b>(Increase)/decrease in operating assets:</b>				
Accounts receivable	483	(392,760)	-	(392,277)
Inventories	-	595,820	-	595,820
Due from other governmental agency	(18,888,270)	(465,886)	-	(19,354,156)
Prepaid and other assets	-	(321,034)	-	(321,034)
<b>Increase/(decrease) in operating liabilities:</b>				
Accounts payable	-	(1,441,374)	-	(1,441,374)
Accrued expenses	-	882,405	-	882,405
Net pension/OPEB liabilities	-	6,923,368	-	6,923,368
Compensated absences	-	(3,185)	-	(3,185)
Claims and judgments	-	2,424,239	-	2,424,239
Net cash provided by (used in) operating activities	<u>\$ (22,514,180)</u>	<u>\$ 163,626,182</u>	<u>\$ -</u>	<u>\$ 141,112,002</u>
<b>Noncash activities:</b>				
Unrealized gain on the fair value of investments	\$ -	\$ 14,464,176		\$ 14,464,176
Capital assets acquired through accounts payable	-	5,353,308		5,353,308
Capital facilities capacity charges acquired	-	(2,136,012)		(2,136,012)

**ORANGE COUNTY SANITATION DISTRICT  
STATISTICAL SECTION**

This part of the comprehensive annual financial report of the Orange County Sanitation District (OCSD) presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information says about OCSD's overall financial health.

<u>Contents</u>	<u>Pages</u>
Financial Position and Trends These schedules contain current and trend information to help the reader understand OCSD's financial position and how OCSD's financial performance and well-being have changed over time.	62 - 66
Revenue Capacity These schedules contain information to help the reader assess OCSD's most significant revenue source of sewer service fees.	67 - 69
Debt Capacity These schedules present information to help the reader assess the affordability of OCSD's current levels of outstanding debt and OCSD's ability to issue additional debt in the future. All of OCSD's debt is recorded in a proprietary fund; consequently, many of the schedules which are applicable to governmental funds are not presented.	70 - 72
Operating Information These schedules contain data to help the reader understand how the information in OCSD's financial report relates to the services it provides and the activities it performs.	73 - 76
Demographic and Economic Factors These schedules offer demographic information to help the reader understand the environment within which OCSD's financial activities take place.	77 - 80

**ORANGE COUNTY SANITATION DISTRICT**  
 Net Position by Component  
 (Dollars in Thousands)  
 Last Ten Fiscal Years



<u>Fiscal Year</u>	<u>Net Investment in Capital Assets</u>	<u>Unrestricted</u>	<u>Total Net Position</u>
2009-10	\$1,121,057	\$ 310,016	\$ 1,431,073
2010-11	1,131,063	379,423	1,510,486
2011-12	1,125,966	471,652	1,597,618 <sup>(1)</sup>
2012-13	1,180,298	520,427	1,700,725
2013-14	1,204,706	617,589	1,822,295
2014-15	1,327,384	434,460	1,761,844 <sup>(2)</sup>
2015-16	1,429,269	489,303	1,918,572 <sup>(3)</sup>
2016-17	1,504,898	536,327	2,041,225
2017-18	1,568,118	626,671	2,194,789 <sup>(4)</sup>
2018-19	1,647,723	712,779	2,360,502

<sup>(1)</sup> Beginning net position restated due to implementation of GASB 65.

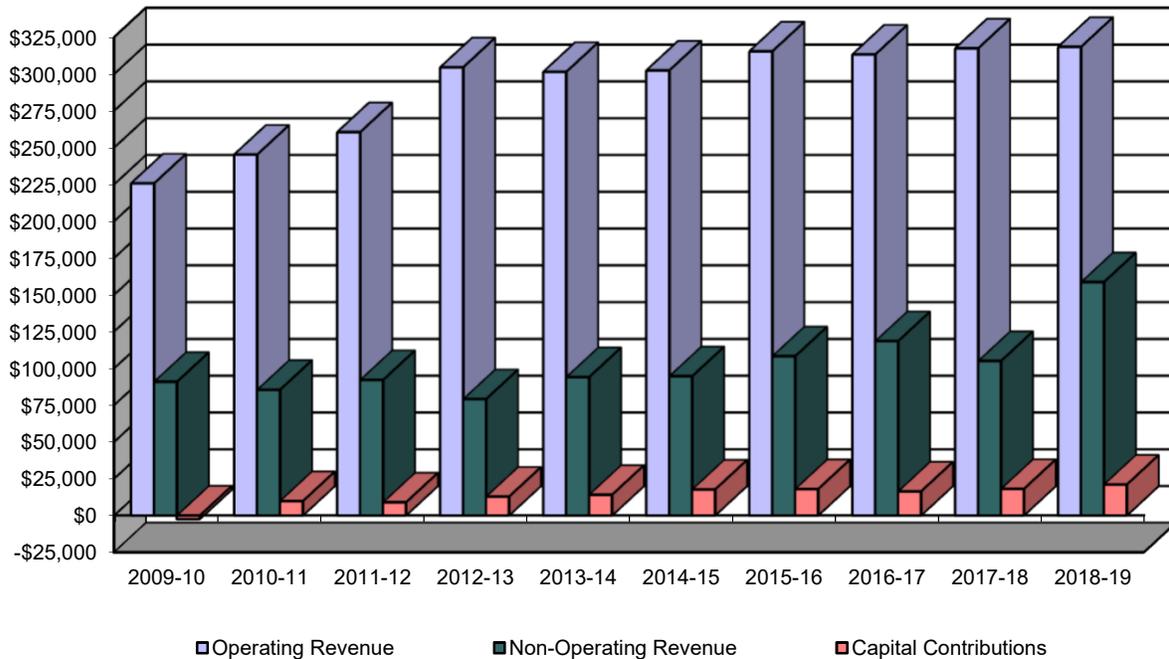
<sup>(2)</sup> Beginning net position restated due to implementation of GASB 68.

<sup>(3)</sup> Beginning net position restated due to implementation of GASB 73.

<sup>(4)</sup> Beginning net position restated due to implementation of GASB 75.

Source: Orange County Sanitation District's Financial Management Division.

**ORANGE COUNTY SANITATION DISTRICT**  
**Revenues and Gross Capital Contributions by Source**  
(Dollars in Thousands)  
Last Ten Fiscal Years

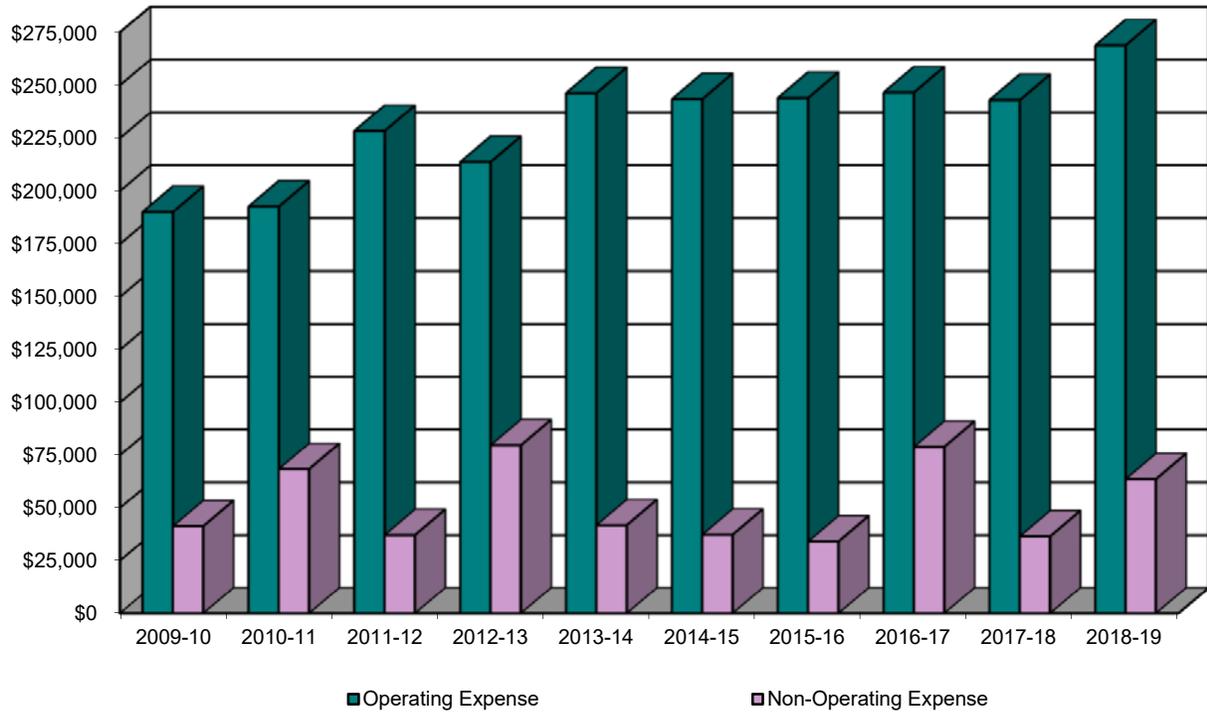


Fiscal Year	Operating Revenue			Non-Operating Revenue			Total Non-Operating	Capital Contributions
	Service Charges	Permit & Inspection Fees	Total Operating	Property Taxes	Interest	Other		
2009-10	\$ 225,059	\$ 629	\$ 225,688	\$ 64,759	\$ 19,166	\$ 6,939	\$ 90,864	(\$2,406)
2010-11	244,465	784	245,249	64,307	10,092	11,015	85,414	9,800
2011-12	259,491	1,030	260,521	67,882	15,747	8,486	92,115	8,936
2012-13	303,400	1,176	304,576	79,240	(3,913)	3,781	79,108	12,797
2013-14	300,611	848	301,459	74,944	6,498	12,595	94,037	14,093
2014-15	301,548	902	302,450	79,835	4,806	9,996	94,637	17,656
2015-16	314,477	951	315,428	84,407	9,183	14,658	108,248	17,974
2016-17	312,237	1,045	313,282	88,284	3,081	27,146	118,511	16,351
2017-18	316,329	1,170	317,499	94,188	3,230	7,611	105,029	18,077
2018-19	317,291	1,199	318,490	99,534	29,102	29,962	158,598	21,032

Source: Orange County Sanitation District's Financial Management Division.

