



Orange County Sanitation District
**Comprehensive Annual
Financial Report**

for the year ended June 30, 2018



Orange County, California

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

COMPREHENSIVE ANNUAL FINANCIAL REPORT

FOR THE YEAR ENDED JUNE 30, 2018

Prepared By:
Administrative Services Department
Financial Management Division

Lorenzo Tyner
Assistant General Manager &
Director of Finance and Administrative Services

(THIS PAGE LEFT INTENTIONALLY BLANK)

ORANGE COUNTY SANITATION DISTRICT

Comprehensive Annual Financial Report

Table of Contents

For the Year Ended June 30, 2018

	<u>Page</u>
INTRODUCTORY SECTION:	
Letter of Transmittal	i-vii
GFOA Certificate of Achievement	viii
Board of Directors	ix
Organization Chart	x
Map of Service Area	xi
FINANCIAL SECTION:	
Independent Auditors' Report	1-2
Management Discussion and Analysis – Required Supplementary Information	3-9
Basic Financial Statements:	
Statement of Net Position	12
Statement of Revenues, Expenses, and Changes in Net Position	13
Statement of Cash Flows	14
Notes to Basic Financial Statements	15-48
Required Supplementary Information:	
Proportionate Share of the Net Pension Liability (Asset) – OCERS Pension Plan	50
Schedule of District Contributions – OCERS Pension Plan	51
Total Pension Liability – Additional Retiree Benefit Account	52
Changes in Total Pension Liability – Additional Retiree Benefit Account	53
Total OPEB Liability – Post-Employment Medical Benefits Plan	54
Changes in Total OPEB Liability – Post-Employment Medical Benefits Plan	55
Supplementary Information:	
Combining Area Schedule of Net Position	58
Combining Area Schedule of Revenues, Expenses, and Changes in Net Position	59
Combining Area Schedule of Cash Flows	60
STATISTICAL SECTION:	
Net Position by Component – Last Ten Fiscal Years	62
Revenues and Gross Capital Contributions by Source – Last Ten Fiscal Years	63
Expenses by Type – Last Ten Fiscal Years	64
Change in Net Position – Last Ten Fiscal Years	65
Cash and Investment Reserve Balances – Last Ten Fiscal Years	66
Sewer Service Fees – Last Nine Fiscal Years and Next Fiscal Year	67
Number of Accounts and Revenues by Customer Class – Last Ten Fiscal Years	68
Principal Sewer Service Customers – Prior Fiscal Year and Nine Years Ago	69
Ratio of Annual Debt Service to Total Expenses – Last Ten Fiscal Years	70
Debt Coverage Ratios – Last Ten Fiscal Years	71
Computation of Direct and Overlapping Debt	72
Ratios of Outstanding Debt – Last Ten Fiscal Years	73
Comparison of the Volume of Wastewater Treated – Last Ten Fiscal Years	74
Authorized Full-time Equivalents by Function – Last Ten Fiscal Years	75
Biosolids Produced – Last Ten Fiscal Years	76
Capital Asset Statistics – Last Ten Fiscal Years	77
Demographic Statistics – Last Ten Fiscal Years	78
Estimated Population Served by Orange County Sanitation District	79
Principal Orange County Employers – Current Fiscal Year and Nine Years Ago	80
Operating Indicators	81
OTHER DATA & TRENDS:	
Cash and Investment Portfolio	84
Property Tax Rates – Direct and Overlapping Governments – Last Ten Fiscal Years	85
Assessed and Estimated Actual Value of Taxable Property – Last Ten Fiscal Years	86
Property Tax and User Fee Levies and Collections – Last Ten Fiscal Years	87
Property Value and Construction – Last Ten Fiscal Years	88
Insurance in Force	89

(THIS PAGE LEFT INTENTIONALLY BLANK)

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 29, 2018

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, Orange County, California for the fiscal year ended June 30, 2018. This report includes the financial position and activity of individual revenue areas, as described within the Governmental Structure below, as of June 30, 2018 and was prepared by the Financial Management Division of the Sanitation District'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 the Sanitation District. 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 the Sanitation District. 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 the Sanitation District'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 the Sanitation District is conducted annually by independent certified public accountants. The Sanitation District selected the accounting firm of Macias Gini & O'Connell LLP to perform the audit for the year ended June 30, 2018. The auditors' report on the Sanitation District'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 the Sanitation District's basic financial statements for the year ended June 30, 2018.

Management's discussion and analysis (MD&A) immediately follows the independent auditors' 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. The Sanitation District 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. The Sanitation District was originally incorporated in 1954 as nine separate public corporations, or districts. In April of 1998, at the Sanitation District'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

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

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.

The Sanitation District is managed by an administrative organization composed of directors appointed by the agencies or cities which are serviced by the Sanitation District. 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 the Sanitation District'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.

The Sanitation District sewerage system includes approximately 396 miles of sewers that convey wastewater generated within the Sanitation District's boundaries to the Sanitation District'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 2018-19, both plants are projected to receive a combined average daily wastewater flow of 183 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 the Sanitation District, 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 decrease of approximately 0.2 percent in payroll jobs from August 2017 to August 2018. During this same time period, unemployment in Orange County decreased to 3.1 percent from 3.8 percent while the unemployment in California as a whole decreased to 4.3 percent from 4.9 percent. In June 2018, Chapman University forecasted Orange County's 2018 total payroll employment to increase 2.4 percent over the prior year, or the addition of 38,000 payroll jobs in 2018.

The four sectors generating the most new jobs in Orange County are construction, professional & business, education & health, and leisure & hospitality. Of these categories, construction is clearly a standout with a 6.9 percent annual average growth, or roughly double that of the other three sectors. Coupled with the powerful multiplier effects that building activity has on other job sectors, the growing importance of the construction sector in shaping the county's economic outlook should be clear.

Chapman's forecast calls for construction to pick up even more steam in 2018, growing at a 5.8 percent rate versus the 4.5 percent increase in 2017. This will help fuel overall job growth of 2.4 percent in Orange County in 2018, roughly the same as the 2.3 percent growth Chapman is forecasting for California and significantly higher than the forecast of 1.5 percent growth for the U.S.

Orange County's job growth is being fueled by housing permit activity. Although total permits are expected to hit a post-recession high of 11,200 units, it should be noted that single-family permits have helped offset the sharp decline in multi-family units. It is too early to tell whether that decline is related in a significant way to concerns over mounting political pressure to institute rent controls in Orange County.

Housing affordability, which measures a family's ability to afford a median-priced home, is projected to continue a steady decline that started in late 2016, when the affordability index hit 72.6. By the fourth quarter of 2017, the index dropped to 68.3, with a further drop projected to near 60.0 by year-end 2018. Despite decreasing housing affordability in the county, there is a tight supplies of homes available for sale, contributing to another year of relatively high housing price appreciation.

MAJOR INITIATIVES

Following are the District's current major initiatives as outlined in the General Manager's work plan for FY 2018-19:

1. Safety and Security

- **Emergency Preparedness** – Develop and conduct an external emergency response and recovery drill by June 30, 2019 that tests the Integrated Emergency Response Plan (IERP).
- **Safety Engineering Solutions** – Continue the 11 Safety Improvement Construction Projects and implement physical site security enhancements as needed to ensure all facilities remain secure. All identified safety improvement contracts and task orders are awarded by May 30, 2019.
- **Voluntary Protection Plan (VPP) Certification** - Complete a full review and audit of all Safety and Health policies, conduct a third-party VPP readiness assessment, and draft a VPP implementation plan by June 30, 2019.
- **Safety Help Desk** – Create a Safety Help Desk Program by June 30, 2019 with software and in-house telephone extension monitored by Risk Management staff, intended to provide internal customers with prompt information and support related to health and safety services. Services include but are not limited to: troubleshooting safety problems, scheduling contractor orientation, or getting policy guidance.
- **Security Committee & Plan** – Reconvene the Security Committee to facilitate development and implementation of a Physical and Cyber Security Plan by March 31, 2019.

2. Succession Planning

- **Realignment of Operations, Maintenance & Engineering (Maintenance Mode)** – Assess the roles and responsibilities of each department and workgroup within the Operation and Maintenance and Engineering Departments and adjust the structure and roles to more efficiently support delivery of services to operate, maintain, refurbish, and replace Orange County Sanitation District (OCSD) assets by November 30, 2018. Make the necessary adjustments to the organization by March 31, 2019.
- **Labor Negotiations** – Complete successful negotiations with all represented bargaining units by June 30, 2019.
- **Leadership Development** – Provide at least two specialized trainings tailored to the Supervisory Level by June 30, 2019.

3. Resource Recovery

- **Water Quality for Water Recycling** – Update OCSD's wastewater ordinance to reflect necessary discharge regulations resulting from alkaline hydrolysis to protect water quality by June 30, 2019.

4. Reliability

- **Asset Management Plan** – Develop an Asset Management Plan by October 31, 2018 that includes an inventory of critical assets for each process area, the collection system and fleet; an evaluation of their condition and performance; and a budgeting and 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.

5. Operational Optimization

- **OCSD Headquarters Building** – Create a final concept plan for the new building complex north of Ellis Avenue by February 28, 2019.
- **Board Meeting Agenda Management Software System** – Select and install a new Board Meeting Agenda Management Software System by June 30, 2019.
- **Document Management** – In preparation for creating a more digital workplace and reducing physical record storage, develop a Scope of Work by November 30, 2018 to issue a Request for Proposals for a Trusted System Needs Assessment and award a contract by February 28, 2019. Present the records retention schedule to the Board of Directors for approval by December 31, 2018.
- **Sludge Dewatering and Odor Control Plant No. 1** – Begin production of dewatered biosolids cake by March 31, 2019.
- **American Society of Civil Engineers Peer Review** – Complete a peer review of the Engineering Department's Capital Improvement Program delivery system by the American Society of Civil Engineers by May 31, 2019.
- **Communications Audit** – Develop scope of work and issue RFP by June 30, 2019 to select firm to conduct a communications audit to review effectiveness of OCSD's communication efforts to redefine and rescope the program.
- **Lobbyist Contract** – Complete selection and contract implementation of legislative lobbyist contracts by December 31, 2018.
- **Return to Work Program** – Develop a formal Return to Work Program to communicate expectations of what is expected of all parties (employees, supervisors, physicians, etc.) by June 30, 2019.

Strategic Planning

In December 2017, the Board of Directors approved the biennium update to the rolling five-year strategic plan for 2014-2019. This is a comprehensive strategic plan to steer OCSD's efforts and engage the organization to envision service levels and operational needs for the next five years. This process began with a consultant retained by OCSD conducting confidential Board Interviews with interested Board members to identify issues of concern. Next the consultant led a Strategic Planning Workshop for employees and attended the Executive Management Team's annual retreat to provide feedback from the Board members and employees. The update concluded with five Strategic Goals being identified as completed, no new goals being adopted and a few minor modifications being made to OCSD's levels of service.

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.

SERVICE EFFORTS AND ACCOMPLISHMENTS

The following service efforts and accomplishments were achieved by the Sanitation District during the year ended June 30, 2018:

- **Platinum Peak Performance Award** from the National Association of Clean Water Agencies (NACWA)
- **Silver Award of Distinction- 2016-2017 Annual Report, Communicator Award** from the Academy of Interactive & Visual Arts (AIVA)
- **Silver Award of Distinction- OCSD CIP Annual Report, Communicator Award** from AIVA
- **Silver Award of Distinction- The Flushable 3, Communicator Award** from AIVA
- **Environmental Communications Award- OCSD's and OCWD's GWRS Bottled Water Campaign** from the American Academy of Environmental Engineers and Scientists
- **Certificate of Achievement for Excellence in Financial Reporting** from the Government Finance Officers Association (GFOA)
- **Distinguished Budget Presentation Award** from GFOA
- **National Environmental Achievement Award (NEAA), Urban Runoff Program** from NACWA
- **Honorable Mention- Urban Runoff Program** from Orange County Business Council's Turning Red Tape into Red Carpet

ACCOUNTING AND BUDGETARY CONTROLS

The Sanitation District's accounting records are maintained on the accrual basis. In developing and evaluating the Sanitation District'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 the Sanitation District's internal accounting controls adequately safeguard assets and provide reasonable assurance of proper recording of financial transactions.

Each year the Sanitation District'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 the Sanitation District 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. The Sanitation District 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 criteria below to determine the total funds required as listed in the Accumulated Funds and Reserves Policy:

Cash Flow Reserve Criteria: 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 Criteria: 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 Criteria: 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 Reserve Criteria: 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 Criteria: 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 Reserve Criteria: 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 level of required COP service reserves at June 30, 2018 was \$5.0 million. In addition, the District's Debt Service Reserve policy requires total debt service reserves to be ten percent of the total outstanding COP debt, or \$100 million at June 30, 2018.

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, 2018, the Sanitation District was in compliance with the Accumulated Funds and Reserves Policy with designated cash and investments totaling \$680 million, and have been earmarked for the following specific purposes in accordance with the Sanitation District's reserve policy:

Designated Cash and Investments

Designated For Cash Flow Contingency	\$173 million
Designated For Self-Insurance	57 million
Designated For Capital Improvements	350 million
Designated For Debt Service Requirements	<u>100 million</u>
Total Designated Cash and Investments	<u>\$ 680 million</u>

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

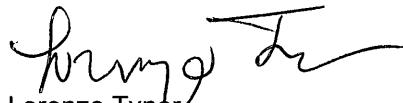
The Government Finance Officers' Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Orange County Sanitation District for the Sanitation District's comprehensive annual financial report for the year ended June 30, 2017. This was the twenty-third consecutive year that the Sanitation District 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 Lina Hsiao, Accounting Supervisor, who assisted in its preparation. I would also like to thank the Sanitation District's Board of Directors and the General Manager for their interest and support in conducting the financial operations of the Sanitation District in a responsible and progressive manner.

Respectfully submitted,



Lorenzo Tyner
Assistant General Manager &
Director of Finance and Administrative Services



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, 2017

Christopher P. Morill

Executive Director/CEO

ORANGE COUNTY SANITATION DISTRICT

Board of Directors

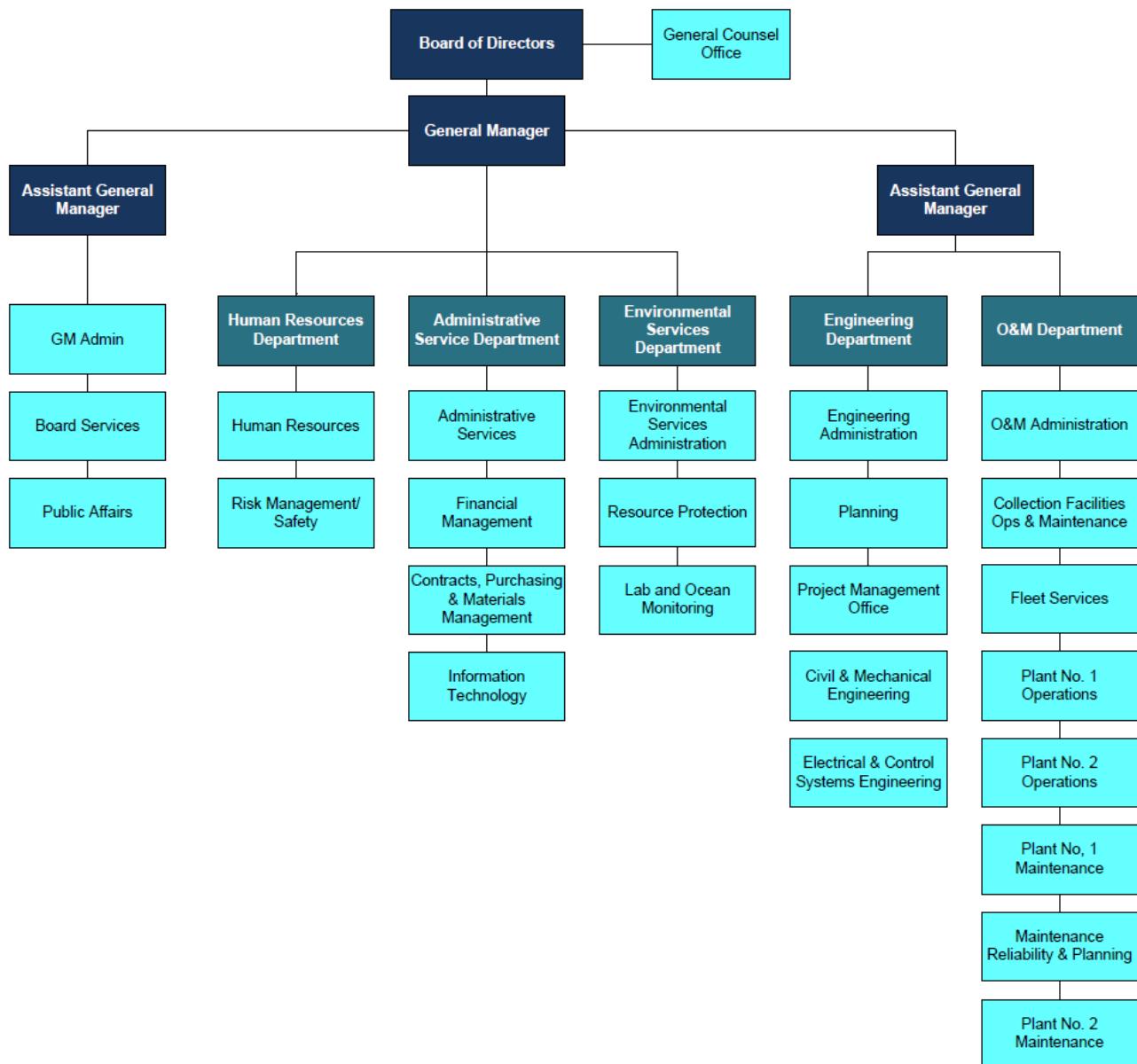
As of June 30, 2018

<u>Agency</u>	<u>Active Director</u>	<u>Alternate Director</u>
Cities:		
Anaheim	Denise Barnes	Lucille Kring
Brea	Glenn Parker	Cecilia Hupp
Buena Park	Fred Smith	Virginia Vaughn
Cypress	Mariellen Yarc	Stacy Berry
Fountain Valley	Steve Nagel	Cheryl Brothers
Fullerton	Greg Sebourn	Jesus Silva
Garden Grove	Steve Jones	Kris Beard
Huntington Beach	Erik Peterson	Mike Posey
Irvine	Donald P. Wagner	Lynn Schott
La Habra	Tim Shaw	Michael Blazey
La Palma	Peter Kim	Marshall Goodman
Los Alamitos	Richard Murphy	Warren Kusumoto
Newport Beach	Scott Peotter	Brad Avery
Orange	Teresa Smith	Mark Murphy
Placentia	Chad Wanke	Ward Smith
Santa Ana	Sal Tinajero	David Benavides
Seal Beach	Ellery Deaton	Sandra Massa-Lavitt
Stanton	David Shawver	Carol Warren
Tustin	Allan Bernstein	Chuck Puckett
Villa Park	Robert Collacott	Robert Pitts
Sanitary Water Districts:		
Costa Mesa Sanitary District	James M. Ferryman	Robert Ooten
Midway City Sanitary District	Charlie 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	Michelle Steel	Shawn Nelson