**ORANGE COUNTY SANITATION DISTRICT**

Expenses by Type  
(Dollars in Thousands)  
Last Ten Fiscal Years

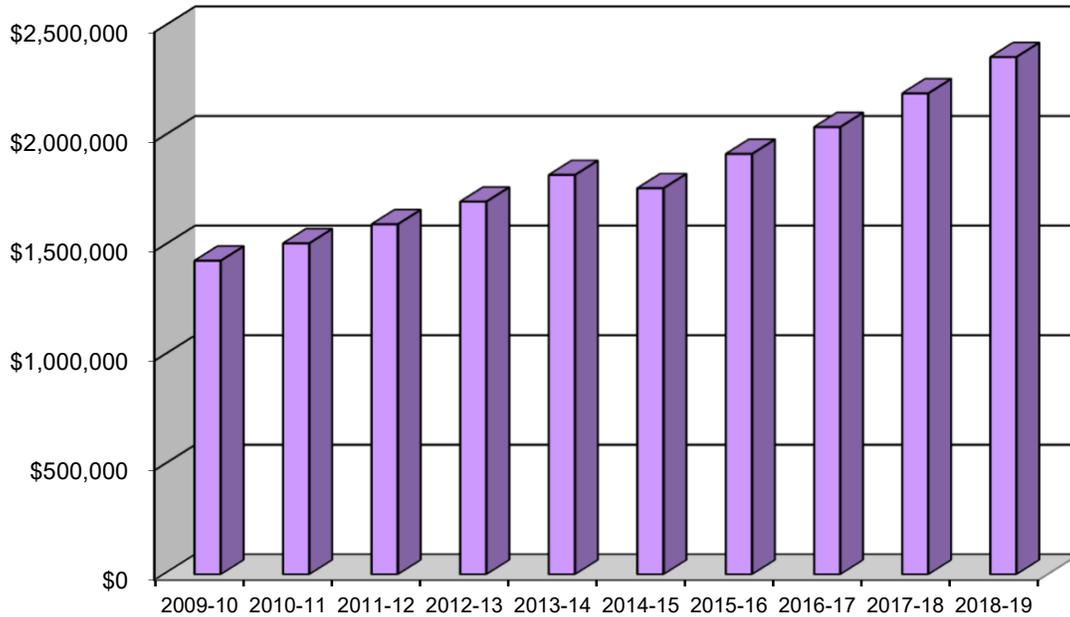


Fiscal Year	Operating Expense				Non - Operating Expense			
	Salaries & Benefits	Utilities	Maint & Other	Depr & Amort	Total Operating	Interest Expense	Other	Total Non-Operating
2009-10	\$ 69,652	\$ 6,934	\$ 61,499	\$ 52,036	\$ 190,121	\$ 27,537	\$ 13,736	\$ 41,273
2010-11	73,112	6,948	63,328	49,288	192,676	29,129	39,245	68,374
2011-12	75,642	7,405	89,272	56,051	228,370	28,700	8,433	37,133
2012-13	76,878	6,403	66,536	63,907	213,724	42,315	37,335	79,650
2013-14	79,179	6,381	60,887	99,805	246,252	40,450	1,317	41,767
2014-15	79,657	7,246	62,323	94,186	243,412	34,112	3,168	37,280
2015-16	75,576	7,246	70,679	90,502	244,003	27,597	6,482	34,079
2016-17	74,291	6,119	69,843	96,320	246,573	25,648	53,270	78,918
2017-18	67,418	7,298	70,840	97,399	242,955	35,011	1,483	36,494
2018-19	85,506	7,733	73,347	102,239	268,825	34,466	29,116	63,582

Source: Orange County Sanitation District's Financial Management Division.

**ORANGE COUNTY SANITATION DISTRICT**

Change in Net Position  
(Dollars in Thousands)  
Last Ten Fiscal Years



Ending Net Position by Fiscal Year

<b>Fiscal Year</b>	<b>Total Revenues</b>	<b>Total Expenses</b>	<b>Change in Net Position</b>	<b>Beginning Net Position</b>	<b>Ending Net Position</b>
2009-10	\$ 314,146	\$ 231,394	\$ 82,752	\$ 1,348,321	\$ 1,431,073
2010-11	340,463	261,050	79,413	1,431,073	1,510,486
2011-12	361,572	265,503	96,069	1,501,549 <sup>(1)</sup>	1,597,618
2012-13	396,481	293,374	103,107	1,597,618	1,700,725
2013-14	409,589	288,019	121,570	1,700,725	1,822,295
2014-15	414,743	280,692	134,051	1,627,793 <sup>(2)</sup>	1,761,844
2015-16	441,650	278,082	163,568	1,755,004 <sup>(3)</sup>	1,918,572
2016-17	448,144	325,491	122,653	1,918,572	2,041,225
2017-18	440,605	279,449	161,156	2,033,633 <sup>(4)</sup>	2,194,789
2018-19	498,120	332,407	165,713	2,194,789	2,360,502

<sup>(1)</sup> Beginning net position restated due to implementation of GASB 65.

<sup>(2)</sup> Beginning net position restated due to implementation of GASB 68.

<sup>(3)</sup> Beginning net position restated due to implementation of GASB 73.

<sup>(4)</sup> Beginning net position restated due to implementation of GASB 75.

Source: Orange County Sanitation District's Financial Management Division.

**ORANGE COUNTY SANITATION DISTRICT**  
Cash and Investment Reserve Balances  
(Dollars in Millions)  
Last Ten Fiscal Years

Fiscal Year	Cash Flow Contingency	Self- Insurance	Capital Improvement Program	Debt Service Requirements	Total
2009-10	\$ 185	\$ 57	\$ 102	\$ 129	\$ 473
2010-11	187	57	176	141	561
2011-12	196	57	186	138	577
2012-13	174	57	234	135	600
2013-14	189	57	296	131	673
2014-15	177	57	194	129	557
2015-16	181	57	190	117	545
2016-17	174	57	173	107	511
2017-18	173	57	350	100	680
2018-19	177	57	429	97	760

**Notes:**

The Board of Directors of the Orange County Sanitation District has established the criteria below to determine the total funds required as listed in the Accumulated Funds and Reserves Policy:

The Cash Flow Contingency Reserve is to fund operations, maintenance, and certificates of participation debt service expenses for the first half of the fiscal year, prior to the receipt of the first installment of the property tax allocation and sewer service user fees.

The Self-Insurance Reserve is to provide requirements for property damage including fire, flood and earthquake, general liability and workers' compensation.

The Capital Improvement Program Reserve is to fund annual increments of the capital improvement program with a target level at one half of the average annual capital improvement program over the next 10 years.

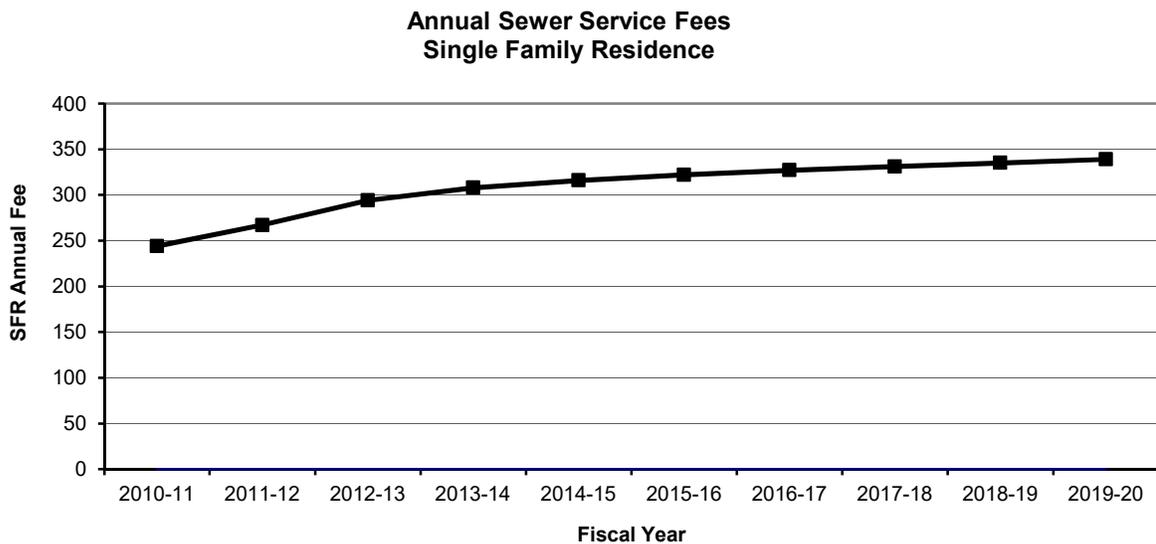
The Debt Service Required Reserves are monies held and controlled by a trustee pursuant to the provisions of certificates of participation issues, and the monies are not available for the general needs of the District.

Source: Orange County Sanitation District's Financial Management Division.

**ORANGE COUNTY SANITATION DISTRICT**  
 Sewer Service Fees  
 Single Family Residence Rate  
 Last Nine Fiscal Years and Next Fiscal Year

Sewer service fees are comprised of three categories: residential customers, commercial customers, and industrial customers. Although the majority of sewer service fee revenues are from residential and commercial customers (see the schedule of Number of Accounts and Revenues by Customer Class), the fee paid by each residential and commercial customer is less than the individual fees paid by industrial customers. The rates for commercial and industrial customers are derived from the base sewer service fee charged for a single-family residence and are based on the type of business and the strength and volume of waste that is discharged into the sewer system. Due to the complexity of the rate structure for commercial and industrial customers and since the rates are derivatives of the single-family residence rate, only the single-family residence rate is presented within the statistical section.

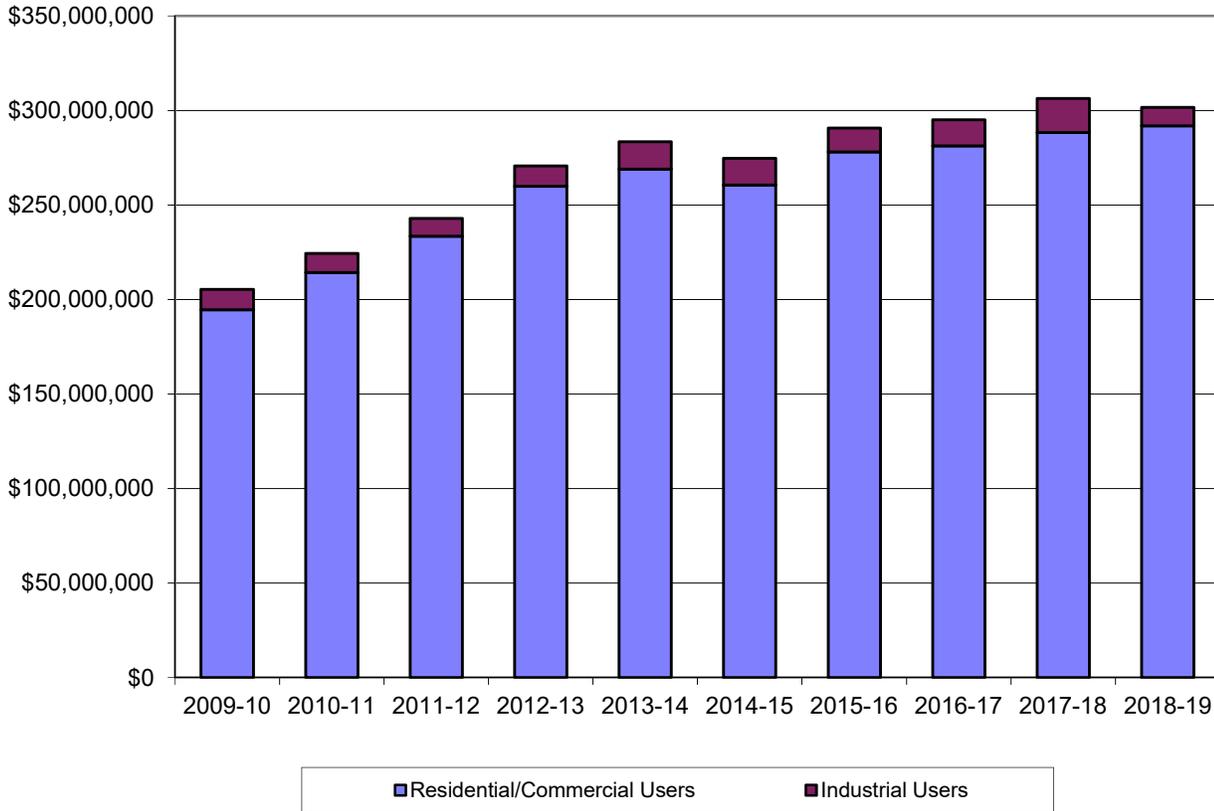
<u>Fiscal Year</u>	<u>Sewer Service Charge</u>
2010-11	\$ 244.00
2011-12	267.00
2012-13	294.00
2013-14	308.00
2014-15	316.00
2015-16	322.00
2016-17	327.00
2017-18	331.00
2018-19	335.00
2019-20	339.00



Source: Orange County Sanitation District's Financial Management Division.

**ORANGE COUNTY SANITATION DISTRICT**  
 Number of Accounts and Revenues by Customer Class  
 (Dollars in Millions)  
 Last Ten Fiscal Years

Fiscal Year	Residential/Commercial			Industrial		
	Number of Equivalent Single-Family Dwellings	Total Sewer Svc. Charge Revenue	Percentage of Sewer Service Charge Revenues	Number of Customer Accounts	Total Sewer Svc. Charge Revenue	Percentage of Sewer Service Charge Revenues
2009-10	880,213	\$ 194.5	95%	487	\$ 10.8	5%
2010-11	878,408	214.3	95%	479	10.1	5%
2011-12	874,008	233.4	96%	516	9.5	4%
2012-13	883,477	259.8	96%	527	10.8	4%
2013-14	873,308	269.0	95%	489	14.4	5%
2014-15	824,465	260.5	95%	467	14.2	5%
2015-16	863,317	278.0	96%	450	12.6	4%
2016-17	859,869	281.2	95%	466	13.8	5%
2017-18	871,338	288.4	94%	473	17.9	6%
2018-19	871,312	291.9	97%	476	9.7	3%



Source: Orange County Sanitation District's Financial Management Division.

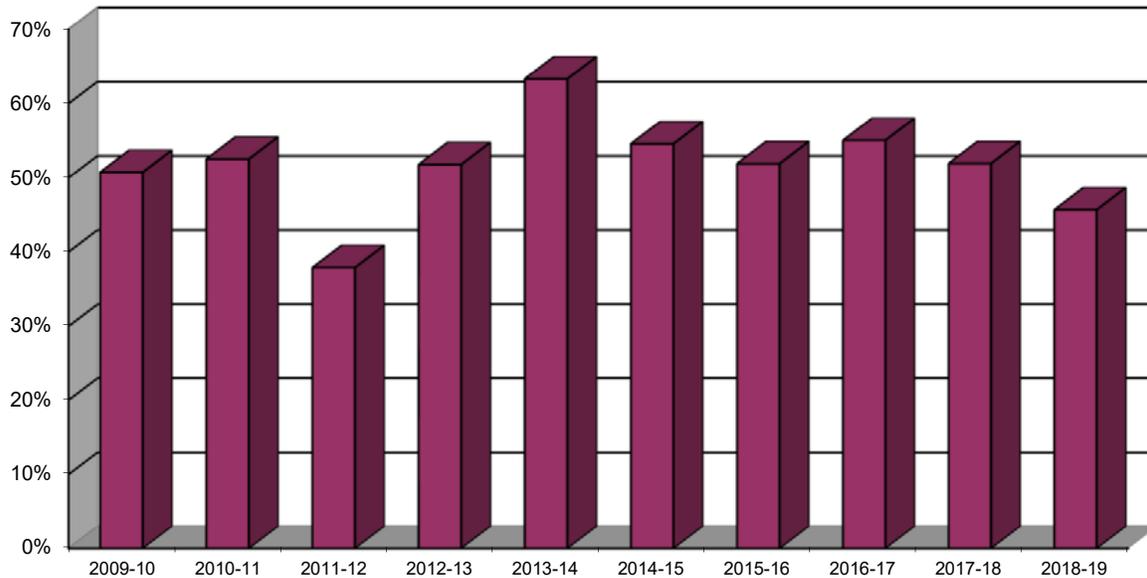
**ORANGE COUNTY SANITATION DISTRICT**  
Principal Sewer Service Customers  
For the Current Fiscal Year and Nine Years Ago

Customer	Fiscal Year Ended 6/30/19			Fiscal Year Ended 6/30/10		
	Industrial Permittee Service Charges	Rank	% to Total Service Charge Revenue	Industrial Permittee Service Charges	Rank	% to Total Service Charge Revenue
House Foods America Corp.	\$ 1,423,273	1	0.45%	\$ 534,052	5	0.24%
Ameripecc Inc.	752,128	2	0.24%	410,545	7	0.18%
Stremicks Heritage Foods, LLC	747,890	3	0.24%	629,473	4	0.28%
Pulmuone Wildwood, Inc.	681,048	4	0.21%	409,974	8	
Kimberly-Clark Worldwide, Inc.	651,129	5	0.21%	1,325,796	1	0.59%
Jazz Semiconductor	578,150	6	0.18%			
Nor-Cal Beverage Co. Inc. (Main)	505,790	7	0.16%			
Dae Shin USA, Inc.	471,401	8	0.15%			
MCP Foods, Inc.	414,959	9	0.13%	1,313,284	2	0.58%
Broncs, Inc. dba WesCoast Textiles	355,395	10	0.11%			
Alstyle Apparel-A&G Inc.				1,019,603	3	0.45%
Pepsi-Cola Bottling Group				419,539	6	0.19%
Morningstar Foods, LLC				360,198	9	0.16%
Angelica Textile Services				321,568	10	0.14%
	<u>\$ 6,581,163</u>		<u>2.08%</u>	<u>\$ 6,744,032</u>		<u>2.81%</u>

Although the majority of sewer service fee revenues are from residential and commercial customers (see the schedule of Number of Accounts and Revenues by Customer Class), the fee paid by each residential and commercial customer is less than the individual fees paid by industrial customers. Consequently, this schedule shows the largest sewer service fee customers.