ORANGE COUNTY SANITATION DISTRICT

Organizational Chart

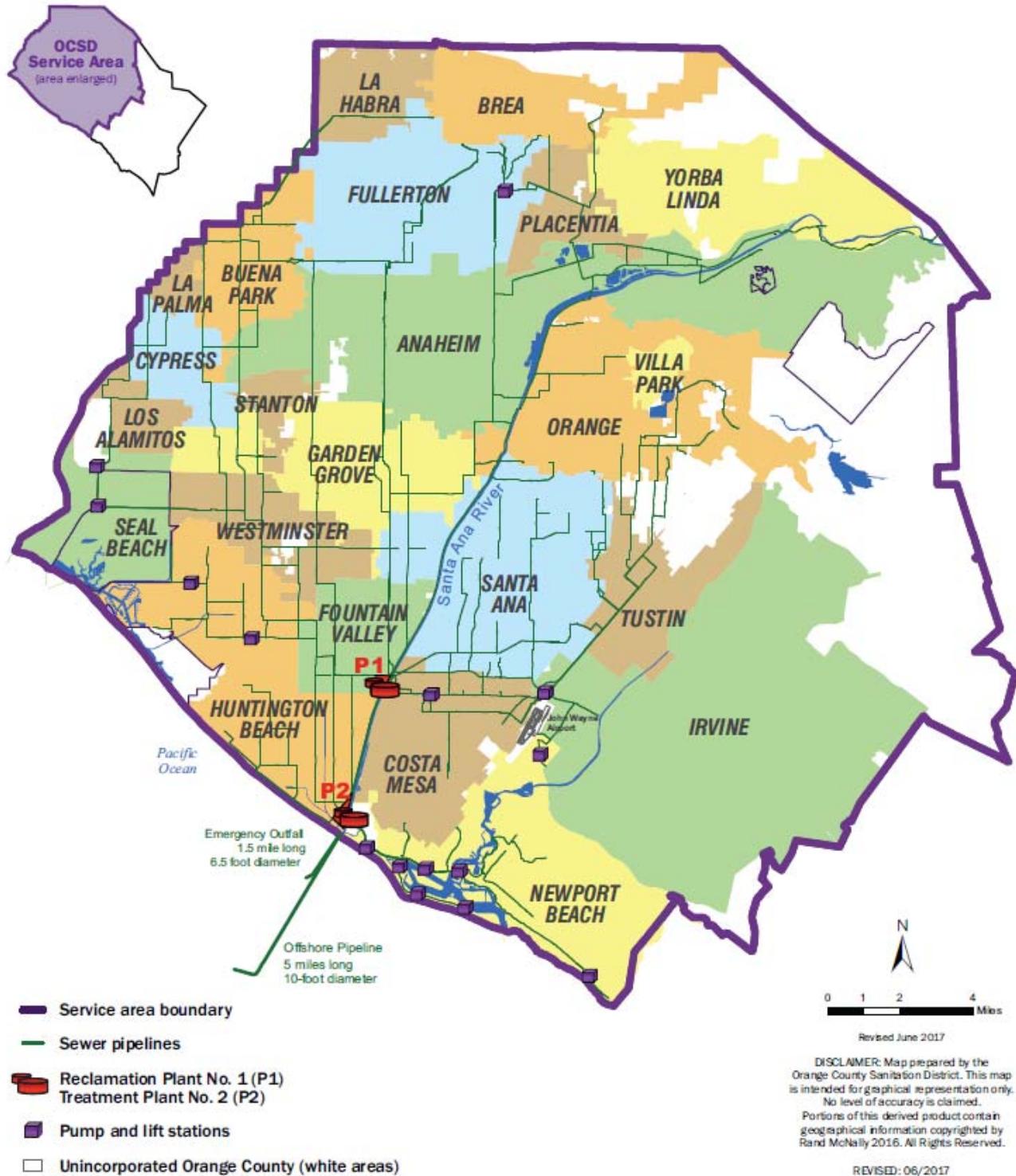
As of June 30, 2018



ORANGE COUNTY SANITATION DISTRICT

Map of Service Area

As of June 30, 2018



(THIS PAGE LEFT INTENTIONALLY BLANK)



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 (the District) as of and for the year ended June 30, 2018, and the related notes to the financial statements, which collectively comprise the District'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 the District's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the District'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, 2018, 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.

Emphasis of Matter

As discussed in Note 1 to basic financial statements, effective July 1, 2017, the District adopted the provisions of Governmental Accounting Standards Board (GASB) Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis, Schedule of Proportionate Share of the Net Pension Liability (Asset) – OCERS Pension Plan, Schedule of District Contributions, 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 the District'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 29, 2018

Management Discussion and Analysis
June 30, 2018

This section of the financial statements of the Orange County Sanitation District (District) is management's narrative overview and analysis of the financial activities of the District for the fiscal year ended June 30, 2018. 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, 2018, the District's assets and deferred outflows of resources exceeded its liabilities and deferred inflows of resources by \$2,194.8 million (net position). Of this amount, \$626.7 million represents unrestricted net position, which may be used to meet the District's ongoing obligations to citizens and creditors.
- Total net position increased \$153.6 million, or 7.5 percent over the prior year. This amount includes the impact of the restatement of beginning net position in the amount of \$7.6 million due to implementation of the Governmental Accounting Standards Board (GASB) Statement No.75.
- Net Capital Assets, consisting of non-depreciable capital assets and depreciable capital assets net of accumulated depreciation, increased \$22.6 million, or 0.9 percent over the prior year.
- Net investment in capital assets increased \$63.2 million, or 4.2 percent over the prior year.
- Unrestricted Net Position increased \$90.3 million, or 16.8 percent over the prior year.
- Total outstanding bonded debt decreased by \$32.1 million from the prior year to \$1.0 billion.

Overview of the Basic Financial Statements

The District 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, the District'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, the District'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 the District'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 District creditors (liabilities). It also provides the basis for computing the rate of return, evaluating the capital structure of the District, and assessing the liquidity and financial flexibility of the District.

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 the District's operations over the past year and can be used to determine the District's creditworthiness. It also highlights the District'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 \$153.6 million, or 7.5 percent over the net position for FY 2016-17, to \$2,194.8 million in FY 2017-18.

(Dollars in thousands)

	June 30, 2018	June 30, 2017	Increase (Decrease)	Percentage Increase (Decrease)
Assets and deferred outflow of resources				
Assets				
Current and other assets	\$ 750,084	\$ 610,450	\$ 139,634	22.9%
Net capital assets	2,626,015	2,603,458	22,557	0.9%
Total assets	3,376,099	3,213,908	162,191	5.0%
Deferred outflows of resources	83,940	74,510	9,430	12.7%
Total assets and deferred outflows of resources	3,460,039	3,288,418	171,621	5.2%
Liabilities				
Current liabilities	117,665	99,376	18,289	18.4%
Noncurrent liabilities	1,083,311	1,118,146	(34,835)	-3.1%
Total liabilities	1,200,976	1,217,522	(16,546)	-1.4%
Deferred inflows of resources	64,274	29,671	34,603	116.6%
Total liabilities and deferred inflows of resources	1,265,250	1,247,193	18,057	1.4%
Net position				
Net investment in capital assets	1,568,118	1,504,898	63,220	4.2%
Unrestricted*	626,671	536,327	90,344	16.8%
Total net position	\$ 2,194,789	\$ 2,041,225	\$ 153,564	7.5%

* The amount for FY 2016/17 does not include the impact of the restatement of beginning net position in the amount of \$7.6 million due to implementation of the Governmental Accounting Standards Board (GASB) Statement No.75.

Current and other assets increased \$139.6 million, or 22.9 percent, due primarily to net cash provided by operations of \$220.6 million, proceeds from property taxes of \$94.3 million, other government repayments of \$20.5 million, receipt of capital facilities capacity charges of \$17.9 million, contributions from other governments of \$3.5 million, interest received of \$7.4 million, offset by capital outlays of \$112.8 million, bonded debt retirements of \$32.1 million, interest paid of \$44.2 million, and net investment activities and other items of \$35.5 million.

Net Capital assets increased \$22.5 million, or 0.9 percent, due mostly to the ongoing capital improvement program construction in progress additions of \$112.7 million, land additions of \$4.5 million, and capital equipment of \$3.0 million, offset by depreciation of \$97.4 million, and \$0.3 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 \$188.3 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 2017-18, the District incurred project costs of \$9.0 million at Plant No. 1 and \$22.2 million at Plant No. 2 bringing the total cost-to-date to \$174.8 million and \$68.8 million, respectively.

Collection system projects includes the Newhope-Placentia Trunk Replacement. The Newhope-Placentia Trunk Replacement incurred outlays of \$4.1 million in FY 2017-18 with a total project budget of \$116.3 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.

The Gisler-Redhill System Improvements (Reach "B") is another collection system project that incurred outlays of \$5.0 million in FY 2017-18 with a total project budget of \$25.2 million through projected completion in FY 2018-19. This project will replace a section of the existing sewer and rehabilitate other reaches in the Gisler-Redhill System. This will include installing a larger diameter pipelines, providing interties, new diversion settings, and sliplining and relining manholes.

See page 8 for the Schedule of Capital Assets and listing of other major capital additions for FY 2017-18.

Deferred Outflows of Resources increased \$9.4 million, or 12.7 percent from the prior year primarily due to \$13.6 million increase in pension deferred outflows due to the changes of actuarial assumptions and other inputs, and a decrease of \$4.2 million for the difference between carrying amount of the retired debt and the acquisition price of COP Series.

Deferred Inflows of Resources increased \$34.6 million, or 116.6 percent over the prior year is primarily due to the decrease 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 \$63.2 million, or 4.2 percent over the prior year primarily due to the result of the net increase in capital assets of \$22.6 million coupled with a \$40.6 million decrease in related debt.

Unrestricted net position increased \$90.3 million, or 16.8 percent due to the overall increase in net position of \$161.1 million and a decrease in the beginning net position of \$7.6 million for implementing GASB 75 related to Other Postemployment Benefits (OPEB), offset by the increase in net investment in capital assets of \$63.2 million.

Changes in Net Position

Net position increased \$38.5 million in FY 2017-18, or 31.4 percent over the prior year's increase in net position.

(Dollars in thousands)

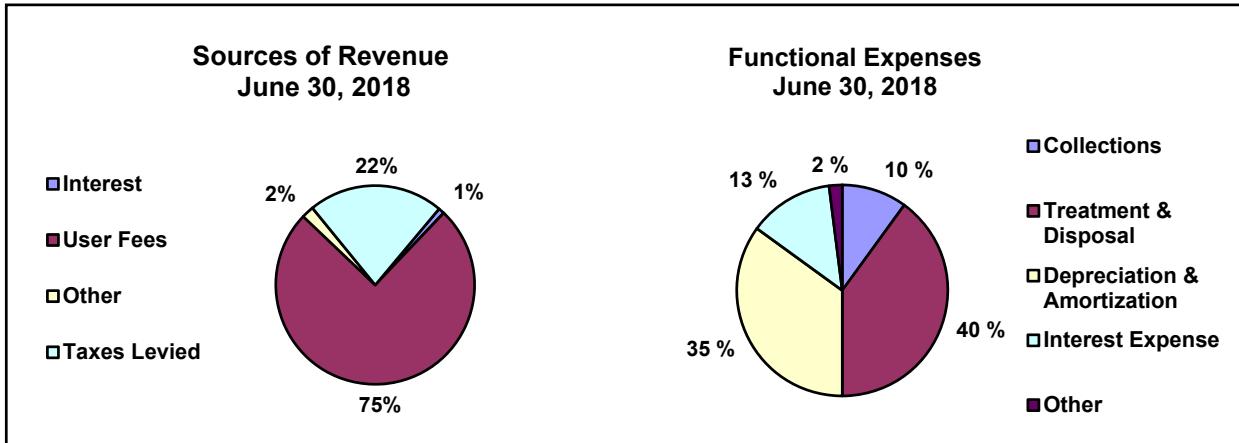
	June 30, 2018	June 30, 2017	Increase (Decrease)	Percentage Increase (Decrease)
Revenues:				
Operating revenues				
Service charges	\$ 316,329	\$ 312,237	\$ 4,092	1.3%
Permit and inspection fees	1,170	1,045	125	12.0%
Total operating revenues	317,499	313,282	4,217	1.3%
Non-operating revenues				
Property taxes	94,188	88,284	5,904	6.7%
Investment and interest income	3,230	3,081	149	4.8%
Contrib. from other government	6,802	24,388	(17,586)	-72.1%
Other	809	2,757	(1,948)	-70.7%
Total non-operating revenues	105,029	118,510	(13,481)	-11.4%
Total revenues	422,528	431,792	(9,264)	-2.1%
Expenses:				
Operating expense other than depreciation and amortization	145,556	150,252	(4,696)	-3.1%
Depreciation and amortization	97,399	96,320	1,079	1.1%
Non-operating expense	36,494	78,918	(42,424)	-53.8%
Total expenses	279,449	325,490	(46,041)	-14.1%
Income before capital contributions	143,079	106,302	36,777	34.6%
Capital facilities capacity charges	18,077	16,351	1,726	10.6%
Increase in net position	161,156	122,653	38,503	31.4%
Beginning net position, as restated*	2,033,633	1,918,572	115,061	6.0%
Ending net position	\$ 2,194,789	\$ 2,041,225	\$ 153,564	7.5%

* The amount for FY 2016/17 does not include the impact of the restatement of beginning net position in the amount of \$7.6 million due to implementation of the Governmental Accounting Standards Board (GASB) Statement No.75.

As previously stated, an enterprise fund is used to account for the operations of the District, which is financed and operated in a manner similar to private business enterprises. This allows the District 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 2017-18, operating revenues increased \$4.2 million, or 1.3 percent from the prior year primarily due to a 1.2 percent increase in the average sewer user fee rate and a decrease in user fee rebates issued over the prior year.



The \$13.5 million, or 11.4 percent decrease in non-operating revenues primarily consists of a \$17.5 million, or 72.1 percent decrease in contributions from other governments, a \$1.9 million, or 70.7 percent in other expenses, somewhat offset by a \$5.9 million, or 6.7 percent increase in property tax. The decrease in contributions from other governments is reflective of the decrease in 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 tax revenue is primarily the result of the increase in total assessed valuation of 6.7 percent over the prior year. The decrease in other revenue is mainly attributable to a \$1 million decrease in non-federal grant reimbursement relative to project 2-72 Newhope-Placentia trunk sewer replacement project in the prior year and a \$1 million decrease in project FE14-05 pollution remediation estimates.

Operating expense before depreciation and amortization decreased \$4.7 million or 3.1 percent from the prior year. The majority of this decrease is attributable to the \$6.9 million, or 9.3 percent decrease in salaries and benefits and the \$2.0 million, or 26.6 percent decrease in feasibility studies, that were somewhat offset by a \$2.8 million, or 10.8 percent increase in supplies, repairs and maintenance, and the \$1.2 million, or 19.3 percent increase in utilities. The increase in supplies, repairs and maintenance expenses is mostly attributable to repairs such as digester cleaning services and engine components purchased to remedy gas leaks. The increase in utilities is attributable to an increase of \$880,000 in power charges as a result of higher electricity rates, increased consumption from facility-related demand, and a Plant 2 Central Generation (CenGen) shutdown. Feasibility studies are done to determine the necessity and the preferred designs of future potential construction projects and fluctuate from year-to-year, as required.

Operating salaries and benefits decreased by \$6.8 million to \$67.4 million, a 9.3 percent decrease from the prior year. The operating salaries and benefits costs are part of the overall decrease of \$8.0 million in total salaries and benefits when including the salaries and benefits capitalized within the capital improvement program. Overall, total District salaries and benefits were \$84.0 million, an 8.2 percent decrease from the prior year total of \$91.6 million. This decrease is reflective of the \$10.7 million, or 72.9 percent decrease in retirement premiums as a result of the \$214.1 million pay down against the District's unfunded actuarial accrued pension liability (UAAL) over the current and previous three fiscal years, that was somewhat offset by a \$3.1 million, or 4.7 percent increase in salaries and wages. This pay down resulted in a UAAL premium rate decrease from 7.86 percent in FY 2015-16 to 1.42 percent in FY 2017-18.

Non-operating expense decreased \$42.4 million, or 53.8 percent, and is primarily reflective of the \$50.0 million reduction in transfer of local sewer service fee assets and replacement funds to East Orange County Water District (EOCWD), a \$2.2 million, or 91.9 percent decrease in loss on disposal of capital assets, somewhat offsetting this decrease is the increase in interest expense of \$9.4 million, or 36.5 percent increase from the prior year total of \$25.6 million.

Capital Facility Capacity Charges increased \$1.7 million, or 10.6 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, 2018, the District had a net investment of \$2.6 billion in capital assets. This represents a net increase (including additions and deletions) of \$22.6 million or 0.9 percent over the prior year.