Source: Orange County Sanitation District's Financial Management Division.

**ORANGE COUNTY SANITATION DISTRICT**  
Ratio of Annual Debt Service to Total Expenses  
(Dollars in Thousands)  
Last Ten Fiscal Years



<u>Fiscal Year</u>	<u>Principal (1)</u>	<u>Interest (4)</u>	<u>Total Debt Service (3)</u>	<u>Total Operating Expenses (2)</u>	<u>Ratio of Debt Service to Total Operating Expenses</u>
2009-10	\$ 24,030	\$ 46,052	\$ 70,082	\$ 138,085	50.75%
2010-11	25,895	49,426	75,321	143,388	52.53
2011-12	14,370	50,975	65,345	172,319	37.92
2012-13	23,965	53,640	77,605	149,817	51.80
2013-14	39,590	53,163	92,753	146,447	63.34
2014-15	27,875	53,586	81,461	149,226	54.59
2015-16	29,405	50,301	79,706	153,501	51.93
2016-17	35,575	47,143	82,718	150,253	55.05
2017-18	32,140	43,466	75,606	145,555	51.94
2018-19	31,655	44,481	76,136	166,586	45.70

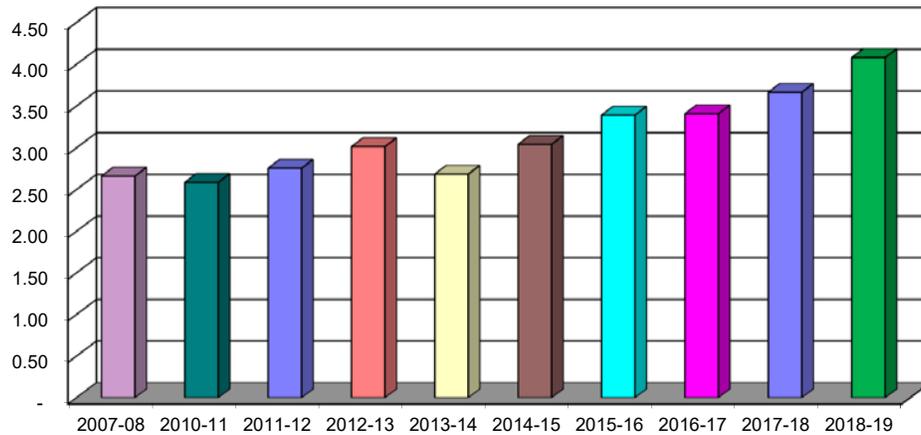
**Notes**

- (1) - Excludes principal reductions due to advanced refunding.
- (2) - Excludes depreciation and amortization expense.
- (3) - Debt consists of certificates of participation, revenue obligations, and anticipation notes.
- (4) - Excludes amortization of premium/discount and deferred amount.

Source: Orange County Sanitation District's Financial Management Division.

**ORANGE COUNTY SANITATION DISTRICT**  
Debt Coverage Ratios  
(Dollars in Millions)  
Last Ten Fiscal Years

The Orange County Sanitation District has no legal debt limits as imposed by State legislation. The District does have contractual covenants within the existing Certificates of Participation indenture agreements which require minimum coverage ratios of 1.25. The coverage ratio is calculated as the ratio of net annual revenues available for debt service payments to total annual debt service requirements.



	Fiscal Year Ending June 30,									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>Operating &amp; Non-operating Revenues:</b>										
Service Charges, Net of Refunds-Regional	\$ 194.5	\$ 214.3	\$ 233.4	\$ 259.8	\$ 269.0	\$ 260.5	\$ 278.0	\$ 281.2	\$ 288.4	\$ 291.9
Service Charges, Net of Refunds-Local (3)	5.6	5.7	5.7	5.8	5.7	5.5	5.7	1.3	(0.1)	-
Industrial Sewer Service Charges	10.8	10.1	9.5	10.8	14.4	14.2	12.6	13.8	17.9	9.4
SAWPA Assessment	6.6	4.9	3.6	2.7	2.4	2.7	3.2	3.3	2.7	2.9
IRWD Assessment	6.7	18.2	14.2	25.6	19.6	26.4	26.6	36.0	9.9	36.3
Ad Valorem Taxes	64.8	64.3	67.9	79.2	74.9	79.8	84.4	88.3	94.2	99.5
Interest Earnings	19.2	10.1	15.7	(3.9)	6.5	4.8	9.2	3.1	3.2	29.1
Other Revenues	8.4	3.0	2.5	3.7	3.0	3.2	4.0	5.0	6.4	8.0
<b>Total Revenues</b>	<b>316.6</b>	<b>330.6</b>	<b>352.5</b>	<b>383.7</b>	<b>395.5</b>	<b>397.1</b>	<b>423.7</b>	<b>432.0</b>	<b>422.6</b>	<b>477.1</b>
Operating Expenses (1)	138.1	143.4	172.3	149.8	146.4	149.2	153.5	150.3	145.6	166.6
<b>Net Revenues</b>	<b>\$ 178.5</b>	<b>\$ 187.2</b>	<b>\$ 180.2</b>	<b>\$ 233.9</b>	<b>\$ 249.1</b>	<b>\$ 247.9</b>	<b>\$ 270.2</b>	<b>\$ 281.7</b>	<b>\$ 277.0</b>	<b>\$ 310.5</b>
<b>Debt Service Requirements</b>										
Principal Payments	24.0	25.9	14.4	24.0	39.6	27.9	29.4	35.6	32.1	31.7
Interest Payments	43.1	46.5	51.0	53.6	53.2	53.6	50.3	47.1	43.5	44.4
<b>Total Debt Service Requirements</b>	<b>\$ 67.1</b>	<b>\$ 72.4</b>	<b>\$ 65.4</b>	<b>\$ 77.6</b>	<b>\$ 92.8</b>	<b>\$ 81.5</b>	<b>\$ 79.7</b>	<b>\$ 82.7</b>	<b>\$ 75.6</b>	<b>\$ 76.1</b>
<b>Coverage Ratios</b>	<b>2.66</b>	<b>2.59</b>	<b>2.76</b>	<b>3.01</b>	<b>2.68</b>	<b>3.04</b>	<b>3.39</b>	<b>3.41</b>	<b>3.66</b>	<b>4.08</b>
Ending Reserves (2)	\$ 344.0	\$ 420.0	\$ 439.0	\$ 465.0	\$ 542.0	\$ 428.0	\$ 428.0	\$ 404.0	\$ 580.0	\$ 663.0

**Notes**

- (1) - Operating expenses exclude depreciation and amortization expenses.
- (2) - Excludes debt service reserves in accordance with the District's reserve policy.
- (3) - Local Sewer transferred to East Orange County Water District in FY2016-17.

Source: Orange County Sanitation District's Financial Management Division.

**ORANGE COUNTY SANITATION DISTRICT**  
Ratios of Outstanding Debt  
Last Ten Fiscal Years

<b>Fiscal Year</b>	<b>(5) Total Outstanding Debt</b>	<b>(3) Median Family Income (1)</b>	<b>Debt as a Percentage of Median Family Income</b>	<b>(4) Population Estimate (2)</b>	<b>Debt per Capita</b>
2009-10	\$ 1,306,255,753	\$ 87,200	0.007%	2,539,990	514.28
2010-11	1,427,792,453	84,200	0.006%	2,563,170	557.04
2011-12	1,376,404,782	85,300	0.006%	2,457,571	560.07
2012-13	1,325,928,512	84,100	0.006%	2,472,122	536.35
2013-14	1,278,998,124	84,900	0.007%	2,491,268	513.39
2014-15	1,241,140,357	85,900	0.007%	2,521,803	492.16
2015-16	1,206,722,347	85,000	0.007%	2,548,745	473.46
2016-17	1,140,679,773	88,000	0.008%	2,578,681	442.35
2017-18	1,095,737,610	92,700	0.008%	2,609,419	419.92
2018-19	1,050,502,373	97,900	0.009%	2,607,092	402.94

**Notes & Data Sources**

**(1)** - Data is for the entire County of Orange.

**(2)** - Data is for the estimated population served by the Orange County Sanitation District.

**(3)** - Data Source: U.S. Department of Housing and Urban Development.

**(4)** - Data Source: Demographic Research Unit, California Department of Finance.

**(5)** - Data Source: Orange County Sanitation District. Debt includes certificates of participation, revenue obligations, and anticipation notes and is presented net of original issuance premiums.