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

(Dollars in thousands)

	June 30, 2018	June 30, 2017	Increase (Decrease)	Percentage Increase (Decrease)
Land	\$ 29,741	\$ 25,247	\$ 4,494	17.8%
Construction in progress	427,996	461,833	(33,837)	-7.3%
Sewage collection facilities	494,171	482,558	11,613	2.4%
Sewage treatment facilities	1,557,473	1,515,969	41,504	2.7%
Effluent disposal facilities	33,178	34,636	(1,458)	-4.2%
Solids disposal facilities	288	297	(9)	-3.0%
General and administrative facilities	83,168	82,918	250	0.3%
Capital assets, net	\$ 2,626,015	\$ 2,603,458	\$ 22,557	0.9%

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

- \$22.2 million – Sludge Dewatering and Odor Control at Plant No. 2
- \$16.2 million – Ocean Outfall System Rehabilitation
- \$ 9.9 million – Mt Langley Property
- \$ 9.0 million – Sludge Dewatering and Odor Control at Plant No. 1
- \$ 7.7 million – Consolidated Demolition & Utility Improvements at Plant No. 2
- \$ 6.4 million – Headworks Rehabilitation at Plant No. 1
- \$ 5.2 million - A-Side Primary Clarifiers Repl. at P2
- \$ 5.0 million - Gisler-Redhill System Improvements, Reach "B"

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

Debt Administration

At June 30, 2018, the District had \$1.0 billion outstanding in bonded debt, a net decrease of \$32.1 million, or 3.1 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 the Sanitation'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. The District's long-range financing plan is designed to maintain this high rating. Over the next five years, the District is projecting over \$1.3 billion in future treatment plant and collection system capital improvements. In accordance with the District's long-term debt fiscal policy, the District 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. However, the 2016B

Certificate Anticipation Notes Series (CANS) are due and payable on December 15, 2018, therefore, the Board of Directors of the Sanitation District has authorized and adopted Resolution No. OCSD 18-17 to issue the 2018A CANS of up to \$109,875,000 in November 2018 which would allow the Sanitation District to repay the 2016B CANS 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 3.3 percent in June 2018, a slight decrease from the rate of 3.8 percent a year ago.
- Inflation for the Los Angeles-Riverside-Orange County area increased 2.2 percent in 2017 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 actual rate of return on investments decreased from the 0.6 percent earnings rate in FY 2016-17 to 0.5 percent for FY 2017-18.

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

As part of the District's recently approved five-year rate schedule, user fees were increased by 1.2 percent for FY 2018-19 over the prior year. The Single Family Residential (SFR) fee, which is the underlying for all other user rates, is applicable to the District's largest customer base: the SFR fee, increased by \$4.00, from \$331.00 to \$335.00. This rate increase is necessary to finance the District's cash flow needs including \$161.0 million in operating costs, \$80.0 million in debt service costs and \$175.0 million in capital improvement outlays in 2018-19. Capital Improvement costs are projected to total \$2.7 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 the District'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.

(THIS PAGE INTENTIONALLY LEFT BLANK)

**ORANGE COUNTY SANITATION DISTRICT
BASIC FINANCIAL STATEMENTS**

ORANGE COUNTY SANITATION DISTRICT

Statement of Net Position

June 30, 2018

	<u>2018</u>
Current assets:	
Cash and cash equivalents	\$ 135,978,533
Investments	539,521,972
Accounts receivable, net of allowance for uncollectibles	\$ 455,979
13,202,940	
Accrued interest receivable	2,851,382
Connection fees receivable	3,871,076
Property tax receivable	1,227,135
Inventories	7,243,823
Prepaid expenses	1,645,412
Total current assets	<u>705,542,273</u>
Noncurrent assets:	
Restricted:	
Cash and cash equivalents	4,953,800
Accrued interest receivable	6,855
Unrestricted:	
Non-depreciable capital assets	457,737,093
Depreciable capital assets, net of accumulated depreciation	2,168,277,734
Other noncurrent assets, net	10,344
Net pension asset - OCERS	39,571,100
Total noncurrent assets	<u>2,670,556,926</u>
Total assets	<u>3,376,099,199</u>
Deferred outflows of resources:	
Deferred losses on defeasances	32,880,203
Deferred outflows related to pensions	<u>51,059,589</u>
Total deferred outflows of resources	<u>83,939,792</u>
Total assets and deferred outflows of resources	<u>3,460,038,991</u>
Current liabilities:	
Accounts payable	13,365,974
Accrued expenses	15,404,746
Retentions payable	2,147,719
Interest payable	17,113,450
Due to other governmental agency	18,888,270
Current portion of long-term obligations	50,744,930
Total current liabilities	<u>117,665,089</u>
Noncurrent liabilities:	
Noncurrent portion of long-term obligations	1,057,454,621
Total OPEB liability	5,025,395
Total pension liability - ARBA	<u>20,831,172</u>
Total noncurrent liabilities	<u>1,083,311,188</u>
Total liabilities	<u>1,200,976,277</u>
Deferred inflows of resources:	
Deferred inflows related to pensions	<u>64,273,306</u>
Total liabilities and deferred inflows of resources	<u>1,265,249,583</u>
Net position:	
Net investment in capital assets	1,568,118,074
Unrestricted	626,671,334
Total net position	<u>\$ 2,194,789,408</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, 2018

	2018
Operating revenues:	
Service charges	\$ 316,328,764
Permit and inspection fees	<u>1,170,329</u>
Total operating revenues	<u>317,499,093</u>
Operating expenses other than depreciation and amortization:	
Salaries and benefits	67,418,039
Utilities	7,298,104
Supplies, repairs and maintenance	28,237,502
Contractual services	29,520,286
Feasibility studies	6,094,056
Other	<u>6,988,024</u>
Total operating expenses other than depreciation and amortization	<u>145,556,011</u>
Operating income before depreciation and amortization	171,943,082
Depreciation and amortization	<u>97,399,234</u>
Operating income	<u>74,543,848</u>
Non-operating revenues:	
Property taxes	94,188,353
Investment and interest income	3,229,756
Contributions from other government	6,802,282
Other	<u>809,076</u>
Total non-operating revenues	<u>105,029,467</u>
Non-operating expenses:	
Interest	35,011,026
Other	1,287,728
Loss on disposal of assets	<u>195,780</u>
Total non-operating expenses	<u>36,494,534</u>
Income before capital contributions	143,078,781
Capital contributions:	
Capital facilities capacity charges	<u>18,077,353</u>
Change in net position	161,156,134
Total net position - beginning, as restated	<u>2,033,633,274</u>
Total net position - ending	<u>\$ 2,194,789,408</u>

See Accompanying Notes to Basic Financial Statements.

ORANGE COUNTY SANITATION DISTRICT

Statement of Cash Flows
For the Year Ended June 30, 2018

	<u>2018</u>
Cash flows from operating activities:	
Receipts from customers and users	\$ 374,435,755
Payments to employees	(73,967,137)
Payments to suppliers	<u>(79,896,248)</u>
Net cash provided by operating activities	<u>220,572,370</u>
Cash flows from noncapital financing activities:	
Proceeds from property taxes	94,280,270
Payments for other obligations	<u>(478,516)</u>
Net cash provided by noncapital financing activities	<u>93,801,754</u>
Cash flows from capital and related financing activities:	
Capital facilities capacity charges	17,918,938
Additions to capital assets	(112,829,813)
Interest paid	(44,240,870)
Principal payments on debt obligation	(32,141,018)
Contribution from other government	<u>3,538,879</u>
Net cash used in capital and related financing activities	<u>(167,753,884)</u>
Cash flows from investing activities:	
Proceeds from the sale of investments	181,547,334
Purchases of investments	(309,468,552)
SARI project payments	20,472,023
Interest received	<u>7,393,886</u>
Net cash used in investing activities	<u>(100,055,309)</u>
Net increase in cash and cash equivalents	<u>46,564,931</u>
Cash and cash equivalents, beginning of year	<u>94,367,402</u>
Cash and cash equivalents, end of year	<u>\$ 140,932,333</u>
Reconciliation of operating income to net cash provided by operating activities:	
Operating income	\$ 74,543,848
Adjustments to reconcile operating income to net cash provided by operating activities:	
Depreciation and amortization	97,399,234
Bad debt expense (net recoveries)	219,792
(Increase)/decrease in operating assets:	
Accounts receivable	32,257,047
Inventories	(75,275)
Prepaid and other assets	<u>87,640</u>
Increase/(decrease) in operating liabilities:	
Accounts payable	(2,012,182)
Accrued expenses	150,961
Due to other governmental agency	24,679,615
Net pension/OPEB liability	(8,463,282)
Pension/OPEB/accrued leave payable	1,192,318
Compensated absences	209,235
Claims and judgments	<u>383,419</u>
Net cash provided by operating activities	<u>\$ 220,572,370</u>
Noncash activities:	
Unrealized (loss) on the fair value of investments	\$ (5,074,806)
Receivable from non-operating activities	4,085,372
Capital assets acquired through accounts payable	5,377,210
Capital facilities capacity charges acquired	<u>158,415</u>

See Accompanying Notes to Basic Financial Statements.

ORANGE COUNTY SANITATION DISTRICT

Notes to Basic Financial Statements
For the Year Ended June 30, 2018

(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 managed by an administrative organization 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, 2018, 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, 2018

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 \$455,979 at June 30, 2018. Unbilled sewer services through June 30, 2018 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, 2018

Inventories

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

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).

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.

ORANGE COUNTY SANITATION DISTRICT

Notes to Basic Financial Statements

For the Year Ended June 30, 2018

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, 2018 are \$32,880,203.

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. Personal leave 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.

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 asset, 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).

ORANGE COUNTY SANITATION DISTRICT

Notes to Basic Financial Statements
For the Year Ended June 30, 2018

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.

Construction Commitments

OCSD has active construction projects to add additional capacity, improve treatment, or replace/rehabilitate existing assets. At June 30, 2018, the outstanding commitments with contractors totaled \$96,474,802.

Self-Insurance Plans

For the year ended June 30, 2018, 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 \$100,000 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

ORANGE COUNTY SANITATION DISTRICT

Notes to Basic Financial Statements
For the Year Ended June 30, 2018

exposure is the deductible ranging from \$75,000 to \$250,000 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, 2018.

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 accrals 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, 2018 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 GASB Pronouncements

The accompanying financial statements reflect the implementation of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. The purpose of this statement is to improve accounting and financial reporting by state and local governments for postemployment benefits other than pensions (other postemployment benefits or OPEB). This statement replaces the requirements of Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*, as amended, and No. 57, *OPEB Measurements by Agent Employers and Agent Multiple-Employer Plans*, for OPEB. The retroactive effect of implementing this change in reporting other postemployment benefits resulted in a restatement of the beginning net position as described further in Note 9. The effect on the previously issued financial statement as of June 30, 2017 resulted in an adjustment to ending net position from \$2,041,225,032 to \$2,033,633,274. In addition, GASB Statement No. 85, *Omnibus 2017* resulted in revisions to the presentation of payroll-related measures in certain OPEB schedules presented as required supplementary information. The requirements of these Statements that are applicable to OCSD are effective for reporting periods beginning after June 15, 2017 and have been implemented in fiscal year 2017-2018.

The accompanying financial statements also reflect the implementation of GASB Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*. This Statement requires that interest cost incurred before the end of a construction period be recognized as an expense in the period in which the cost is incurred for financial statements prepared using the economic resources measurement focus. As a result, interest costs incurred before the end of a construction period are no longer included in the historical cost of capital assets reported. The requirements of this Statement that are applicable to OCSD are effective for reporting periods beginning after December 15, 2019 and has been early implemented in fiscal year 2017-2018.

ORANGE COUNTY SANITATION DISTRICT

Notes to Basic Financial Statements
For the Year Ended June 30, 2018

(2) Cash and Investments

Cash and investments as of June 30, 2018 are classified within the accompanying Statement of Net Position as follows:

Statement of Net Position:	
Current, Unrestricted:	
Cash and cash equivalents	\$ 135,978,533
Investments	539,521,972
Subtotal - current, unrestricted	675,500,505
Restricted:	
Cash and cash equivalents	4,953,800
Total cash and cash equivalents and investments	<u>\$ 680,454,305</u>

Cash and investments consist of the following as of June 30, 2018:

Cash on hand	\$ 3,000
Deposits with financial institutions	2,411,045
Managed portfolio - cash and investments	673,086,460
Subtotal - unrestricted cash and investments	675,500,505
Monies held by trustees:	
Cash and cash equivalents	4,953,800
Grand total cash and investments	<u>\$ 680,454,305</u>

ORANGE COUNTY SANITATION DISTRICT

Notes to Basic Financial Statements
For the Year Ended June 30, 2018

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 (1)(3)	Maximum Percentage of Portfolio (1)	Maximum Investment in a Single Issuer (1)
Local Agency Bonds	Yes	5 years	10% (2)	5% (2)
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% (2)
Banker's Acceptances	Yes	180 days	40%	5% (2)
Commercial Paper	Yes	270 days	25%	5% (2)
Negotiable Certificates of Deposit	Yes	5 years	30%	5% (2)
Repurchase Agreements	Yes	1 year	20% (2)	5% (2)
Reverse Repurchase Agreements	Yes	90 days (2)	5% (2)	5% (2)
Corporate Medium-Term Notes	Yes	5 years	30%	5% (2)
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% (2)
County Investment Pools	Yes	N/A	15% (2)	15% (2)
Local Agency Investment Fund (LAIF)	Yes	N/A	15% (2)	15% (2)
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, 2018

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, 2018

Following is a table which summarizes OCSD's managed portfolio investments by purpose with the modified duration as of June 30, 2018.

Investment Type	Fair Value	Modified Duration (in years)	Modified Duration (in months)
Short-Term Portfolio:			
U.S. Treasury Bills	\$ 59,851,200	0.135	1.62
Local Agency Investment Fund	55,104,678	0.529	6.35
U.S. Treasury Notes	30,957,000	0.169	2.03
U.S. Agency Securities	24,218,123	0.082	0.99
Commercial Paper	10,058,827	0.183	2.19
Certificates of Deposit	9,939,086	0.368	4.42
Corporate Medium-Term Notes	8,014,233	0.224	2.69
Supranationals	7,994,655	0.087	1.04
Money Market Mutual Funds	<u>4,727,642</u>	<u>-</u>	<u>-</u>
Short-term portfolio subtotal	<u>\$ 210,865,444</u>	<u>0.249</u>	<u>2.99</u>
Long-Term Portfolio:			
U.S. Treasury Notes	\$ 137,436,984	2.788	33.46
Corporate Medium-Term Notes	105,957,676	2.773	33.28
U.S. Agency Securities*	103,508,844	2.214	26.56
Asset Backed Securities/CMO*	34,763,432	0.965	11.57
Supranationals	32,064,683	3.119	37.42
Commercial Paper	16,905,320	0.243	2.91
U.S. Treasury Inflation-Protected Securities (TIPS)**	10,665,636	6.000	72.00
Money Market Mutual Funds	10,528,215	-	-
Certificates of Deposit	5,821,913	0.110	1.32
Taxable Municipal Bonds	4,382,355	1.764	21.17
U.S. Govt. Backed Mortgage Pools (GNMA)*	<u>185,958</u>	<u>4.273</u>	<u>51.28</u>
Long-term portfolio subtotal	<u>\$ 462,221,016</u>	<u>2.417</u>	<u>29.00</u>
Total Portfolio	<u>\$ 673,086,460</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, 2018

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, 2018.