**ORANGE COUNTY SANITATION DISTRICT**  
 Comparison of the Volume of Wastewater Treated  
 With Revenues and Expenses  
 Last Ten Fiscal Years

<b>Fiscal Year</b>	<b>Millions of Gallons of Waste-water Treated Per Day</b>	<b>Collection, Treatment &amp; Disposal Cost per Million Gallons</b>	<b>Total Operating Costs (In Thousands)</b>	<b>Total Non-Operating Costs (In Thousands)</b>	<b>Total Operating Revenues (In Thousands)</b>	<b>Total Non-Operating Revenues (In Thousands)</b>
2009-10	196	\$ 1,588.72	\$ 190,121	\$ 41,273	\$ 225,688	\$ 90,864
2010-11	207	1,816.62	192,676	68,374	245,249	85,414
2011-12	201	1,871.47	228,370	37,133	260,521	92,115
2012-13	200	1,906.01	213,724	79,650	304,576	79,108
2013-14	198	1,936.64	246,252	41,767	301,459	94,037
2014-15	187	2,070.97	243,412	37,280	302,450	94,637
2015-16	183	2,110.43	244,003	34,079	315,428	108,248
2016-17	188	2,054.56	246,573	78,918	313,282	118,511
2017-18	185	2,069.30	242,955	36,494	317,499	105,029
2018-19	191	2,274.73	268,825	63,582	318,490	158,598

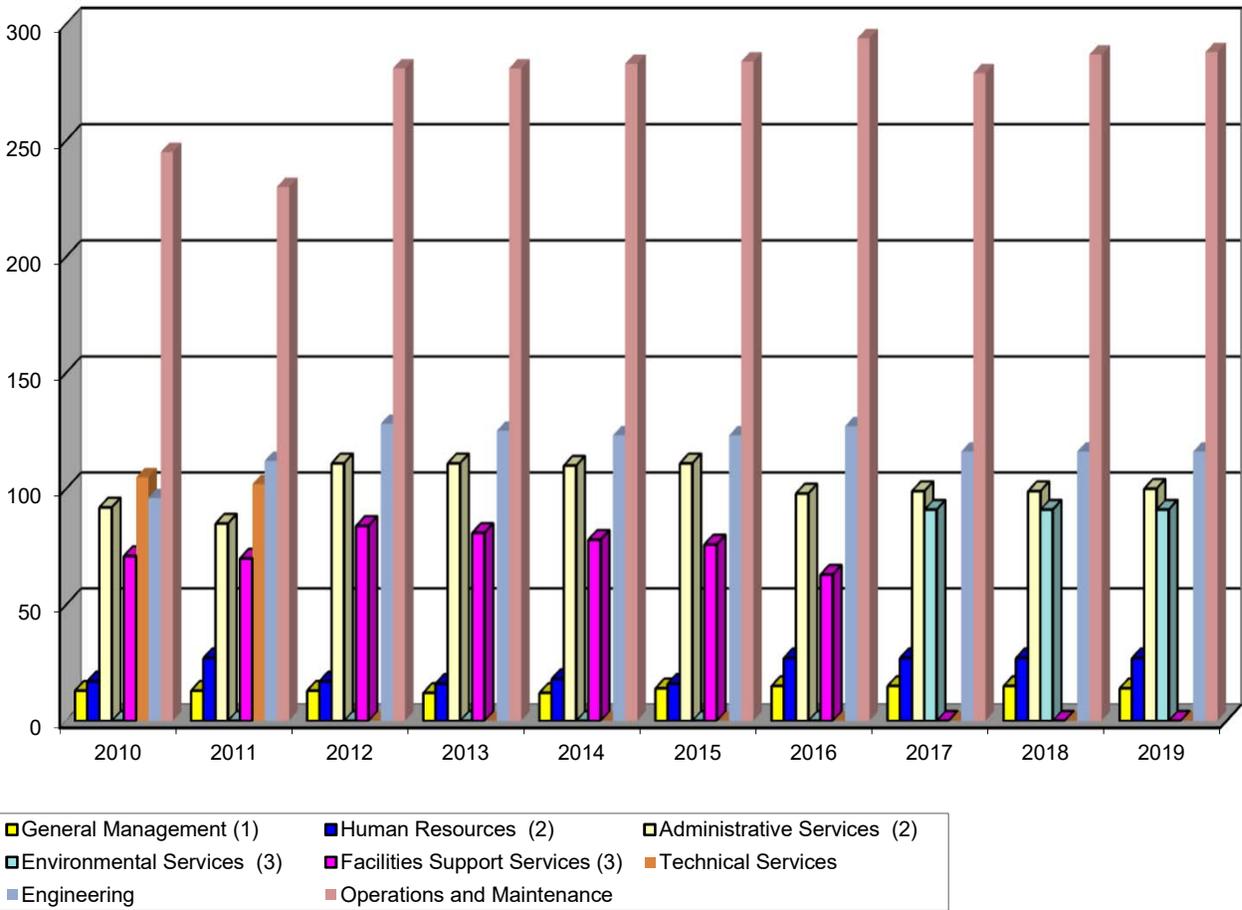
Total expenses in FY 2018-19 increased \$101 million, or 43.7 percent since FY 2009-10, primarily as a result of expansion of the Capital Improvement Program (CIP) and increase in operational services levels with OCSD's decision beginning in FY 2002-03 to maximize existing secondary treatment facilities as OCSD moved from a 50/50 mix of primary and secondary effluent treatment to meeting secondary treatment standards as of December 31, 2012.

Depreciation expense represents 49.7 percent of the increase as a result of the expansion in capital facilities and the financing associated with the expansion. Other non-operating expense represents 15.2 percent of the increase due to the local sewer facilities transfer to City of Santa Ana. Maintenance, chemicals, utilities, and other operating costs represent another 12.5 percent of the increase, primarily due to the increase in the levels of treatment referred to above. In FY 2018-19 personnel expenses increased 26.8 percent over the prior year. This increase is mainly due to the difference between projected and actual investment earnings on OCERS plan investments that have been recognized as pension expense. The full-time equivalent positions authorized increased by 1 in FY 2018-19.

As depicted from the chart above, actual wastewater treatment flows were 196 mgd in FY 2009-10. The last several years of California's record-breaking drought and water conservation efforts have resulted in FY 2018-19 flows of only 191 mgd, a decrease of 5 mgd or 2.56 percent since FY 2009-10.

Source: Orange County Sanitation District.

**ORANGE COUNTY SANITATION DISTRICT**  
 Authorized Full-time Equivalents by Function  
 Last Ten Fiscal Years



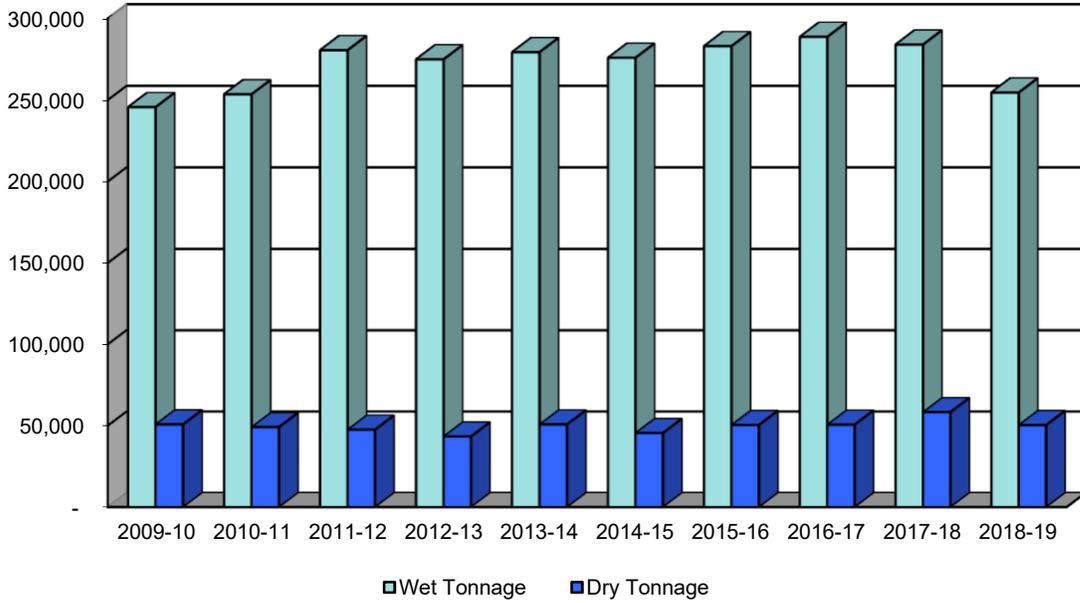
	Fiscal Year Ending June 30,									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
General Management (1)	13	13	13	12	12	14	15	15	15	14
Human Resources (2)	17	27	17	16	18	16	27	27	27	27
Administrative Services (2)	92	85	111	111	110	111	98	99	99	100
Environmental Services (3)	-	-	-	-	-	-	-	91	91	91
Facilities Support Services (3)	71	70	84	81	78	76	63	-	-	-
Technical Services	105	102	-	-	-	-	-	-	-	-
Engineering	96	112	128	125	123	123	127	116	116	116
Operations and Maintenance	245	230	281	281	283	284	294	279	287	288
<b>Total FTE's</b>	<b>639</b>	<b>639</b>	<b>634</b>	<b>626</b>	<b>624</b>	<b>624</b>	<b>624</b>	<b>627</b>	<b>635</b>	<b>636</b>

**Notes**

- (1) - Management Discretion positions used on a temporary basis have been excluded from FTE count.
- (2) - In 2016, Risk Management moved from Administrative Services to Human Resources Department.
- (3) - In 2017, District reorganization created Environmental Services and eliminated Facilities Support Services.