	Fair Value	Maturities
Cash equivalents held by fiscal agents:		
Money Market Mutual Funds:		
First American Government Obligations Fund	4,953,382	20 days
Blackrock Institutional Funds	418	39 days
Total fair value of investments held by fiscal agents	<u>\$ 4,953,800</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 \$3,763,829 including \$2,294,752 of mortgage pass-through securities, \$1,283,119 of U.S. agency securities, and \$185,958 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

Notes to Basic Financial Statements
For the Year Ended June 30, 2018

At June 30, 2018, OCSD had the following fair value measurements for its managed investment portfolio:

Investment Type	Fair Value	Quoted Prices in Active Markets for Identical Assets			Significant Other Observable Inputs	Unobservable Inputs
		Level 1	Level 2	Level 3		
Investments in Short-Term Portfolio:						
U.S. Treasury Bills	\$ 59,851,200	\$ -	\$ 59,851,200	\$ -		
U.S. Treasury Notes	30,957,000		30,957,000			
U.S. Agency Securities	24,218,123	-	24,218,123			
Commercial Paper	10,058,827	-	10,058,827			
Certificates of Deposits	9,939,086	-	9,939,086			
Corporate Medium-term Notes	8,014,233	-	8,014,233			
Supranationals	7,994,655	-	7,994,655			
Investments in Long-Term Portfolio:						
U.S. Treasury Notes	137,436,984	-	137,436,984			
Corporate Medium-term Notes	105,957,676	-	105,957,676			
U.S. Agency Securities	103,508,844	-	103,508,844			
Asset Backed Securities/CMO	34,763,432	-	34,763,432			
Supranationals	32,064,683	-	32,064,683			
Commercial Paper	16,905,320	-	16,905,320			
US Treasury Inflation Protected Securities (TIPS)	10,665,636	-	10,665,636			
Certificates of Deposits	5,821,913	-	5,821,913			
Taxable Municipal Bonds	4,382,355	-	4,382,355			
U.S. Government Backed Mortgage Pools	185,958	-	185,958			
Fair Value Hierarchy Totals		\$ -	\$ 602,725,925		\$ -	
Investments Not Subject To Fair Value Hierarchy:						
Local Agency Investment Fund (LAIF)*	55,104,678					
Money Market Mutual Funds*	4,727,642					
Money Market Mutual Funds**	10,528,215					
Total Portfolio			<u>\$ 673,086,460</u>			

* 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

Notes to Basic Financial Statements For the Year Ended June 30, 2018

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	\$ 238,910,820
U.S. Agency Securities - GNMA	185,958
Subtotal	<u>\$ 239,096,778</u>
Investments with no legal minimum rating:	
U.S. Agency Securities (other than GNMA):	
Rating of AA+ (Standard & Poor's)	94,520,544
Rating of P-1 (Moody's)	33,206,423
Municipal Bonds:	
Rating of Aa1 (Moody's)	1,436,512
Rating of Aa3 (Moody's)	2,945,843
Certificates of Deposits:	
Rating of A-1 (Standard and Poor's)	8,765,689
Rating of P-1 (Moody's)	5,997,200
Not rated	998,110
Local Agency Investment Fund (LAIF):	
Not rated	<u>55,104,678</u>
Subtotal	<u>202,974,999</u>
Investments with a legal minimum rating (or its equivalent) of A:	
Corporate Medium-Term Notes:	
Rating of Aa1 (Moody's)	3,930,440
Rating of AA+ (Standard and Poor's)	2,944,800
Rating of AA+ (Fitch)	2,919,881
Rating of Aa2 (Moody's)	3,908,867
Rating of AA- (Standard & Poor's)	2,441,500
Rating of A1 (Moody's)	13,297,646
Rating of A+ (Fitch)	6,444,285
Rating of A2 (Moody's)	39,846,414
Rating of A (Standard & Poor's)	10,949,431
Rating of A3 (Moody's)*	16,481,401
Rating of A- (Standard & Poor's)*	7,826,040
Rating of BBB+ (Standard & Poor's)*	2,962,904
Not rated	18,300
Money Market Mutual Funds:	
Rating of P-1 (Moody's)	<u>15,255,857</u>
Invested with fiscal agents:	
Rating of Aaa-mf (Moody's)	<u>4,953,800</u>
Subtotal	<u>134,181,566</u>
Investments with a legal minimum rating (or its equivalent) of AA:	
Asset Backed Securities/CMO:	
Rating of Aaa (Moody's)	24,098,386
Rating of AAA (Standard & Poor's)	8,341,682
Rating of AA+ (Standard and Poor's)	2,167,755
Rating of BBB (Fitch)*	126,997
Rating of B (Fitch)*	28,612
Supranational Obligations:	
Rating of Aaa (Moody's)	28,837,318
Rating of AAA (Fitch)	6,224,920
Rating of P-1 (Moody's)	<u>4,997,100</u>
Subtotal	<u>74,822,770</u>
Investments with a legal minimum rating (or its equivalent) of "Prime":	
Commercial Paper:	
Rating of P-1 (Moody's)*	10,458,370
Rating of A-1 (Standard & Poor's)*	16,505,777
Subtotal	<u>26,964,147</u>
Total	<u>\$ 678,040,260</u>

* 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, 2018

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, 2018, 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)	\$ 54,686,653	8.12%
Federal National Mortgage Association (FNMA)	\$ 48,561,145	7.21%

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 market value of the pledged securities in the collateral pool must equal at least 110% of the total amount deposited by the public agencies. California law also allows financial institutions to secure deposits by pledging first trust deed mortgage notes having a value of 150% of the secured public deposits.

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, 2018, 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, 2018.

ORANGE COUNTY SANITATION DISTRICT

Notes to Basic Financial Statements
For the Year Ended June 30, 2018

(3) Capital Assets

Capital asset activity for the year ended June 30, 2018 is as follows:

	Beginning Balance at July 1, 2017	Additions / Transfers	Deletions / Transfers	Ending Balance at June 30, 2018
Capital assets not depreciated:				
Cost:				
Land	\$ 25,247,046	\$ 4,494,197	\$ -	\$ 29,741,243
Construction in progress	461,833,450	112,729,390	(146,566,990)	427,995,850
Total nondepreciable assets	<u>487,080,496</u>	<u>117,223,587</u>	<u>(146,566,990)</u>	<u>457,737,093</u>
Depreciable capital assets:				
Cost:				
Sewage collection facilities	830,551,347	30,159,021	-	860,710,368
Sewage treatment facilities	2,366,129,584	111,241,674	(13,749)	2,477,357,509
Effluent disposal facilities	97,014,820	-	-	97,014,820
Solids disposal facilities	3,463,236	-	-	3,463,236
General and administrative facilities	246,051,157	7,899,118	(820,503)	253,129,772
Excess purchase price over book value on acquired assets	<u>19,979,000</u>	<u>-</u>	<u>-</u>	<u>19,979,000</u>
Subtotal	<u>3,563,189,144</u>	<u>149,299,813</u>	<u>(834,252)</u>	<u>3,711,654,705</u>
Accumulated depreciation:				
Sewage collection facilities	(347,993,364)	(18,546,029)	-	(366,539,393)
Sewage treatment facilities	(850,160,711)	(69,737,183)	13,749	(919,884,145)
Effluent disposal facilities	(62,379,493)	(1,457,559)	-	(63,837,052)
Solids disposal facilities	(3,165,971)	(9,719)	-	(3,175,690)
General and administrative facilities	(163,132,772)	(7,648,744)	819,825	(169,961,691)
Excess purchase price over book value on acquired assets	<u>(19,979,000)</u>	<u>-</u>	<u>-</u>	<u>(19,979,000)</u>
Subtotal	<u>(1,446,811,311)</u>	<u>(97,399,234)</u>	<u>833,574</u>	<u>(1,543,376,971)</u>
Net depreciable assets	<u>2,116,377,833</u>	<u>51,900,579</u>	<u>(678)</u>	<u>2,168,277,734</u>
Net capital assets	<u>\$ 2,603,458,329</u>	<u>\$ 169,124,166</u>	<u>\$ (146,567,668)</u>	<u>\$ 2,626,014,827</u>

For the fiscal year ended June 30, 2018, capital asset additions of \$149.3 million in depreciable capital assets are \$2.7 million more than the \$146.6 million transferred from Construction in Progress due to capital equipment purchases of \$3.0 million, partially offset by \$0.3 million of prior capital project expenses that were written off as expense.

ORANGE COUNTY SANITATION DISTRICT

Notes to Basic Financial Statements
For the Year Ended June 30, 2018

(4) Long-Term Liabilities

The following is a summary of the changes in long-term liabilities for the year ended June 30, 2018:

	Beginning Balance, July 1	Additions	Deletions	Ending Balance, June 30	Due within one year	Long-term amount
Compensated absences	\$ 7,817,373	\$ 7,252,711	\$ (7,044,230)	\$ 8,025,854	\$ 7,334,828	\$ 691,026
Claims and judgments	4,052,668	941,417	(557,998)	4,436,087	732,040	3,704,047
Certificates of participation, revenue obligations & notes	1,044,250,000	-	(32,140,000)	1,012,110,000	31,655,000	980,455,000
Unamortized premium	96,429,773	-	(12,802,163)	83,627,610	11,023,062	72,604,548
Totals	\$ 1,152,549,814	\$ 8,194,128	\$ (52,544,391)	\$ 1,108,199,551	\$ 50,744,930	\$ 1,057,454,621

Compensated Absences

OCSD's policies related to compensated absences are described in Note 1. OCSD's liability at June 30, 2018 is \$8,025,854 with an estimated \$7,334,828 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, 2018 and 2017:

	2017-18	2016-17
Claims and judgments payable at July 1	\$ 4,052,668	\$ 4,571,057
Claims incurred during the fiscal year	941,417	497,501
Payments on claims during the fiscal year	(557,998)	(1,015,890)
Claims and judgments payable at June 30	4,436,087	4,052,668
Less: current portion	(732,040)	(752,880)
Total long-term claims and judgments payable	\$ 3,704,047	\$ 3,299,788

ORANGE COUNTY SANITATION DISTRICT

Notes to Basic Financial Statements
For the Year Ended June 30, 2018

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, 2018 are summarized as follows:

	Amount
2009A certificates of participation	\$ 4,690,000
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	66,395,000
2014A wastewater refunding revenue obligations	78,375,000
2015A wastewater refunding revenue obligations	127,510,000
2016A wastewater refunding revenue obligations	145,880,000
2016B revenue refunding certificate anticipation notes	109,875,000
2017A wastewater refunding revenue obligations	66,370,000
Total certificates of participation, revenue obligations, and notes	<u>\$ 1,012,110,000</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, 2018, the coverage ratio for senior lien debt was 3.66.

May 2009 Certificates of Participation, Series 2009A

On May 7, 2009, OCSD completed the sale of \$200,000,000 of certificates of participation. The certificates were issued to finance and to reimburse OCSD for the acquisition, construction, and installation of additional improvements made to the wastewater system. The interest rate on the certificates is fixed and will range from 3.00 percent to 5.00 percent. Annual principal payments are due on February 1, beginning February 1, 2010 through February 1, 2019.

On March 30, 2016, \$162,780,000 of the outstanding principal balance of the 2009 Series A certificates was advance-refunded with the proceeds of the March 30, 2016 wastewater refunding revenue obligations Series 2016A (see below) in a transaction accounted for as an in-substance defeasance. These funds are held in an escrow account that is not reflected on OCSD's financial statements because it has been legally defeased. At June 30, 2018, this \$162,780,000 represents the amount still outstanding on bonds considered defeased.

The trust agreement for the certificates requires the establishment of a reserve which was funded from certificate proceeds. The June 30, 2018 reserve of \$4,952,817 is held by US Bank, the trustee, and meets the reserve requirement.

ORANGE COUNTY SANITATION DISTRICT

Notes to Basic Financial Statements
For the Year Ended June 30, 2018

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.

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.

ORANGE COUNTY SANITATION DISTRICT

Notes to Basic Financial Statements

For the Year Ended June 30, 2018

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.

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.

November 2016 Revenue Refunding Certificate Anticipation Notes, Series 2016B

On November 1, 2016, OCSD completed the sale of \$109,875,000 of revenue refunding certificate anticipation notes. The notes were issued to fully refund the \$120,850,000 outstanding principal balance of the 2014 Series B revenue refunding certificate anticipation notes. The interest rate on the notes is fixed at 2 percent. The notes will mature on December 15, 2018. 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. OCSD has a non-cancellable agreement with its lender to refinance the notes with future obligations that will not be expired until August 2021.

ORANGE COUNTY SANITATION DISTRICT

Notes to Basic Financial Statements
For the Year Ended June 30, 2018

The trust agreement for the certificates 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.

Annual Amortization Requirements

The annual requirements to amortize all debt related to certificates of participation, revenue obligations, and anticipation notes as of June 30, 2018, including the Revenue Refunding Certificate Anticipation Notes, Series 2016B that currently matures in December 2018, are as follows:

<u>Year Ending June 30,</u>	<u>Principal</u>	<u>Estimated Interest</u>	<u>Total</u>
2019	\$ 31,655,000	\$ 41,616,369	\$ 73,271,369
2020	32,730,000	38,934,869	71,664,869
2021	140,305,000	37,298,369	177,603,369
2022	28,405,000	35,776,869	64,181,869
2023	29,805,000	34,371,619	64,176,619
2024-2028	167,225,000	150,221,096	317,446,096
2029-2033	252,370,000	105,320,725	357,690,725
2034-2038	225,075,000	49,285,704	274,360,704
2039-2043	102,060,000	10,467,303	112,527,303
2044-2048	2,480,000	103,168	2,583,168
Total	\$ 1,012,110,000	\$ 503,396,091	\$ 1,515,506,091

ORANGE COUNTY SANITATION DISTRICT

Notes to Basic Financial Statements
For the Year Ended June 30, 2018

(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, 2018 is presented below:

	OCERS	ARBA	Total
Net pension asset - OCERS	\$ 39,571,100	\$ -	\$ 39,571,100
Deferred outflows - pensions	48,595,341	2,464,248	51,059,589
Total pension liability - ARBA	-	20,831,172	20,831,172
Deferred inflows - pensions	64,273,306	-	64,273,306
Pension expenses	2,785,617	1,612,274	4,397,891

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.

ORANGE COUNTY SANITATION DISTRICT

Notes to Basic Financial Statements
For the Year Ended June 30, 2018

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, 2017 measurement date, the following employees were covered by the benefit terms:

Inactive employees or beneficiaries currently receiving benefits	474
Inactive employees entitled to but not yet receiving benefits	113
Active employees	592
Total	1,179

ORANGE COUNTY SANITATION DISTRICT

Notes to Basic Financial Statements
For the Year Ended June 30, 2018

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 \$7,525,655 for the year ended June 30, 2018.

Contribution rates in effect for the fiscal year ended June 30, 2018 are as follows:

	Plan G	Plan H	Plan B	Plan U
Employer Contribution Rate, 7/1/17 - 6/30/18	12.33%	12.33%	10.30%	9.25%
Employee Contribution Rate, 7/1/17 - 6/30/18 (2)	6.35-12.22% (1)	5.88-12.22% (1)	6.78-12.39%	6.44-13.68%
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, 2018, 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	\$ 16,815	\$ 4,773	0.03%
Plan H	5,534,624	1,556,280	10.84%
Plan B	644,683	-	0.99%
Plan U	1,329,533	-	2.03%
Total	<u>\$ 7,525,655</u>	<u>\$ 1,561,053</u>	

Pension Assets / Liabilities: As of June 30, 2018, OCSD reported a net pension asset of \$39,571,100 for its proportionate share of OCERS' net pension asset. The net pension asset was measured as of December 31, 2017 and the total pension asset used to calculate the net pension asset was determined by an actuarial valuation as of that date. OCSD's proportion of the net pension asset 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, 2017, OCSD's proportion of the net pension liability was (0.799%), which was a decrease of 0.599% from its proportion measured as of December 31, 2016. The change in OCSD's proportion of the net pension liability during the fiscal year ended June 30, 2018 was caused by an additional contribution made in November 2016 and projections noted above.

ORANGE COUNTY SANITATION DISTRICT

Notes to Basic Financial Statements
For the Year Ended June 30, 2018

Pension Expense and Deferred Outflows/Inflows of Resources Related to Pensions: For the year ended June 30, 2018, OCSD recognized pension expense of \$2,785,617 for its proportionate share of the pension expense. At June 30, 2018 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	\$ -	\$ 15,393,406
Net difference between projected and actual investment earnings on pension plan investments	16,000,909	44,251,106
Changes of assumptions (1)	20,491,177	4,517,168
Changes in proportion and differences between employer contributions and proportionate share of contributions	1,296,565	111,626
Employer contributions paid to OCERS subsequent to the measurement date	10,806,690	-
Total	\$ 48,595,341	\$ 64,273,306

(1) The monetary effects of changes in actuarial assumptions and method totals \$20,491,177 for deferred outflows and \$4,517,168 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, 2017, Section 3. This report is available on the OCERS website at www.ocers.org.

The \$10,806,690 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
2019	\$ (5,465,917)
2020	(6,857,020)
2021	(10,219,274)
2022	(7,151,750)
2023	3,177,532
2024	31,774
Total	\$ (26,484,655)

ORANGE COUNTY SANITATION DISTRICT

Notes to Basic Financial Statements
For the Year Ended June 30, 2018

Actuarial Assumptions and Methods: The total pension liability in the December 31, 2017 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, 2017 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.

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.

ORANGE COUNTY SANITATION DISTRICT

Notes to Basic Financial Statements
For the Year Ended June 30, 2018

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, 2017:

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%
Total	<u>100.00%</u>	

Discount Rate: The discount rate used to measure the total pension liability was 7.00% for the year ended December 31, 2017. 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, 2017.

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 (Asset)	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
December 31, 2017	\$ 57,945,374	\$ (39,571,100)	\$ (118,791,140)

ORANGE COUNTY SANITATION DISTRICT

Notes to Basic Financial Statements
For the Year Ended June 30, 2018

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).

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 325 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, 2018

At June 30, 2018, the following employees were covered by the benefit terms:

Inactive employees or beneficiaries currently receiving benefits	325
Inactive employees entitled to but not yet receiving benefits	53
Active employees	<u>558</u>
Total	<u>936</u>

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 \$728,450 for the year ended June 30, 2018.

Pension Liabilities: As of June 30, 2018, OCSD reported total pension liability of \$20,831,172 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, 2018.

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, 2017	<u>\$ 18,467,361</u>
Changes in the year:	
Service cost	553,795
Interest on total pension liability	649,192
Changes of benefit terms	-
Difference between expected and actual experience	1,889,274
Changes of assumptions	-
Benefit payments (1)	(728,450)
Net changes	2,363,811
Ending balance at June 30, 2018	<u>\$ 20,831,172</u>

(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, 2018

Pension Expense and Deferred Outflows/Inflows of Resources Related to Pension: For the year ended June 30, 2018, OCSD recognized pension expense of \$1,612,274 for its ARBA plan. At June 30, 2018 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	\$ 1,603,020	\$ -
Changes of assumptions (1)	861,228	-
Net difference between projected and actual investment earnings on pension plan investments	-	-
Employer contributions over actuary projections	-	-
Total	\$ 2,464,248	\$ -

(1) The monetary effects of changes in actuarial assumptions and method totals \$861,228. These changes include passage of time, a change in the discount rate from 3.75% to 3.25%, 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
2019	\$ 409,287
2020	409,287
2021	409,287
2022	409,287
2023	409,287
2024	294,783
2025	123,030
Total	\$ 2,464,248

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) 3.25% per annum as of June 30, 2018 (measurement date)
Inflation rate	2.50% 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, 2018

Discount Rate: The discount rate used to measure the total pension liability was 3.25% as of the valuation date, July 1, 2017, and 3.25% as of the measurement date, June 30, 2018. 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 3.25% 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 (2.25%) or 1 percentage point higher (4.25%) than the current rate:

	1% Decrease	Current Discount Rate	1% Increase
Total Pension Liability	(2.25%)	(3.25%)	(4.25%)
June 30, 2018	\$ 23,803,120	\$ 20,831,172	\$ 18,384,011

(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, 2018, premiums ranged between \$360 and \$3,918 per month, depending on the plan and number of dependents covered.

At June 30, 2018, the following employees were covered by the benefit terms:

Inactive employees or beneficiaries currently receiving benefits (includes 106 paying premiums and 53 with premiums paid by OCSD)	159
Inactive employees entitled to but not yet receiving benefits	0
Active employees (includes 7 eligible for premiums paid by OCSD)	596
Total	755

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 \$953,656 and the estimated implicit subsidy was \$519,941, resulting in total payments of \$1,473,597, and retirees contributed \$1,023,232 for the year ended June 30, 2018.

OPEB Liabilities: As of June 30, 2018, OCSD reported total OPEB liability of \$5,025,395 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

ORANGE COUNTY SANITATION DISTRICT

Notes to Basic Financial Statements
For the Year Ended June 30, 2018

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, 2018.

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, 2017	\$ 6,398,694
Changes in the year:	
Service cost	18,182
Interest on total OPEB liability	177,395
Changes of benefit terms	-
Changes of assumptions	(95,279)
Benefit payments (1)	(1,473,597)
Net changes	(1,373,299)
Ending balance at June 30, 2018	\$ 5,025,395

(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, 2018, OCSD recognized OPEB expense of \$100,298 for its post-employment retiree medical benefits plan. At June 30, 2018 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 as of July 1, 2017 (valuation date) 3.62% per annum as of June 30, 2018 (measurement date)
Healthcare cost trend rate	6.00% for 2017, 5.00% for 2018 and later
Projected salary increases	3.00% per annum

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.

ORANGE COUNTY SANITATION DISTRICT

Notes to Basic Financial Statements
For the Year Ended June 30, 2018

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 3.62% as of the measurement date, June 30, 2018. 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 3.62% 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 (2.62%) or 1 percentage point higher (4.62%) than the current rate:

	1% Decrease (2.62%)	Current Discount Rate (3.62%)	1% Increase (4.62%)
Total OPEB Liability			
June 30, 2018	\$ 5,222,788	\$ 5,025,395	\$ 4,839,538

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:

	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%)
Total OPEB Liability			
June 30, 2018	\$ 4,797,343	\$ 5,025,395	\$ 5,271,841

(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, 2018, the excess of purchase price over the assets' book value was fully amortized.

ORANGE COUNTY SANITATION DISTRICT

Notes to Basic Financial Statements
For the Year Ended June 30, 2018

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 \$3,840,791 were recorded as contribution from other government during the fiscal year ended June 30, 2018. 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 credited to IRWD of (\$632,465) to Revenue Area 14 were recognized and reported as reductions to contributions from other government during the fiscal year ended June 30, 2018. 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, \$1,242,436 in annual solids capital handling charges were reported as operating revenue in Consolidated Revenue Area, and \$2,935,007 in quarterly solids operating and maintenance charges were reported as operating revenue in Revenue Area No. 14 during the fiscal year ended June 30, 2018.

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 \$483 was reported in accounts receivable and \$18,888,270 in due to other governmental agency as of June 30, 2018.

Annual Cash Reserve Requirement

The cash reserve contribution requirement from IRWD at June 30, 2018; in accordance with Amendment No. 2 to the Agreement between IRWD and OCSD Acquiring Ownership Interests, Assigning Rights, and Establishing Obligations; is \$15.4 million. This cash reserve requirement is recognized as a liability to IRWD.

(8) Commitments, Due From Other Governmental Agency, and Contingencies

Relocation of the Santa Ana Regional Interceptor: On June 29, 2010, OCSD entered into an agreement to lend the Orange County Flood Control District (OCFCD) 60 percent of the amount of the contract awarded to design and construct the relocation of the Santa Ana Regional Interceptor, but not to exceed \$72 million. On December 18, 2012, a new agreement was executed that superseded the prior agreement and reduced OCSD's maximum loan obligation to \$59,036,400 based on lower than expected construction costs. OCFCD agrees to repay the loan from any subvention funds received by OCFCD, with the total balance repaid by no later than July 1, 2022. Repayment installments will be made within 30 days equal to 60 percent of any subvention funds received by OCFCD. Interest shall accrue on the unpaid balance from July 1, 2018 at an annual interest rate of two percent until the unpaid balance has been repaid. During the fiscal year ended June 30, 2018, OCSD received loan repayments totaling \$20,472,023, leaving an outstanding loan receivable balance of \$0.

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

ORANGE COUNTY SANITATION DISTRICT

Notes to Basic Financial Statements
For the Year Ended June 30, 2018

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 will now be 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 is anticipated to begin in the spring of 2019 and be completed by January 2020. As of June 30, 2018, actual costs of \$290,896 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.

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) Restatement- Adoption of New Accounting Standard

During the year ended June 30, 2018, OCSD implemented GASB Statement No. 75. The implementation of GASB Statement No. 75 requires recognizing and measuring OPEB liabilities, deferred outflows of resources, deferred inflows of resources, and expense. The net position was not restated for deferred inflows and deferred outflows because they were not determinable at the time of implementation of GASB 75. The retroactive effect of implementing this change in reporting OPEB costs resulted in a restatement of the beginning net position. The following is a summary of the effect of this adjustment:

Beginning net position as previously reported at June 30, 2017	\$2,041,225,032
Total OPEB liability (measurement date as of July 1, 2017)	<u>(7,591,758)</u>
Net position as restated, July 1, 2017	<u><u>\$2,033,633,274</u></u>

**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
District's proportion of the net pension liability (asset)	1.13%	0.74%	(0.20%)	(0.80%)
District's proportionate share of the net pension liability (asset)	\$ 57,418,760	\$ 42,439,759	\$ (10,384,508)	\$ (39,571,100)
District's covered payroll (2)	\$ 58,641,163	\$ 59,789,927	\$ 60,000,017	\$ 62,341,796
District's proportionate share of the net pension liability (asset) as a percentage of its covered payroll	97.92%	70.98%	(17.31%)	(63.47%)
OCERS' fiduciary net position as a percentage of the total pension liability	89.61%	92.74%	101.70%	105.96%

(1) The amounts presented were determined as of the measurement date December 31.

Data for fiscal years ended June 30, 2009 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
Contractually required contribution	\$ 17,201,569	\$ 12,222,849	\$ 7,709,734	\$ 7,525,655
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>
Contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
District's covered payroll (2)	\$ 60,025,942	\$ 60,595,474	\$ 62,266,907	\$ 65,390,144
Contributions as a percentage of covered payroll	28.66%	20.17%	12.38%	11.51%

(1) Data for fiscal years ended June 30, 2009 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
District's total pension liability	\$ 16,680,614	\$ 18,313,122	\$ 18,467,361	\$ 20,831,172
District's covered-employee payroll (2)	\$ 62,139,375	\$ 62,977,577	\$ 65,120,945	\$ 68,126,103
District's total pension liability as a percentage of its covered-employee payroll	26.84%	29.08%	28.36%	30.58%

- (1) The amounts presented for each fiscal year were determined as of July 1. Data for fiscal years ended June 30, 2009 through 2014 is not available in a comparable format.
- (2) 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
Beginning balance at July 1	<u>\$ 16,680,614</u>	<u>\$ 18,313,122</u>	<u>\$ 18,467,361</u>
Changes in the year:			
Service cost	270,223	278,330	553,795
Interest on total pension liability	626,386	593,711	649,192
Changes of benefit terms	-	-	-
Changes of assumptions	1,230,327	(70,952)	1,889,274
Benefit payments (2)	<u>(494,428)</u>	<u>(646,850)</u>	<u>(728,450)</u>
Net changes	<u>1,632,508</u>	<u>154,239</u>	<u>2,363,811</u>
Ending balance at June 30	<u><u>\$ 18,313,122</u></u>	<u><u>\$ 18,467,361</u></u>	<u><u>\$ 20,831,172</u></u>

- (1) The amounts presented for each fiscal year were determined as of July 1. Data for fiscal years ended June 30, 2009 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 the District to pay ARBA benefits. The District 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,	
	2017	2018
District's total OPEB liability	\$ 6,398,694	\$ 5,025,395
District's covered-employee payroll (2)	\$ 65,120,945	\$ 68,126,103
District's total OPEB liability as a percentage of its covered-employee payroll	9.83%	7.38%

- (1) The amounts presented for each fiscal year were determined as of July 1. Data for fiscal years ended June 30, 2009 through 2016 is not available in a comparable format.
- (2) 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)

	<u>Fiscal Year Ended June 30,</u> <u>2018</u>
Beginning balance at July 1	<u>\$ 6,398,694</u>
Changes in the year:	
Service cost	18,182
Interest on total OPEB liability	177,395
Changes of benefit terms	-
Changes of assumptions	(95,279)
Benefit payments (2)	<u>(1,473,597)</u>
Net changes	<u>(1,373,299)</u>
Ending balance at June 30	<u>\$ 5,025,395</u>

- (1) The amounts presented for each fiscal year were determined as of July 1. Data for fiscal years ended June 30, 2009 through 2016 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.

(THIS PAGE INTENTIONALLY LEFT BLANK)

**ORANGE COUNTY SANITATION DISTRICT
SUPPLEMENTARY INFORMATION**

ORANGE COUNTY SANITATION DISTRICT
 Combining Area Schedule of Net Position
 June 30, 2018

	Revenue Area No. 14	Consolidated Revenue Area	Totals 2018
Current assets:			
Cash and cash equivalents	\$ 3,802,119	\$ 132,176,414	\$ 135,978,533
Investments	15,085,667	524,436,305	539,521,972
Accounts receivable, net of allowance for uncollectibles \$455,979	483	13,202,457	13,202,940
Accrued interest receivable	-	2,851,382	2,851,382
Connection fees receivable	-	3,871,076	3,871,076
Property tax receivable	-	1,227,135	1,227,135
Inventories	-	7,243,823	7,243,823
Prepaid expenses	-	1,645,412	1,645,412
Total current assets	18,888,269	686,654,004	705,542,273
Noncurrent assets:			
Restricted:			
Cash and cash equivalents	-	4,953,800	4,953,800
Accrued interest receivable	-	6,855	6,855
Unrestricted:			
Non-depreciable capital assets	13,862,535	443,874,558	457,737,093
Depreciable capital assets, net of accumulated depreciation	78,375,231	2,089,902,503	2,168,277,734
Other noncurrent assets, net	-	10,344	10,344
Net pension asset - OCERS	-	39,571,100	39,571,100
Total noncurrent assets	92,237,766	2,578,319,160	2,670,556,926
Total assets	111,126,035	3,264,973,164	3,376,099,199
Deferred outflows of resources:			
Deferred losses on defeasances	-	32,880,203	32,880,203
Deferred outflows related to pensions	-	51,059,589	51,059,589
Total defered outflows of resources	-	83,939,792	83,939,792
Total assets and deferred outflows of resources	111,126,035	3,348,912,956	3,460,038,991
Current liabilities:			
Accounts payable	-	13,365,974	13,365,974
Accrued expenses	-	15,404,746	15,404,746
Retentions payable	-	2,147,719	2,147,719
Interest payable	-	17,113,450	17,113,450
Due to other governmental agency	18,888,270	-	18,888,270
Current portion of long-term obligations	-	50,744,930	50,744,930
Total current liabilities	18,888,270	98,776,819	117,665,089
Noncurrent liabilities:			
Noncurrent portion of long-term obligations	-	1,057,454,621	1,057,454,621
Total OPEB liability	-	5,025,395	5,025,395
Net pension liability - OCERS	-	-	-
Total pension liability - ARBA	-	20,831,172	20,831,172
Total noncurrent liabilities	-	1,083,311,188	1,083,311,188
Total liabilities	18,888,270	1,182,088,007	1,200,976,277
Deferred inflows of resources:			
Deferred inflows related to pensions	-	64,273,306	64,273,306
Total liabilities and deferred inflows of resources	18,888,270	1,246,361,313	1,265,249,583
Net position:			
Net investment in capital assets:			
Collection system	16,234,789	517,005,841	533,240,630
Treatment and disposal -land	954,499	18,649,788	19,604,287
Treatment and disposal system	75,048,477	1,998,121,432	2,073,169,909
Capital assets related debt	-	(1,057,896,752)	(1,057,896,752)
Subtotal	92,237,765	1,475,880,309	1,568,118,074
Unrestricted:			
Total net position	\$ 92,237,765	\$ 2,102,551,643	\$ 2,194,789,408

ORANGE COUNTY SANITATION DISTRICT
 Combining Area Schedule of Revenues, Expenses, and Changes in Net Position
 For the Year Ended June 30, 2018

	Revenue Area No. 14	Consolidated Revenue Area	Totals 2018
Operating revenues:			
Service charges	\$ 5,418,027	\$ 310,910,737	\$ 316,328,764
Permit and inspection fees	8,245	1,162,084	1,170,329
Total operating revenues	<u>5,426,272</u>	<u>312,072,821</u>	<u>317,499,093</u>
Operating expenses other than depreciation and amortization:			
Salaries and benefits	2,593,403	64,824,636	67,418,039
Utilities	220,445	7,077,659	7,298,104
Supplies, repairs and maintenance	1,377,135	26,860,367	28,237,502
Contractual services	3,673,256	25,847,030	29,520,286
Feasibility studies	119,025	5,975,031	6,094,056
Other	234,054	6,753,970	6,988,024
Total operating expenses other than depreciation and amortization	<u>8,217,318</u>	<u>137,338,693</u>	<u>145,556,011</u>
Operating income (loss) before depreciation and amortization	(2,791,046)	174,734,128	171,943,082
Depreciation and amortization	<u>3,615,330</u>	<u>93,783,904</u>	<u>97,399,234</u>
Operating income (loss)	<u>(6,406,376)</u>	<u>80,950,224</u>	<u>74,543,848</u>
Non-operating revenues:			
Property taxes	2,781,080	91,407,273	94,188,353
Investment and interest income	44,113	3,185,643	3,229,756
Contributions from other government	3,263,403	3,538,879	6,802,282
Other	13,995	795,081	809,076
Total non-operating revenues	<u>6,102,591</u>	<u>98,926,876</u>	<u>105,029,467</u>
Non-operating expenses:			
Interest	100,319	34,910,707	35,011,026
Other	3,043	1,284,685	1,287,728
Loss on disposal of assets	5,178	190,602	195,780
Total non-operating expenses	<u>108,540</u>	<u>36,385,994</u>	<u>36,494,534</u>
Income (loss) before capital contributions	(412,325)	143,491,106	143,078,781
Capital contributions:			
Capital facilities capacity charges	-	18,077,353	18,077,353
Change in net position	(412,325)	161,568,459	161,156,134
Total net position - beginning, as restated	<u>92,650,090</u>	<u>1,940,983,184</u>	<u>2,033,633,274</u>
Total net position - ending	<u>\$ 92,237,765</u>	<u>\$ 2,102,551,643</u>	<u>\$ 2,194,789,408</u>

ORANGE COUNTY SANITATION DISTRICT

Combining Area Schedule of Cash Flows
For the Year Ended June 30, 2018

	Revenue Area No. 14	Consolidated Revenue Area	Eliminations	Totals 2018
Cash flows from operating activities:				
Receipts from customers and users	\$ 24,314,059	\$ 350,121,696	\$	\$ 374,435,755
Payments to employees	(2,593,403)	(71,373,734)	-	(73,967,137)
Payments to suppliers	(5,623,915)	(74,272,333)	-	(79,896,248)
Net cash provided by operating activities	<u>16,096,741</u>	<u>204,475,629</u>	-	<u>220,572,370</u>
Cash flows from noncapital financing activities:				
Proceeds from property taxes	2,781,080	91,499,190	-	94,280,270
Payments for other obligations	11,095	(489,611)	-	(478,516)
Net cash provided by noncapital financing activities	<u>2,792,175</u>	<u>91,009,579</u>	-	<u>93,801,754</u>
Cash flows from capital and related financing activities:				
Capital facilities capacity charges	-	17,918,938	-	17,918,938
Additions to capital assets	(3,208,326)	(113,517,355)	3,895,868	(112,829,813)
Disposal of capital assets	-	632,465	(632,465)	-
Interest paid	(100,319)	(44,140,551)	-	(44,240,870)
Principal payments on debt obligation	-	(32,141,018)	-	(32,141,018)
Contribution from other government	3,263,403	3,538,879	(3,263,403)	3,538,879
Net cash used in capital and related financing activities	<u>(45,242)</u>	<u>(167,708,642)</u>	-	<u>(167,753,884)</u>
Cash flows from investing activities:				
Proceeds from the sale of investments	(5,943,508)	187,490,842	-	181,547,334
Purchases of investments	(9,284,057)	(300,184,495)	-	(309,468,552)
SARI project payments	-	20,472,023	-	20,472,023
Interest received	186,010	7,207,876	-	7,393,886
Net cash used in investing activities	<u>(15,041,555)</u>	<u>(85,013,754)</u>	-	<u>(100,055,309)</u>
Net increase in cash and cash equivalents	3,802,119	42,762,812	-	46,564,931
Cash and cash equivalents, beginning of year	-	94,367,402	-	94,367,402
Cash and cash equivalents, end of year	<u>\$ 3,802,119</u>	<u>\$ 137,130,214</u>	<u>\$</u>	<u>\$ 140,932,333</u>
Reconciliation of operating income (loss) to net cash provided by (used in) operating activities:				
Operating income (loss)	\$ (6,406,376)	\$ 80,950,224	\$	\$ 74,543,848
Adjustments to reconcile operating income (loss) to net cash provided by operating activities:				
Depreciation and amortization	3,615,330	93,783,904	-	97,399,234
Bad debt expense (net recoveries)	-	219,792	-	219,792
(Increase)/decrease in operating assets:				
Accounts receivable	33,893,622	(1,636,575)	-	32,257,047
Inventories	-	(75,275)	-	(75,275)
Prepaid and other assets	-	87,640	-	87,640
Increase/(decrease) in operating liabilities:				
Accounts payable	-	(2,012,182)	-	(2,012,182)
Accrued expenses	-	150,961	-	150,961
Due to other governmental agency	(15,005,835)	39,685,450	-	24,679,615
Net pension/OPEB liability	-	(8,463,282)	-	(8,463,282)
Pension/OPEB/accrued leave payable	-	1,192,318	-	1,192,318
Compensated absences	-	209,235	-	209,235
Claims and judgments	-	383,419	-	383,419
Net cash provided by (used in) operating activities	<u>\$ 16,096,741</u>	<u>\$ 204,475,629</u>	<u>\$</u>	<u>\$ 220,572,370</u>
Noncash activities:				
Unrealized (loss) on the fair value of investments	\$ (141,898)	\$ (4,932,908)	\$	\$ (5,074,806)
Receivable from non-operating activities	-	4,085,372	-	4,085,372
Capital assets acquired through accounts payable	-	5,377,210	-	5,377,210
Capital facilities capacity charges acquired	-	158,415	-	158,415