Source: Orange County Sanitation District's Financial Management Division.

**ORANGE COUNTY SANITATION DISTRICT**  
 Biosolids Produced  
 Last Ten Fiscal Years



<u>Fiscal Year</u>	<u>Wet Tonnage</u>	<u>Dry Tonnage</u>
2009-10	245,668	50,799
2010-11	253,557	49,133
2011-12	280,572	47,556
2012-13	274,957	43,365
2013-14	279,362	50,764
2014-15	275,943	45,515
2015-16	283,052	50,439
2016-17	288,771	50,641
2017-18	284,039	58,325
2018-19	254,616	50,421

Source: Orange County Sanitation District's Environmental Compliance Division.

**ORANGE COUNTY SANITATION DISTRICT**

Capital Asset Statistics

Last Ten Fiscal Years

<b>Fiscal Year</b>	<b>Miles of Trunk &amp; Subtrunk Sewers</b>	<b>Number of Pump Stations</b>	<b>Primary Treatment Capacity (1)</b>	<b>Secondary Treatment Capacity (1)</b>
2009-10	579	17	376	212
2010-11	587	17	376	212
2011-12	572	17	376	332
2012-13	572	17	376	332
2013-14	580	17	376	332
2014-15	580	17	376	332
2015-16	570	17	376	332
2016-17	396 (2)	17	376	332
2017-18	396	17	376	332
2018-19	389	17	376	332

**Notes**

(1) - Capacity is presented as million gallons treated per day.

(2) - In FY 2016-17, local sewers were transferred to East Orange County Water District.

Source: Orange County Sanitation District

**ORANGE COUNTY SANITATION DISTRICT**  
Demographic Statistics  
Covering The Entire County of Orange (1)  
Last Ten Fiscal Years

Fiscal Year	(2) Population Estimates	Total Personal Income (in thousands)	Per Capita Personal Income	(5) Median Family Income	(6) Public School Enrollment	(7) Unemployment Rate
2009-10	3,166,000	\$ 147,138,449 (3)	\$ 46,475	\$ 87,200	502,239	9.5%
2010-11	3,030,000	154,131,535 (3)	50,868	84,200	502,903	9.2%
2011-12	3,056,000	169,584,000 (4)	55,492	85,300	502,195	7.9%
2012-13	3,082,000	166,370,000 (4)	53,981	84,100	501,801	6.1%
2013-14	3,114,000	179,141,000 (4)	57,528	84,900	500,487	5.2%
2014-15	3,148,000	193,359,000 (4)	61,423	85,900	497,116	4.3%
2015-16	3,183,000	199,442,000 (4)	62,658	85,000	493,030	4.4%
2016-17	3,194,000	208,653,000 (4)	65,327	88,000	490,430	3.8%
2017-18	3,221,000	220,368,000 (4)	68,416	92,700	485,835	3.3%
2018-19	3,222,000	230,180,000 (4),(8)	71,440	97,900	478,823	3.0%

**Notes and Data Sources**

(1) - The Orange County Sanitation District services 479 square miles or 60% of the total 799 square miles that make up the boundaries of the County of Orange.

(2) - Data Source: Demographic Research Unit, California Department of Finance.

(3) - Data Source: Bureau of Economic Analysis, U.S. Department of Commerce.

(4) - Data Source: A. Gary Anderson Center for Economic Research, Chapman University.

(5) - Data Source: U.S. Department of Housing and Urban Development.

(6) - Data Source: California Department of Education, Educational Demographics Unit.

(7) - Data Source: State of California, Employment Development Department as of June 30 of each fiscal year.

(8) - Forecasted number.

**ORANGE COUNTY SANITATION DISTRICT**

Estimated Population Served by the  
Orange County Sanitation District  
June 30, 2019

	<b>Population as of <u>January 1, 2019</u></b>
Anaheim	359,339
Brea	45,606
Buena Park	83,384
Costa Mesa	115,830
Cypress	49,833
Fountain Valley	56,652
Fullerton	142,824
Garden Grove	175,155
Huntington Beach	203,761
Irvine	280,202
La Habra	63,542
La Palma	15,820
Los Alamitos	11,721
Newport Beach	87,180
Orange	141,691
Placentia	52,333
Santa Ana	337,716
Seal Beach	25,073
Stanton	39,307
Tustin	81,369
Villa Park	5,933
Westminster	92,610
Yorba Linda	68,706
Subtotal Cities <sup>(1)</sup>	<u>2,535,587</u>
Estimated Population Served in Unincorporated Areas <sup>(2)</sup>	<u>71,505</u>
	<u><u>2,607,092</u></u>

**Data Sources:**

- (1) Demographic Research Unit, State of California Department of Finance
- (2) Center for Demographic Research, California State University, Fullerton.

**ORANGE COUNTY SANITATION DISTRICT**  
Principal Orange County Employers (1)  
For the Current Fiscal Year and Nine Years Ago

<u>Employers</u>	<u>Fiscal Year Ended 6/30/19</u>			<u>Fiscal Year Ended 6/30/010</u>		
	<u>Number of Employees (2)</u>	<u>Rank</u>	<u>Percentage of Total County Employment (3)</u>	<u>Number of Employees (2)</u>	<u>Rank</u>	<u>Percentage of Total County Employment (4)</u>
Walt Disney Co.	30,000	1	1.92%	19,800	1	1.36%
University of California, Irvine	23,884	2	1.53%	19,279	2	1.33%
County of Orange	17,271	3	1.10%	17,895	3	1.23%
St. Joseph Health	14,000	4	0.89%	10,929	4	0.75%
Kaiser Permanente	8,178	5	0.52%	5,598	9	0.38%
Albertsons Southern California	7,670	6	0.49%			
Target Corp.	6,300	7	0.40%	6,226	7	0.43%
Wal-Mart Stores Inc.	6,200	8	0.40%			
Hoag Memorial Hospital	6,100	9	0.39%			
Boeing Co.	6,000	10	0.38%	8,477	5	0.58%
Yum! Brands Inc				7,000	6	0.48%
SuperValu, Inc.				5,923	8	0.41%
Memorial Health Services, Inc				5,533	10	0.38%
Total	125,603		8.02%	106,660		7.33%

**Notes & Data Sources**

- (1) - Data is for the entire County of Orange.
- (2) - Data Sources: Orange County Business Journal Book of Lists, County of Orange
- (3) - Data Source: State of California, Employment Development Department.  
- Percentage is calculated by dividing employees by total employment of 1,558,900 as of June 2019.
- (4) - Data Source: State of California, Employment Development Department.  
- Percentage is calculated by dividing employees by total employment of 1,454,700 as of June 2010.

**ORANGE COUNTY SANITATION DISTRICT**

Operating Indicators

June 30, 2019

**District Organization:** The Orange County Sanitation District is one consolidated district made up of two revenue areas which service unincorporated county areas and twenty-three cities and related special districts, as follows:

**Consolidated Revenue Area**

County of Orange (unincorporated areas)

Cities:

Anaheim	Huntington Beach	Santa Ana
Brea	Irvine	Seal Beach
Buena Park	La Habra	Stanton
Costa Mesa	La Palma	Tustin
Cypress	Los Alamitos	Villa Park
Fountain Valley	Newport Beach	Westminster
Fullerton	Orange	Yorba Linda
Garden Grove	Placentia	

Special Districts:

- Costa Mesa Sanitary District
- Midway City Sanitary District
- Yorba Linda Water District

**Revenue Area No. 14**

County of Orange (unincorporated areas)

Cities:

- Irvine
- Orange
- Tustin

Special District:

- Irvine Ranch Water District

<b>Governing Body:</b>	25-member Board of Directors
<b>Authorized Full-Time Equivalent Employees:</b>	636
<b>Operational Date:</b>	July 1, 1954
<b>Authority:</b>	California Health & Safety Code Section 4700 et. seq.
<b>Services:</b>	Wastewater collection, treatment, and disposal
<b>Service Area:</b>	479 square miles
<b>Population Served:</b>	2.6 million
<b>Total Miles of Sewers (including force mains):</b>	389 miles
<b>Number of Pumping Stations:</b>	17

**Wastewater System Treatment Capacities (Million Gallons per Day)**

	<u>Actual Flows FY18-19</u>	<u>Existing Primary Treatment Capacity</u>	<u>Existing Secondary Treatment Capacity</u>
Plant 1	120	208	182
Plant 2	<u>71</u>	<u>168</u>	<u>150</u>
Total	<u>191</u>	<u>376</u>	<u>332</u>

Source: Orange County Sanitation District's Financial Management Division.