**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.

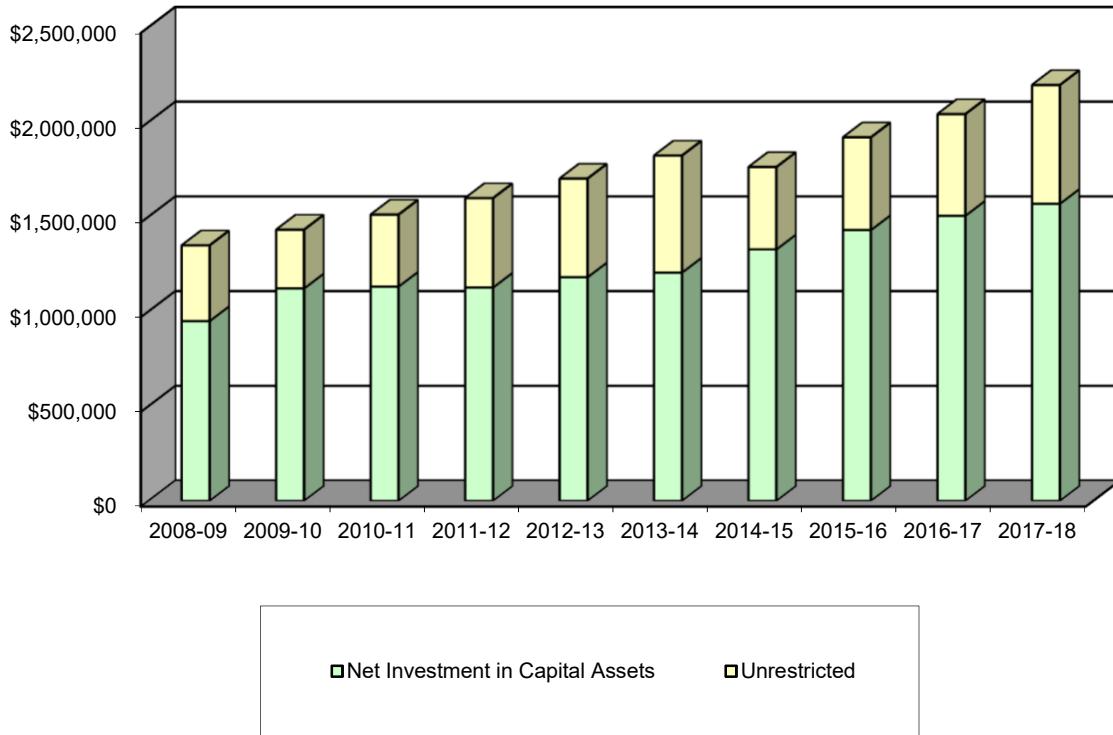
<u>Contents</u>	<u>Pages</u>
Financial Position and Trends These schedules contain current and trend information to help the reader understand OCSD's financial position and how OCSD's financial performance and well-being have changed over time.	62 - 66
Revenue Capacity These schedules contain information 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 - 73
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.	74 - 77
Demographic and Economic Factors These schedules offer demographic information to help the reader understand the environment within which OCSD's financial activities take place.	78 - 81

ORANGE COUNTY SANITATION DISTRICT

Net Position by Component

(Dollars in Thousands)

Last Ten Fiscal Years



Net Investment in Capital Assets Unrestricted

Fiscal Year	Net Investment in Capital Assets	Unrestricted	Total Net Position
2008-09	\$ 948,869	\$ 399,452	\$ 1,348,321
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 ⁽¹⁾
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 ⁽²⁾
2015-16	1,429,269	489,303	1,918,572 ⁽³⁾
2016-17	1,504,898	536,327	2,041,225
2017-18	1,568,118	626,671	2,194,789 ⁽⁴⁾

⁽¹⁾ Beginning net position restated due to implementation of GASB 65.

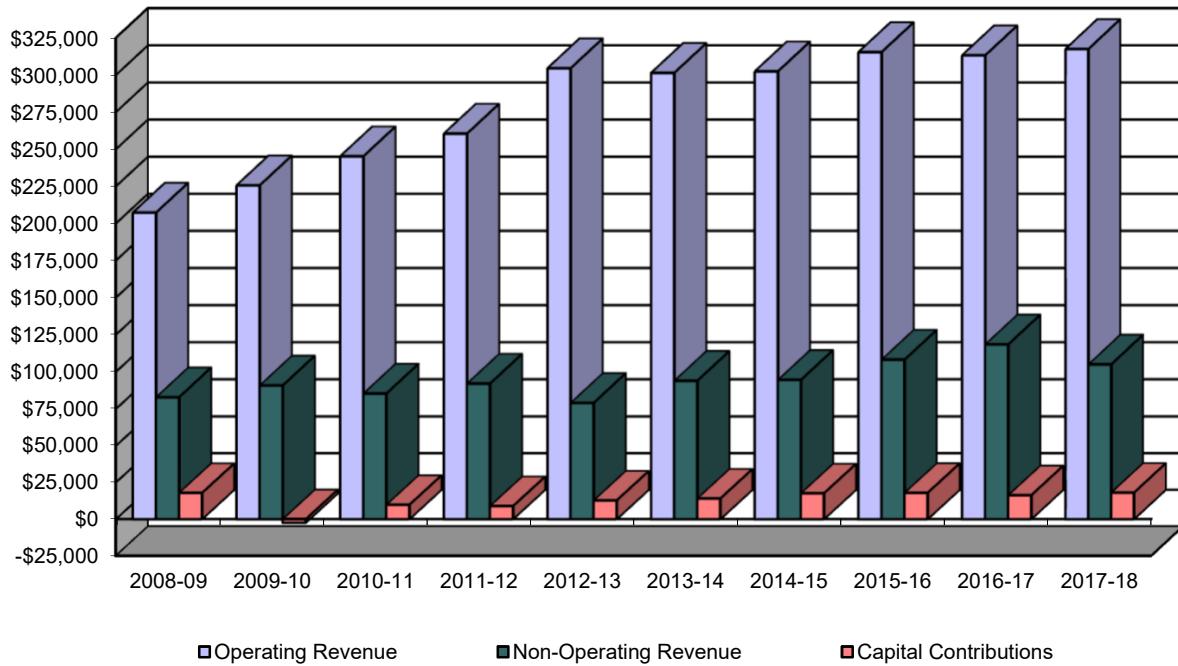
⁽²⁾ Beginning net position restated due to implementation of GASB 68.

⁽³⁾ Beginning net position restated due to implementation of GASB 73.

⁽⁴⁾ 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

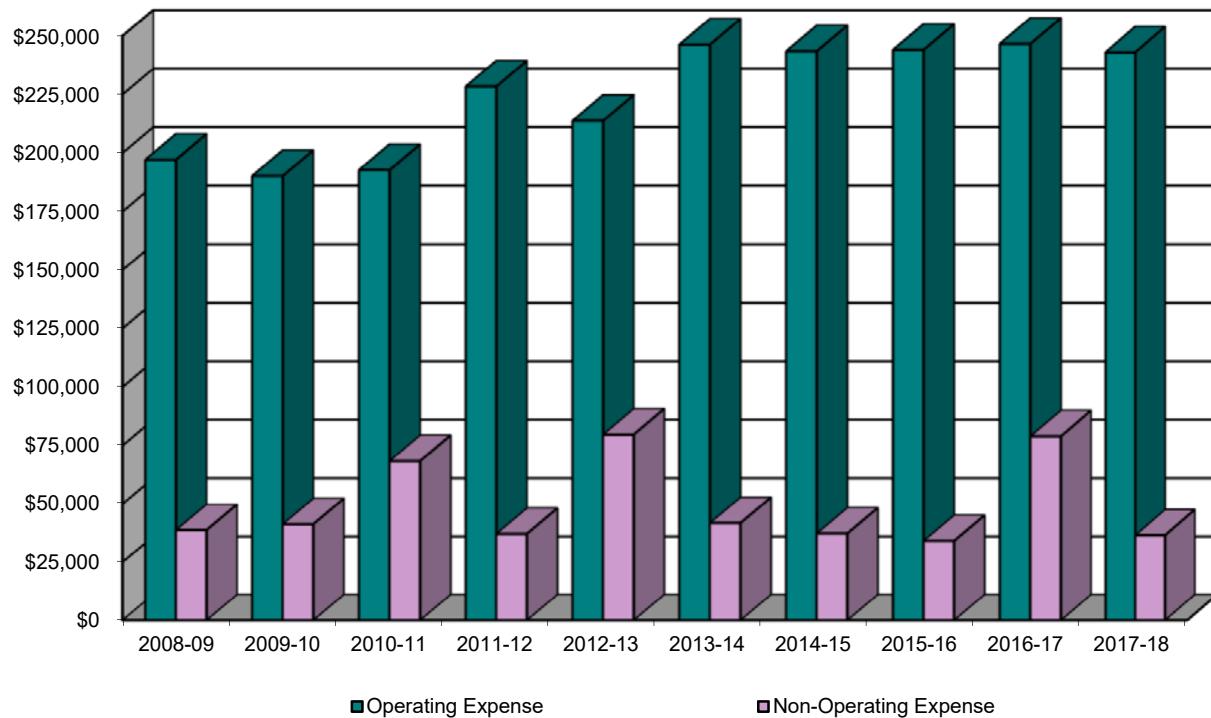


Fiscal Year	Operating Revenue			Non-Operating Revenue				Total Non-Operating	Capital Contributions		
	Permit &		Total Operating	Property Taxes	Interest	Other					
	Service Charges	Inspection Fees									
2008-09	\$ 206,422	\$ 895	\$ 207,317	\$ 66,427	\$ 14,836	\$ 1,634	\$ 82,897	\$ 17,937			
2009-10	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			

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
2008-09	\$ 67,498	\$ 7,242	\$ 89,816	\$ 32,520	\$ 197,076	\$ 24,899	\$ 13,842	\$ 38,741
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

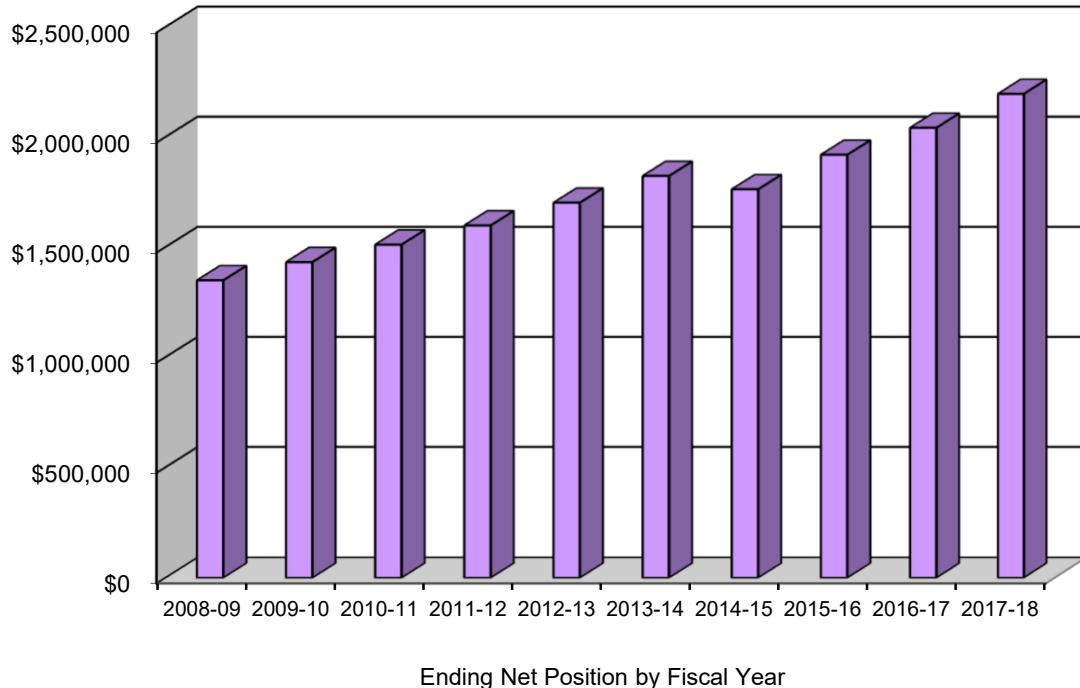
Source: Orange County Sanitation District's Financial Management Division.

ORANGE COUNTY SANITATION DISTRICT

Change in Net Position

(Dollars in Thousands)

Last Ten Fiscal Years



Ending Net Position by Fiscal Year

Fiscal Year	Total Revenues	Total Expenses	Change in Net Position	Beginning Net Position	Ending Net Position
2008-09	\$ 308,151	\$ 235,817	\$ 72,334	\$ 1,275,987	\$ 1,348,321
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 ⁽¹⁾	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 ⁽²⁾	1,761,844
2015-16	441,650	278,082	163,568	1,755,004 ⁽³⁾	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 ⁽⁴⁾	2,194,789

⁽¹⁾ Beginning net position restated due to implementation of GASB 65.

⁽²⁾ Beginning net position restated due to implementation of GASB 68.

⁽³⁾ Beginning net position restated due to implementation of GASB 73.

⁽⁴⁾ 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
2008-09	\$ 172	\$ 57	\$ 172	\$ 133	\$ 534
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

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.

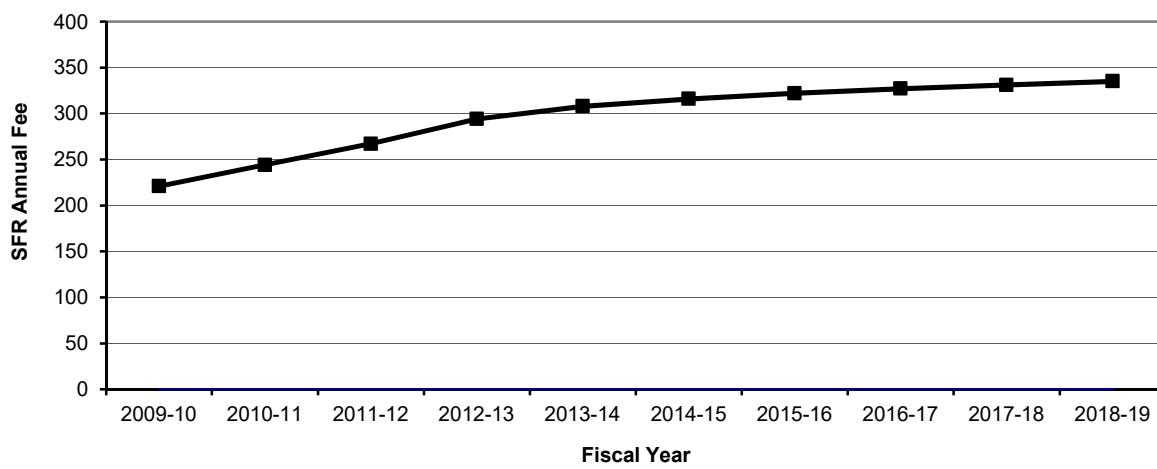
ORANGE COUNTY SANITATION DISTRICT

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>
2009-10	\$ 221.00
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

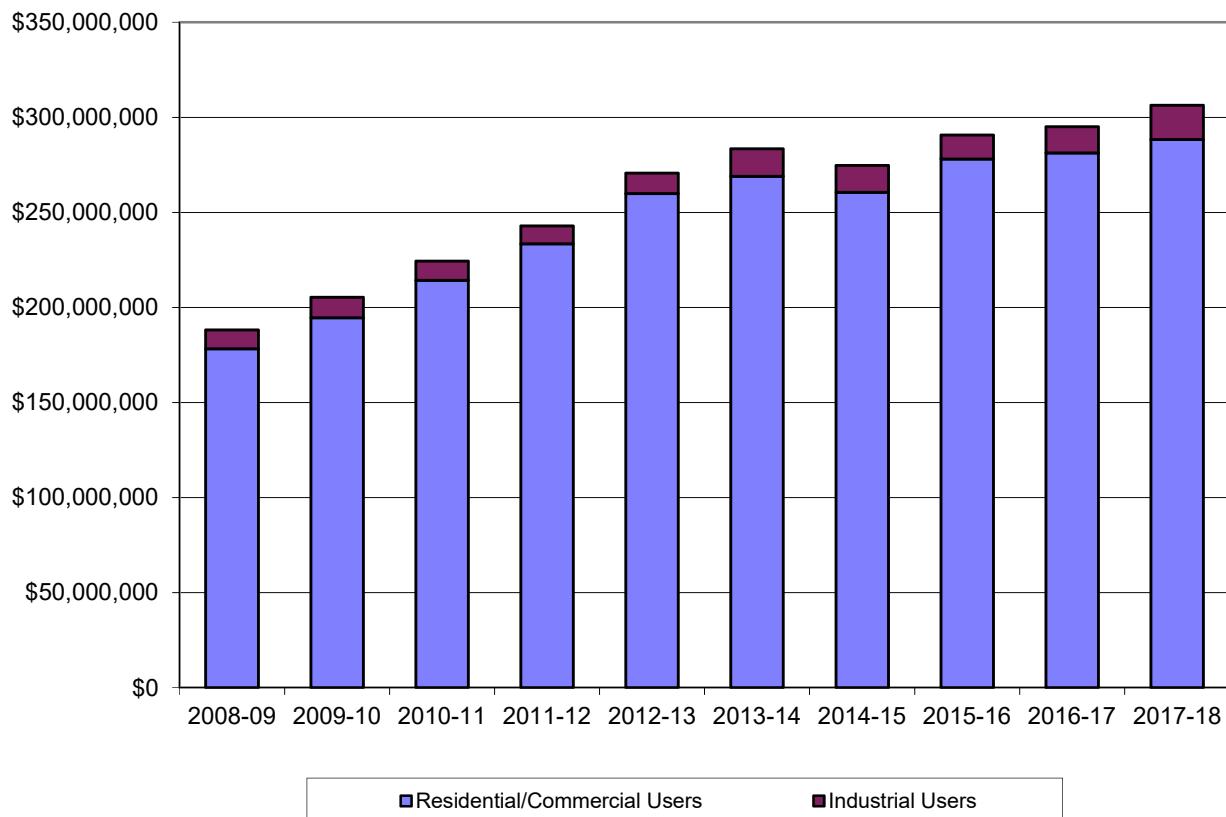
**Annual Sewer Service Fees
Single Family Residence**



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
2008-09	887,290	\$ 178.3	95%	515	\$ 9.9	5%
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%



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

ORANGE COUNTY SANITATION DISTRICT

Principal Sewer Service Customers
For the Prior Fiscal Year and Nine Years Ago

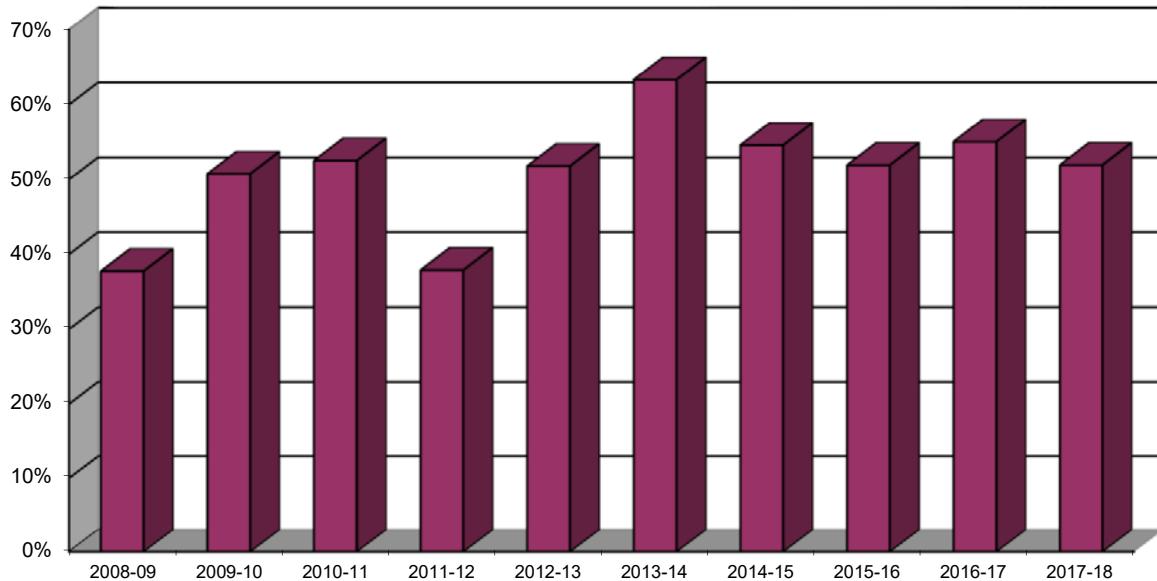
Customer	Fiscal Year Ended 6/30/17 ⁽¹⁾				Fiscal Year Ended 6/30/09			
	Industrial Permittee Service Charges		Rank	% to Total Service Charge Revenue	Industrial Permittee Service Charges		Rank	% to Total Service Charge Revenue
House Foods America Corp.	\$ 1,328,551	1		0.43%	\$ 543,277	5		0.26%
Kimberly-Clark Worldwide, Inc.	1,139,233	2		0.36%	1,091,757	1		0.51%
Pulmuone Wildwood, Inc.	749,655	3		0.24%				
Stremicks Heritage Foods, LLC	678,705	4		0.22%	573,353	4		0.27%
MCP Foods, Inc.	676,563	5		0.22%	1,045,850	2		0.49%
Ameripac Inc.	593,679	6		0.19%	459,905	6		0.22%
Jazz Semiconductor	549,292	7		0.18%				
Nor-Cal Beverage Co. Inc (Main)	538,242	8		0.17%	357,354	8		0.17%
Van-Law	528,980	9		0.17%				
Cargill, Inc.	427,204	10		0.14%				
Alstyle Apparel-A&G Inc.					849,942	3		0.40%
Pepsi-Cola Bottling Group					391,780	7		0.18%
Favorite Foods					324,637	9		0.15%
Orange City Mills Ltd Partnership					346,794	10		0.16%
	<u>\$ 7,210,104</u>			<u>2.32%</u>	<u>\$ 5,984,649</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.

⁽¹⁾ Current fiscal year information not yet available. Prior year information shown has been revised.

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



Fiscal Year	Principal (1)	Interest (4)	Total Debt Service (3)	Total Operating Expenses (2)	Ratio of Debt Service to Total Operating Expenses
2008-09	\$ 21,305	\$ 40,840	\$ 62,145	\$ 164,556	37.77%
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	150,252	55.05
2017-18	32,140	43,466	75,606	145,556	51.94

Notes

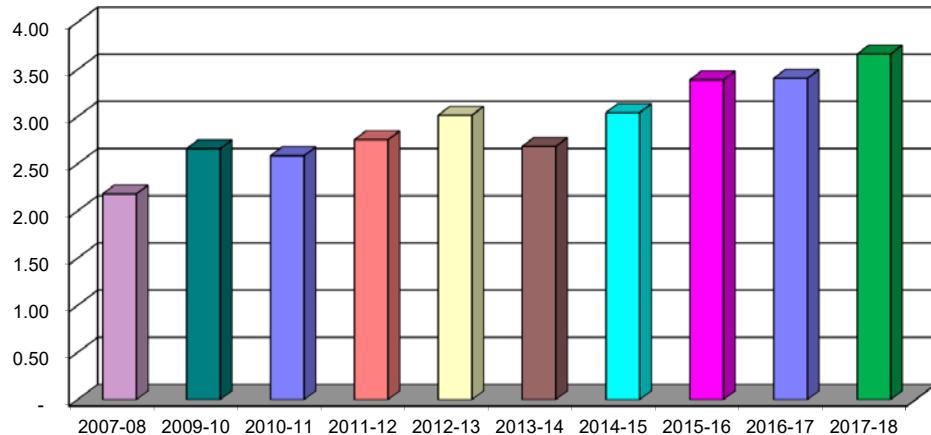
- (1) - Excludes principal reductions due to advanced refunding.
- (2) - Excludes depreciation and amortization expense.
- (3) - Debt consists of certificates of participation, revenue obligations, and anticipation notes.
- (4) - Excludes amortization of premium/discount and deferred amount.

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,									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Operating & Non-operating Revenues:										
Service Charges, Net of Refunds-Regional	\$ 178.3	\$ 194.5	\$ 214.3	\$ 233.4	\$ 259.8	\$ 269.0	\$ 260.5	\$ 278.0	\$ 281.2	\$ 288.4
Service Charges, Net of Refunds-Local (3)	5.6	5.6	5.7	5.7	5.8	5.7	5.5	5.7	1.3	(0.1)
Industrial Sewer Service Charges	9.9	10.8	10.1	9.5	10.8	14.4	14.2	12.6	13.8	17.9
SAWPA Assessment	3.9	6.6	4.9	3.6	2.7	2.4	2.7	3.2	3.3	2.7
IRWD Assessment	7.7	6.7	18.2	14.2	25.6	19.6	26.4	26.6	36.0	9.9
Ad Valorem Taxes	66.4	64.8	64.3	67.9	79.2	74.9	79.8	84.4	88.3	94.2
Interest Earnings	14.8	19.2	10.1	15.7	(3.9)	6.5	4.8	9.2	3.1	3.2
Other Revenues	3.6	8.4	3.0	2.5	3.7	3.0	3.2	4.0	5.0	6.4
Total Revenues	290.2	316.6	330.6	352.5	383.7	395.5	397.1	423.7	432.0	422.6
Operating Expenses (1)	164.6	138.1	143.4	172.3	149.8	146.4	149.2	153.5	150.3	145.6
Net Revenues	\$ 125.6	\$ 178.5	\$ 187.2	\$ 180.2	\$ 233.9	\$ 249.1	\$ 247.9	\$ 270.2	\$ 281.7	\$ 277.0
Debt Service Requirements										
Principal Payments	21.3	24.0	25.9	14.4	24.0	39.6	27.9	29.4	35.6	32.1
Interest Payments	36.3	43.1	46.5	51.0	53.6	53.2	53.6	50.3	47.1	43.5
Total Debt Service Requirements	\$ 57.6	\$ 67.1	\$ 72.4	\$ 65.4	\$ 77.6	\$ 92.8	\$ 81.5	\$ 79.7	\$ 82.7	\$ 75.6
Coverage Ratios	2.18	2.66	2.59	2.76	3.01	2.68	3.04	3.39	3.41	3.66
Ending Reserves (2)	\$ 401.0	\$ 344.0	\$ 420.0	\$ 439.0	\$ 465.0	\$ 542.0	\$ 428.0	\$ 428.0	\$ 404.0	\$ 580.0

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

Computation of Direct and Overlapping Debt

June 30, 2018

	<u>Total Debt 6/30/2018</u>	<u>% Applicable (1)</u>	<u>District's Share of Debt 6/30/18</u>
<u>OVERLAPPING TAX AND ASSESSMENT DEBT (Based on all property assessed valuation of \$418,360,472,026):</u>			
Metropolitan Water District of Southern California	\$ 60,600,000	15.253%	\$ 9,243,318
Coast Community College District	781,334,504	99.382	776,505,857
North Orange County Joint Community College District	206,054,001	97.477	200,855,259
Rancho Santiago Community College District and School Facilities Improvement Dist. No. 1	368,129,249	99.019 & 100.000	365,708,786
Garden Grove Unified School District	328,540,160	100.000	328,540,160
Irvine Unified School District School Facilities Improvement District No. 1	95,000,000	100.000	95,000,000
Los Alamitos Unified School District School Facilities Improvement District No. 1	103,895,227	96.602	100,364,867
Newport Mesa Unified School District	266,335,606	99.995	266,322,289
Orange Unified School District	188,000,000	97.921	184,091,480
Placentia-Yorba Linda Unified School District	236,974,879	98.979	234,555,365
Saddleback Valley Unified School District	113,365,000	11.579	13,126,533
Santa Ana Unified School District	247,026,073	100.000	247,026,073
Tustin Unified School District School Facilities Improvement District No. 2002-1	45,094,043	99.958	45,075,104
Tustin Unified School District School Facilities Improvement District No. 2008-1	86,860,000	99.957	86,822,650
Tustin Unified School District School Facilities Improvement District No. 2012-1	45,410,000	99.970	45,396,377
Other Unified School Districts	273,876,624	0.146-99.985	16,948,510
Anaheim Union High School District	200,528,955	100.000	200,528,955
Fullerton Joint Union High School District	169,665,000	91.701	155,584,502
Huntington Beach Union High School District	187,014,998	99.026	185,193,472
School Districts	621,258,502	97.384-100.000	619,508,763
Irvine Ranch Water District Improvement Districts	563,322,680	Various	500,987,763
City of Anaheim Community Facilities Districts	66,960,000	100.000	66,960,000
Irvine Unified School District Community Facilities Districts	635,755,000	100.000	635,755,000
Tustin Unified School District Community Facilities Districts	230,815,000	100.000	230,815,000
City of Tustin Community Facilities Districts	99,155,000	100.000	99,155,000
Other Community Facilities Districts	470,131,990	99.989-100.000	470,131,337
Orange County Assessment Districts	37,850,000	100.000	37,850,000
City of Irvine 1915 Act Bonds	808,032,000	100.000	808,032,000
Other 1915 Act Bonds	9,612,735	100.000	9,612,735
TOTAL OVERLAPPING TAX AND ASSESSMENT DEBT			\$7,035,697,155
DIRECT AND OVERLAPPING GENERAL FUND DEBT:			
Orange County General Fund Obligations	\$ 210,347,000	75.026%	\$ 157,814,940
Orange County Pension Obligation Bonds	383,564,389	75.026	287,773,018
Orange County Board of Education Certificates of Participation	13,990,000	75.026	10,496,137
Coast Community College District Certificates of Participation	3,285,000	99.382	3,264,699
North Orange Regional Occupation Program Certificates of Participation	9,610,000	99.499	9,561,854
Los Alamitos Unified School District Certificates of Participation	41,431,230	96.891	40,143,133
Orange Unified School District Certificates of Participation and Benefit Obligations	110,343,225	97.921	108,049,190
Placentia-Yorba Linda Unified School District Certificates of Participation	94,175,355	98.979	93,213,825
Santa Ana Unified School District Certificates of Participation	69,817,854	100.000	69,817,854
Other Unified School District General Fund Obligations	21,680,000	Various	16,684,798
Union High School District Certificates of Participation	121,456,090	Various	119,235,762
School District Certificates of Participation	106,498,253	Various	106,090,325
City of Anaheim General Fund Obligations	606,340,522	99.215	601,580,749
City of Costa Mesa General Fund Obligations	46,500,000	100.000	46,500,000
City of Garden Grove General Fund Obligations	23,175,000	100.000	23,175,000
City of Huntington Beach General Fund Obligations	43,268,254	98.728	42,717,882
City of La Habra General Fund Obligations	20,890,000	100.000	20,890,000
City of Newport Beach Certificates of Participation	107,410,000	99.994	107,403,555
City of Santa Ana General Fund Obligations	52,325,000	100.000	52,325,000
Other City General Fund Obligations	93,339,428	Various	80,029,718
Orange County Sanitation District	0	100.000	0 (2)
TOTAL GROSS OVERLAPPING GENERAL FUND DEBT			\$1,996,767,439
Less: City of Anaheim supported obligations			601,580,749
TOTAL NET OVERLAPPING GENERAL FUND DEBT			\$1,395,186,690
OVERLAPPING TAX INCREMENT DEBT (Successor Agencies):	\$968,560,375	58.495-100.000%	\$965,136,241
TOTAL DIRECT DEBT			\$0
GROSS OVERLAPPING & COMBINED TOTAL DEBT			\$9,997,600,835 (3)
NET OVERLAPPING & COMBINED TOTAL DEBT			\$9,396,020,086
(1) The percentage of overlapping debt applicable to the district is estimated using taxable assessed property value. Applicable percentages were estimated by determining the portion of the overlapping district's assessed value that is within the boundaries of the sanitation district divided by the district's total taxable assessed value.			
(2) Excludes wastewater revenue certificates of participation. Previously classified certificates of participation have been reclassified as district revenue supported issues and are no longer included as direct debt in the debt statement.			
(3) Excludes tax and revenue anticipation notes, enterprise revenue, mortgage revenue and non-bonded capital lease obligations. Qualified Zone Academy Bonds are included based on principal due at maturity.			
Ratios to:			
Land and Improvement Assessed Valuation (\$416,300,856,879)	Total Overlapping Tax and Assessment Debt 1.69%	Gross Combined Total Debt 2.40%	Net Combined Total Debt 2.26%
All Property Assessed Valuation (\$418,360,472,026)			
Redevelopment Incremental Valuation (\$58,409,937,717)		2.39%	2.25%
			1.65%

ORANGE COUNTY SANITATION DISTRICT

Ratios of Outstanding Debt

Last Ten Fiscal Years

Fiscal Year	(5) Total Outstanding Debt	(3) Median Family Income (1)	Debt as a Percentage of Median Family Income	(4) Population Estimate (2)	Debt per Capita
2008-09	\$ 1,262,936,747	\$ 86,100	0.007%	2,522,820	500.61
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

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

Fiscal Year	Millions of Gallons of Wastewater Treated	Collection, Treatment & Disposal Cost per Million Gallons	Total Operating Costs (In Thousands)	Total Non-Operating Costs (In Thousands)	Total Operating Revenues (In Thousands)	Total Non-Operating Revenues (In Thousands)
	Per Day					
2008-09	211	\$ 1,576.67	\$ 197,076	\$ 38,741	\$ 207,317	\$ 82,897
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

Total expenses in FY 2017-18 increased \$43.6 million, or 18.5 percent since FY 2008-09, 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.