**ORANGE COUNTY SANITATION DISTRICT  
OTHER DATA & TRENDS**

Information within this section consists of other data and trends including additional annual disclosures as required by the Sanitation District's debt covenants beyond what is allowed to be reported in the Statistical Section.

## ORANGE COUNTY SANITATION DISTRICT

### Cash and Investment Portfolio

As of June 30, 2019

	Shares Par	Cost Base	Market Value Base	% of Total	Net Unrealized Gain/(Loss) Base
INVESTMENT PORTFOLIO:					
CASH & CASH EQUIVALENTS (U.S. DOLLAR):					
COMMERCIAL PAPER	\$ 14,415,000	\$ 14,358,541	\$ 14,369,161	1.99%	\$ 10,620
FIRST AMERICAN SHORT TERM FDS	21,158,772	21,158,772	21,158,772	2.93%	-
US AGENCY	2,850,000	2,835,718	2,836,491	0.39%	773
SUBTOTAL - CASH & CASH EQUIVALENTS	<u>38,423,772</u>	<u>38,353,031</u>	<u>38,364,424</u>	<u>5.31%</u>	<u>11,393</u>
FIXED INCOME SECURITIES (U.S. DOLLAR):					
COMMERCIAL PAPER	4,000,000	3,919,749	3,966,960	0.55%	47,211
CONSUMER DISCRETIONARY	8,822,000	8,861,208	8,959,006	1.24%	97,798
CONSUMER STAPLES	3,880,000	3,878,991	4,077,996	0.56%	199,005
ENERGY	9,000,000	8,942,542	9,143,090	1.26%	200,548
FINANCE	88,504,000	88,501,683	89,521,399	12.38%	1,019,716
HEALTH CARE	2,000,000	1,948,640	2,048,160	0.28%	99,520
INDUSTRIAL	10,493,000	10,504,744	10,613,239	1.47%	108,495
INFORMATION TECHNOLOGY	28,715,000	28,626,585	29,054,181	4.02%	427,596
INVESTMENT GRADE-MUNI REVENUE	4,240,000	4,307,634	4,330,845	0.60%	23,211
MTG RELATED SECURITY	46,930,801	46,861,535	47,326,912	6.55%	465,377
SHORT TERM FUNDS	7,300,000	7,303,984	7,304,306	1.01%	322
SUPRANATIONAL	33,005,000	32,742,600	33,041,747	4.57%	299,147
TELECOMMUNICATION SERVICES	1,130,000	1,114,813	1,129,514	0.16%	14,701
U. S. GOVERNMENT	285,487,829	282,973,692	286,206,371	39.59%	3,232,679
U.S. GOVERNMENT TIPS	11,190,920	11,046,200	11,171,448	1.55%	125,248
US AGENCY	133,975,000	134,565,949	136,642,950	18.90%	2,077,001
SUBTOTAL - FIXED INCOME SECURITIES	<u>678,673,550</u>	<u>676,100,549</u>	<u>684,538,124</u>	<u>94.69%</u>	<u>8,437,575</u>
TOTAL INVESTMENT PORTFOLIO	<u>\$ 717,097,322</u>	<u>714,453,580</u>	<u>722,902,548</u>	<u>100.00%</u>	<u>\$ 8,448,968</u>
DEMAND DEPOSITS AND CASH ON HAND		2,346,869	2,346,869		
MONIES HELD WITH FISCAL AGENTS		28,766	28,766		
MONIES WITH THE LOCAL AGENCY INVESTMENT FUND		35,158,735	35,218,920		
TOTAL CASH AND INVESTMENTS		<u>\$ 751,987,950</u>	<u>\$ 760,497,103</u>		

Source: US Bank and Orange County Sanitation District's Financial Management Division.

**ORANGE COUNTY SANITATION DISTRICT**  
Property Tax Rates - Direct and Overlapping Governments  
Last Ten Fiscal Years

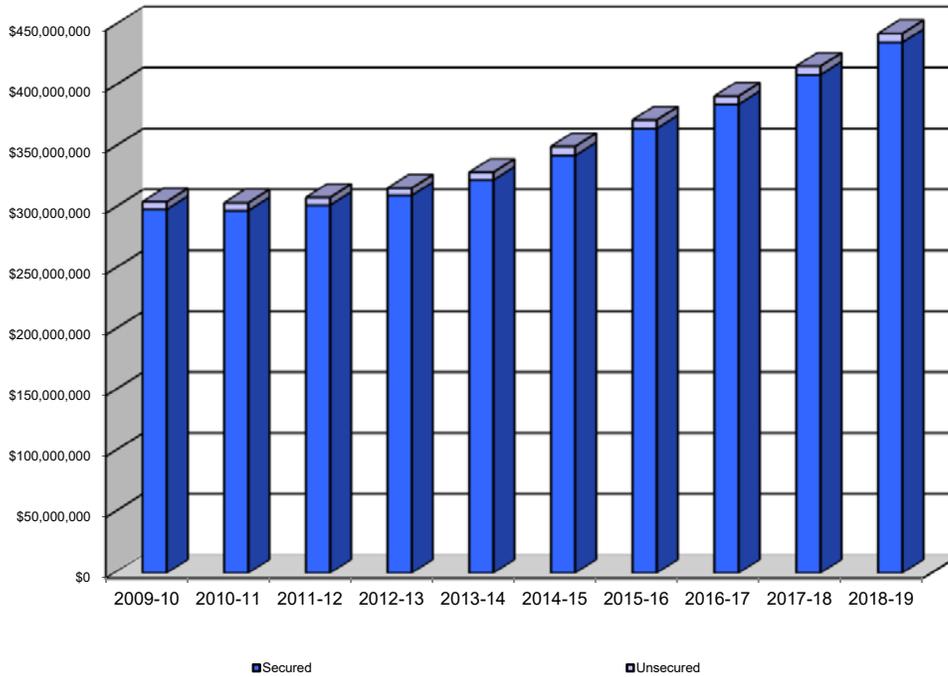
<b>Fiscal Year</b>	<b>Tax Rate</b>			<b>OCSD's Average Share of Basic Levy</b>
	<b>Basic Levy</b>	<b>OCSD 1958 General Obligation Bonds</b>	<b>Total Tax Rate</b>	
2009-10	1.00%	0.00%	1.00%	1.63%
2010-11	1.00%	0.00%	1.00%	1.64%
2011-12	1.00%	0.00%	1.00%	1.64%
2012-13	1.00%	0.00%	1.00%	1.64%
2013-14	1.00%	0.00%	1.00%	1.65%
2014-15	1.00%	0.00%	1.00%	1.63%
2015-16	1.00%	0.00%	1.00%	1.62%
2016-17	1.00%	0.00%	1.00%	1.61%
2017-18	1.00%	0.00%	1.00%	1.59%
2018-19	1.00%	0.00%	1.00%	1.59%

**Notes**

In 1978, California voters passed Proposition 13 which set the property tax rate at a 1.00% fixed amount of assessed value. This 1.00% is shared by all taxing agencies within which the subject property resides. In addition to the 1.00% fixed amount, property owners were charged taxes as a percentage of assessed property values for the payment of OCSD general obligation bonds (which were paid in full in fiscal year 1998-99).

Source: County of Orange Auditor-Controller's Office.

**ORANGE COUNTY SANITATION DISTRICT**  
 Assessed and Estimated Actual Value of Taxable Property  
 (Dollars In Thousands)  
 Last Ten Fiscal Years

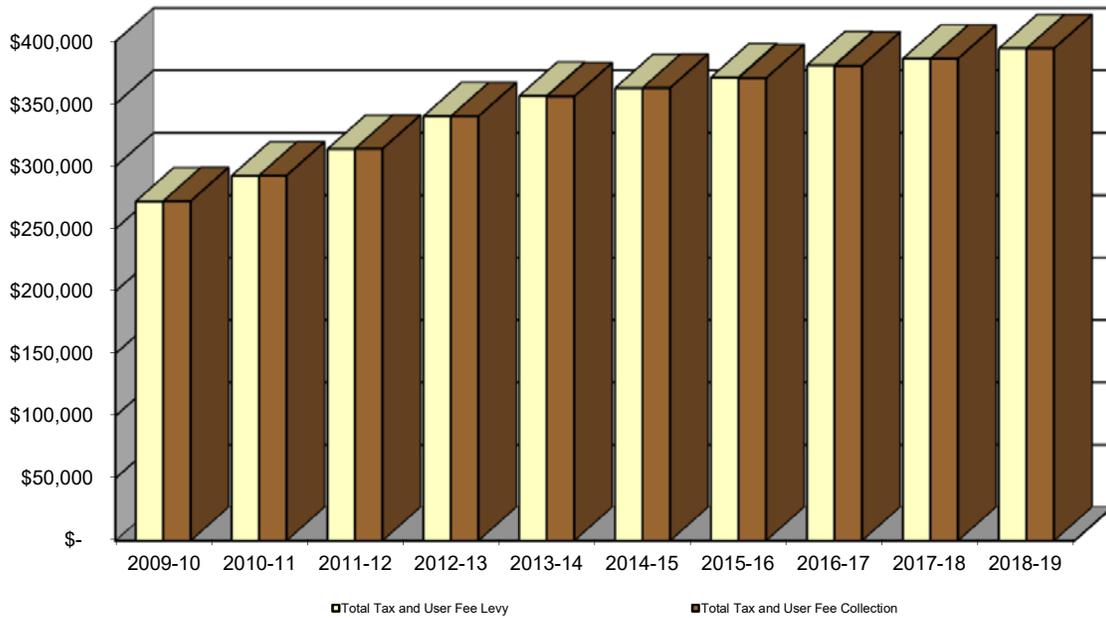


<b>Fiscal Year</b>	<b>Secured</b>	<b>Unsecured</b>	<b>Total</b>	<b>Percent Change in Assessed Value</b>
2009-10	\$ 299,038,654	\$ 6,116,530	\$ 305,155,184	5.08%
2010-11	298,099,034	6,238,834	304,337,868	-0.27%
2011-12	302,526,970	6,163,979	308,690,949	1.43%
2012-13	310,451,986	5,901,040	316,353,026	2.48%
2013-14	323,064,994	6,220,505	329,285,499	4.09%
2014-15	343,102,030	7,378,643	350,480,673	6.44%
2015-16	365,267,850	6,936,768	372,204,618	6.20%
2016-17	385,137,024	6,642,312	391,779,336	5.26%
2017-18	409,310,248	6,990,609	416,300,857	6.26%
2018-19	435,911,818	7,213,037	443,124,855	6.44%

In 1978, the voters of the State of California passed Proposition 13 which limited property taxes to a total maximum rate of 1% based upon the assessed value of the property being taxed. Each year, the assessed value of property may be increased by an inflation factor which is limited to a maximum increase of 2%. With a few exceptions, property is only reassessed at the time that it is sold to a new owner. At that point, the new assessed value is reassessed at the purchase price of the property sold. The assessed valuation data shown above represents the only data currently available with respect to the actual market value of taxable property and is subject to the limitations described above. Consequently, the assessed and estimated values are the same.

Source: Orange County Auditor - Controller's Office.

**ORANGE COUNTY SANITATION DISTRICT**  
Property Tax and User Fee Levies and Collections  
(Dollars in Thousands)  
Last Ten Fiscal Years



Fiscal Year	Total Tax and User Fee Levy	Current Tax and User Fee Collection	Percent of Levy Collected	Delinquent Collection	Total Tax and User Fee Collection	% of Total Collection to Levy	O/S Delinquencies	% of Delinquencies to Levy	(1) Pass-Through Payments
2009-10	\$272,050	\$ 272,110	100.02	\$ 226	\$ 272,336	100.11	\$ (60)	(0.02)	\$ -
2010-11	292,646	292,689	100.01	120	292,809	100.06	(43)	(0.01)	-
2011-12	314,077	314,133	100.02	121	314,254	100.06	(56)	(0.02)	3,116
2012-13	340,298	340,156	99.96	64	340,220	99.98	142	0.04	14,687
2013-14	356,607	356,108	99.86	76	356,184	99.88	499	0.14	7,274
2014-15	362,978	362,927	99.99	108	363,035	100.02	51	0.01	8,447 (2)
2015-16	371,502	370,170	99.64	637	370,807	99.81	1,332	0.36	9,199 (2)
2016-17	381,226	380,078	99.70	608	380,686	99.86	1,148	0.30	9,751
2017-18	386,538	385,673	99.78	741	386,414	99.97	865	0.22	11,353
2018-19	394,641	393,809	99.79	786	394,595	99.99	832	0.21	12,524

**Notes**

(1) Upon dissolution of California redevelopment agencies during fiscal year 2011-12, property tax increment formerly remitted to OCSD by its member city redevelopment agencies was instead deposited into the newly formed Redevelopment Property Tax Trust Fund (RPTTF) from which the Auditor/Controller makes disbursements on behalf of the successor agencies. There is no tax levy associated with these collections; thus, they have been excluded from the "% of Total Collection to Levy" calculation.

(2) In fiscal year 2014-15 and 2015-16, the County did not bill user fees for wholly exempt agencies not subject to property taxes. In fiscal year 2014-15 and 2015-16, OCSD internally billed user fees of \$5 million and \$4.5 million, respectively, to wholly exempt agencies. These amounts have been excluded from the levy and collection amounts above, as only tax and user fees included on County property tax billings are shown in this schedule.

Source: Orange County Auditor - Controller's Office.

**ORANGE COUNTY SANITATION DISTRICT**

Property Value and Construction  
 Covering The Entire County of Orange (1)  
 (Dollars In Thousands)  
 Last Ten Fiscal Years

<u>Assessed Property Value (2)</u>		<u>Calendar Year</u>	<u>Non- Residential Construction (3)</u>		<u>Residential Construction (3)</u>		<u>Total Construction Value (3)</u>
<u>Fiscal Year</u>	<u>Value</u>		<u>Value</u>	<u>No. of Units</u>	<u>Value</u>		
2009-10	\$ 422,965,596	2010	\$ 1,151,929	3,091	\$ 1,029,407	\$ 2,181,336	
2010-11	420,751,575	2011	1,300,019	4,807	1,236,973	2,536,992	
2011-12	424,769,642	2012	1,265,430	6,163	1,560,509	2,825,939	
2012-13	432,902,274	2013	1,521,280	10,453	2,653,728	4,175,008	
2013-14	447,749,156	2014	1,993,154	10,636	2,640,484	4,633,638	
2014-15	476,303,290	2015	2,196,000	10,897	2,834,000	5,030,000	
2015-16	504,650,360	2016	2,487,000	12,134	3,160,000	5,647,000	
2016-17	531,052,158	2017	2,062,000	10,294	3,217,000	5,279,000	
2017-18	563,662,044	2018	3,675,000	8,417	2,786,000	6,461,000	
2018-19	598,901,016	2019	3,595,000	8,567	2,717,000	6,312,000 (4)	

**Notes and Data Sources**

(1) - The Orange County Sanitation District services 479 square miles or 60% of the total 799 square miles that make up the boundaries of the County of Orange.

(2) - Data Source: Orange County Auditor-Controller's Office.

(3) - Data Source: A. Gary Anderson Center for Economic Research, Chapman University.

(4) - Forecasted numbers.

**ORANGE COUNTY SANITATION DISTRICT**

Insurance in Force  
As of June 30, 2019

<u>Type</u>	<u>Insurer</u>	<u>Deductible</u>	<u>Limit</u>
<b><u>All-Risk Property</u></b>			
Fire and Other Perils	Public Entity Property Insurance Program (multiple insurers)	\$500,000 per occurrence	\$1 billion/occurrence
Flood	Public Entity Property Insurance Program	\$2500,000 per occurrence	\$300 million/occurrence
Earthquake (certain structures only)	Two insurers	5% per structure, min. \$5,000,000	\$25 million
<b><u>Boiler &amp; Machinery</u></b>			
	Public Entity Property Insurance Program (multiple insurers)	\$25,000 to \$350,000	\$100 million/occurrence
<b><u>Crime Insurance</u></b>			
	National Union Fire	\$25,000	\$5 million
<b><u>Cyber Insurance</u></b>			
	Lloyd's of London (Beazley)	\$100,000	\$2 million
<b><u>Excess General Liability</u></b>			
	Great American (first \$10 million layer); Berkley National (\$20 million layer excess \$10 million) Great American (\$10 million layer excess \$30 million)	\$500,000	\$40 million/occurrence and annual aggregate
<b><u>Travel &amp; Accident</u></b>			
	Chubb Group of Insurance Companies	None	Accidental Death & Dismemberment: Class 1: Elected Officials, \$500,000 per occurrence Class 2: Employees, 10X annual salary, up to \$500,000 per occur.
<b><u>Excess Workers' Compensation</u></b>			
	CSAC Excess Insurance Authority Program	\$1,000,000 Each Accident	Unlimited statutory coverage each accident, each employee \$4 million employer's liability
<b><u>Pollution Liability</u></b>			
	CSAC Excess Insurance Authority Program	\$75,000	\$10,000,000 per loss
<b><u>Watercraft</u></b>			
Liability	Atlantic Specialty	\$2,500 BI / \$10,000 All other	\$10 million
Hull & Machinery	Atlantic Specialty	\$10,000	\$600,000
Pollution Liability	Great American Ins. Co,	None	\$5 million

Source: Orange County Sanitation District's Risk Management Office.

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**ORANGE COUNTY SANITATION DISTRICT  
FINANCIAL MANAGEMENT DIVISION**

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06/30/19