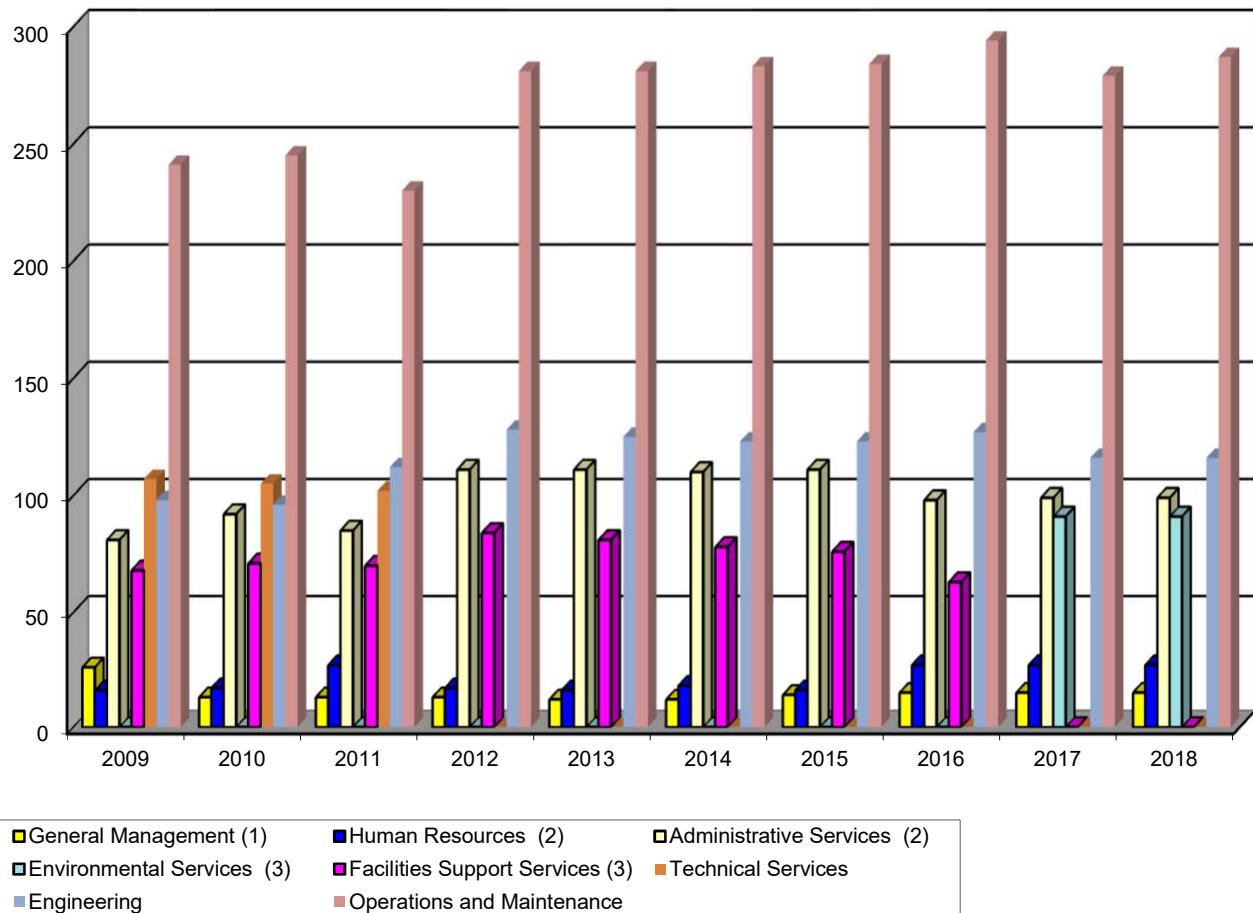
Depreciation expense represents 148.7 percent of the increase as a result of the expansion in capital facilities and the financing associated with the expansion. This increase is offset by a decrease in maintenance, chemicals, other operating and non-operating costs. In FY 2017-18 personnel expenses decreased 9.3 percent over the prior year. This decrease is mainly caused by a reduction in the OCERS retirement contribution rate as a result of paying down the unfunded actuarial accrued liability over the previous three years. The full-time equivalent positions authorized increased by 8 in FY 2017-18.

As depicted from the chart above, actual wastewater treatment flows were 211 mgd in FY 2008-09. The last several years of California's record-breaking drought and water conservation efforts have resulted in FY 2017-18 flows of only 185 mgd, a decrease of 26 mgd or 12.3 percent since FY 2008-09.

Source: Orange County Sanitation District.

ORANGE COUNTY SANITATION DISTRICT

Authorized Full-time Equivalents by Function
Last Ten Fiscal Years



General Management (1)	Human Resources (2)	Administrative Services (2)
Environmental Services (3)	Facilities Support Services (3)	Technical Services
Engineering		Operations and Maintenance

	Fiscal Year Ending June 30,										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
General Management (1)	26	13	13	13	12	12	14	15	15	15	
Human Resources (2)	16	17	27	17	16	18	16	27	27	27	
Administrative Services (2)	81	92	85	111	111	110	111	98	99	99	
Environmental Services (3)	-	-	-	-	-	-	-	-	91	91	
Facilities Support Services (3)	68	71	70	84	81	78	76	63	-	-	
Technical Services	107	105	102	-	-	-	-	-	-	-	
Engineering	98	96	112	128	125	123	123	127	116	116	
Operations and Maintenance	241	245	230	281	281	283	284	294	279	287	
Total FTE's	637	639	639	634	626	624	624	624	627	635	

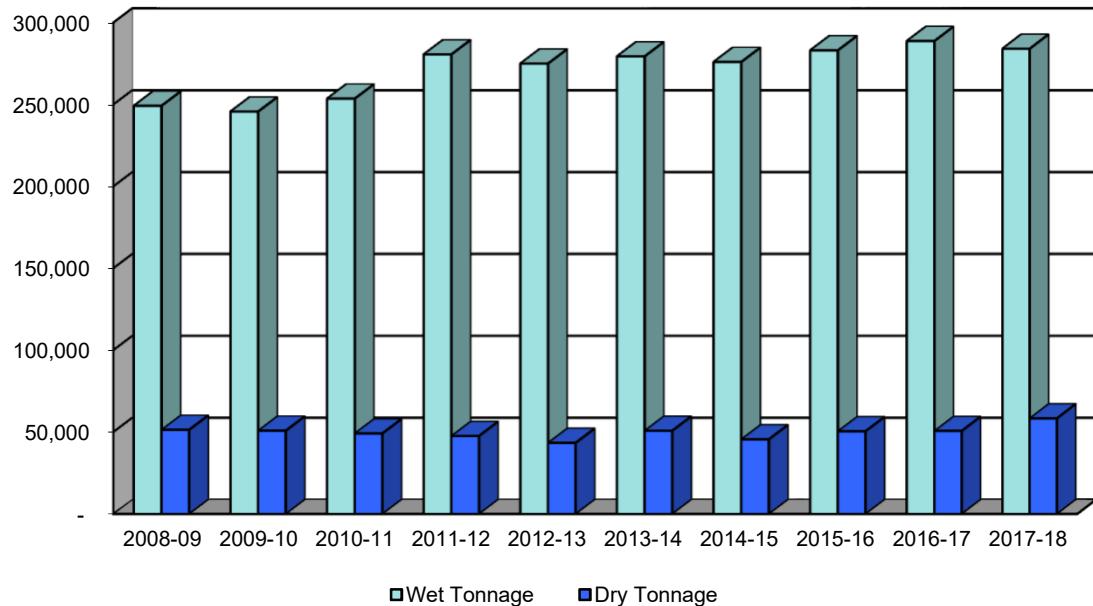
Notes

- (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>
2008-09	249,202	51,342
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

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

ORANGE COUNTY SANITATION DISTRICT

Capital Asset Statistics
Last Ten Fiscal Years

Fiscal Year	Miles of Trunk & Subtrunk Sewers	Number of Pump Stations	Primary Treatment Capacity (1)	Secondary Treatment Capacity (1)
2008-09	582	17	376	212
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

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
2008-09	3,135,000	\$ 145,247,447 (3)	\$ 46,331	\$ 86,100	504,136	9.3%
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	174,586,000 (4)	56,065	84,900	500,487	5.2%
2014-15	3,148,000	188,472,000 (4)	59,870	85,900	497,116	4.3%
2015-16	3,183,000	196,921,000 (4)	61,866	85,000	493,030	4.4%
2016-17	3,194,000	205,389,000 (4)	64,305	88,000	490,430	3.8%
2017-18	3,221,000	215,479,000 (4),(8)	66,898	92,700	485,835	3.3%

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, 2018

	Population as of January 1, 2018
Anaheim	357,084
Brea	44,890
Buena Park	83,995
Costa Mesa	115,296
Cypress	49,978
Fountain Valley	56,920
Fullerton	144,214
Garden Grove	176,896
Huntington Beach	202,648
Irvine	276,176
La Habra	62,850
La Palma	15,948
Los Alamitos	11,863
Newport Beach	87,182
Orange	141,952
Placentia	52,755
Santa Ana	338,247
Seal Beach	25,984
Stanton	39,470
Tustin	82,344
Villa Park	5,951
Westminster	94,476
Yorba Linda	69,121
Subtotal Cities ⁽¹⁾	2,536,240
Estimated Population Served in Unincorporated Areas ⁽²⁾	73,179
	<u>2,609,419</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

Employers	Fiscal Year Ended 6/30/18			Fiscal Year Ended 6/30/09		
	Number of Employees (2)	Rank	Percentage of Total County Employment (3)	Number of Employees (2)	Rank	Percentage of Total County Employment (4)
Walt Disney Co.	30,000	1	1.93%	20,000	1	1.35%
University of California, Irvine	23,605	2	1.52%	17,500	3	1.18%
County of Orange	17,146	3	1.11%	18,668	2	1.26%
St. Joseph Health	13,786	4	0.89%	10,656	4	0.72%
Kaiser Permanente	7,800	5	0.50%			
Boeing Co.	6,103	6	0.39%	8,100	5	0.55%
Albertsons Southern California	6,057	7	0.39%			
Wal-Mart Stores Inc.	6,000	8	0.39%			
Hoag Memorial Hospital	5,680	9	0.37%			
Target Corp.	5,400	10	0.35%	6,100	7	0.41%
Yum! Brands Incorporated				7,000	6	0.47%
SuperValu, Inc.				6,082	8	0.41%
California State University, Fullerton				5,768	9	0.39%
Bank of America Corp.				5,500	10	0.37%
Total	121,577		7.84%	105,374		7.11%

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 1,551,100 as of June 2018.
- (4) - Data Source: State of California, Employment Development Department.
 - Percentage is calculated by dividing employees by total employment of 1,477,500 as of June 2009.

ORANGE COUNTY SANITATION DISTRICT

Operating Indicators
June 30, 2018

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:

Midway City Sanitary District
Costa Mesa 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

Governing Body:	25-member Board of Directors
Authorized Full-Time Equivalent Employees:	635
Operational Date:	July 1, 1954
Authority:	California Health & Safety Code Section 4700 et. seq.
Services:	Wastewater collection, treatment, and disposal
Service Area:	479 square miles
Population Served:	2.6 million
Total Miles of Sewers (including force mains):	396 miles
Number of Pumping Stations:	17

Wastewater System Treatment Capacities (Million Gallons per Day)

	Actual Flows FY17-18	Existing Primary Treatment Capacity	Existing Secondary Treatment Capacity
Plant 1	121	208	182
Plant 2	64	168	150
Total	<u>185</u>	<u>376</u>	<u>332</u>

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

(THIS PAGE INTENTIONALLY LEFT BLANK)

**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, 2018

	Shares Par	Cost Base	Market Value Base	% of Total	Net Unrealized Gain/(Loss) Base
INVESTMENT PORTFOLIO:					
CASH & CASH EQUIVALENTS (U.S. DOLLAR):					
FINANCE	\$ 2,000,000	\$ 2,003,880	\$ 2,000,730	0.32%	\$ (3,150)
FIRST AMERICAN SHORT TERM FDS	15,255,857	15,255,857	15,255,857	2.47%	-
SHORT TERM FUNDS	2,000,000	1,998,300	1,999,700	0.32%	1,400
SUPRANATIONAL	5,000,000	4,979,075	4,997,100	0.81%	18,025
U. S. GOVERNMENT	21,000,000	20,932,717	21,000,000	3.40%	67,283
US AGY - SHORT TERM CASH EQUIV	33,255,000	33,194,553	33,206,423	5.37%	11,870
SUBTOTAL - CASH & CASH EQUIVALENTS	78,510,857	78,364,382	78,459,810	12.70%	95,428
FIXED INCOME SECURITIES (U.S. DOLLAR):					
COMMERCIAL PAPER	27,100,000	26,893,589	26,964,147	4.36%	70,558
CONSUMER DISCRETIONARY	5,500,000	5,544,240	5,476,800	0.89%	(67,440)
CONSUMER STAPLES	3,880,000	3,878,991	3,908,867	0.63%	29,876
ENERGY	8,850,000	8,856,037	8,661,562	1.40%	(194,475)
FINANCE	62,008,000	61,419,298	58,744,606	9.51%	(2,674,692)
FIXED INCOME FUNDS OTHER	2,950,000	2,941,423	2,943,775	0.48%	2,352
HEALTH CARE	4,000,000	4,009,675	3,981,040	0.64%	(28,635)
INDUSTRIAL	9,860,000	9,883,495	9,820,463	1.59%	(63,032)
INFORMATION TECHNOLOGY	20,715,000	20,582,925	20,178,517	3.27%	(404,408)
INVESTMENT GRADE-MUNI REVENUE	4,240,000	4,307,634	4,382,355	0.71%	74,721
MATERIALS TRANSPORTATION	1,205,000	1,198,514	1,199,324	0.19%	810
MTG RELATED SECURITY	36,310,853	36,260,363	36,224,006	5.86%	(36,357)
SHORT TERM FUNDS	10,825,000	10,817,731	10,817,523	1.75%	(208)
SUPRANATIONAL	36,005,000	35,739,638	35,062,238	5.67%	(677,400)
U. S. GOVERNMENT	210,908,222	208,980,724	207,253,688	33.54%	(1,727,036)
U.S. GOVERNMENT TIPS	10,972,312	10,827,592	10,665,636	1.73%	(161,956)
US AGY - LONG TERM ISSUES	94,865,000	94,552,136	93,237,425	15.09%	(1,314,711)
SUBTOTAL - FIXED INCOME SECURITIES	550,194,387	546,694,005	539,521,972	87.30%	(7,172,033)
TOTAL INVESTMENT PORTFOLIO	\$ 628,705,244	625,058,387	617,981,782	100.00%	\$ (7,076,605)
DEMAND DEPOSITS AND CASH ON HAND		2,414,045	2,414,045		
MONIES HELD WITH FISCAL AGENTS		4,953,800	4,953,800		
MONIES WITH THE LOCAL AGENCY INVESTMENT FUND		55,208,090	55,104,678		
TOTAL CASH AND INVESTMENTS		\$ 687,634,322	\$ 680,454,305		

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

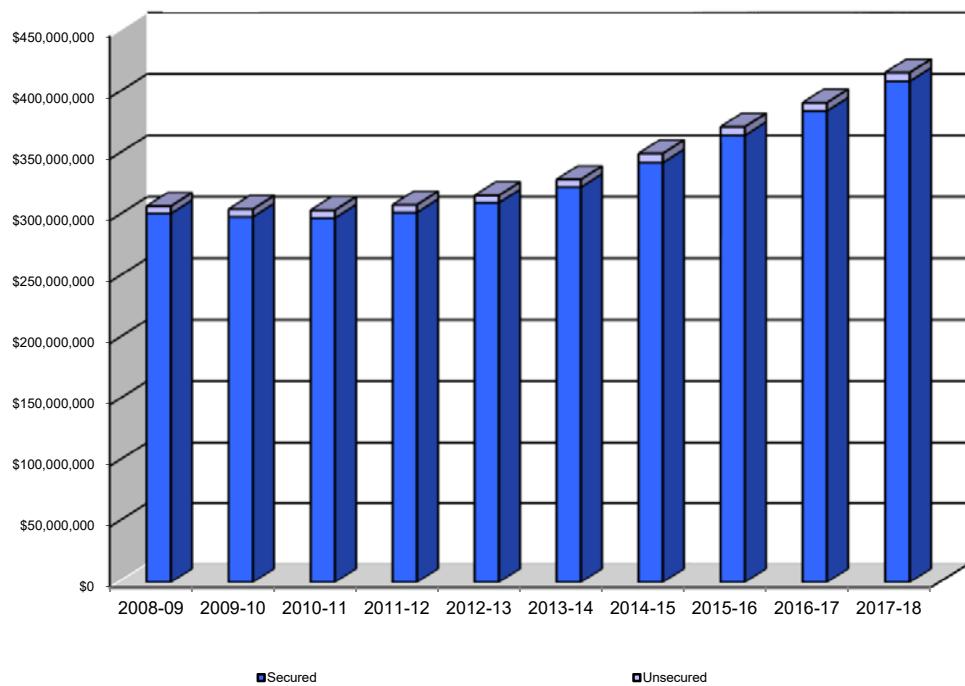
Fiscal Year	Tax Rate				OCSD's Average Share of Basic Levy
	Basic Levy	Obligation Bonds	Total Tax Rate	OCSD	
	1958 General				
2008-09	1.00%	0.00%	1.00%		1.64%
2009-10	1.00%	0.00%	1.00%		1.63%
2010-11	1.00%	0.00%	1.00%		1.64%
2011-12	1.00%	0.00%	1.00%		1.64%
2012-13	1.00%	0.00%	1.00%		1.64%
2013-14	1.00%	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%

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

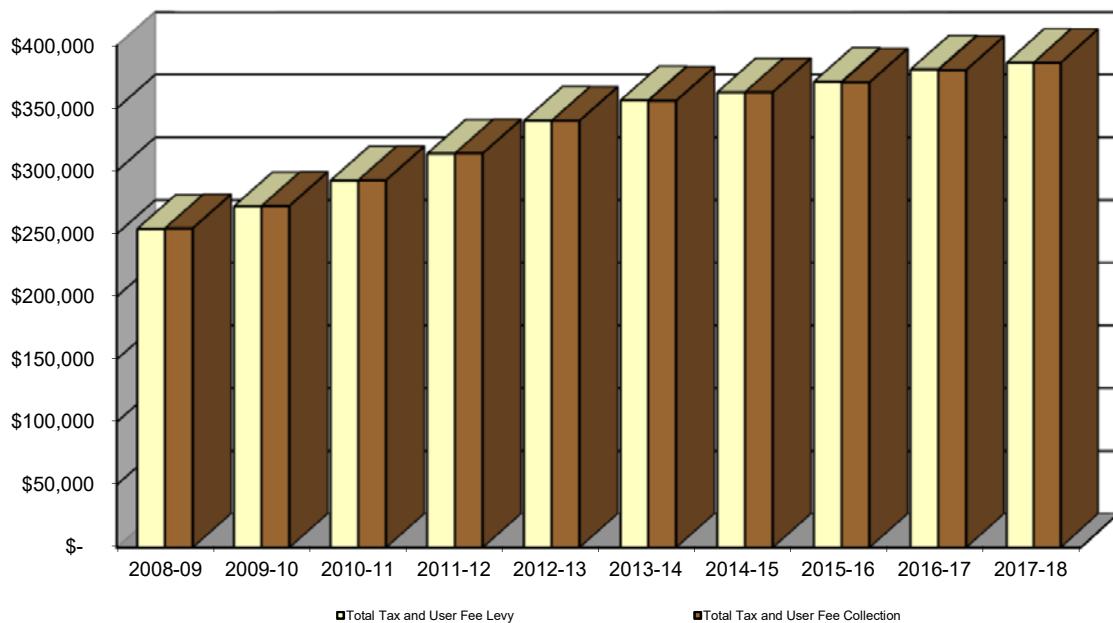


Fiscal Year	Secured	Unsecured	Total	Percent Change in Assessed Value
2008-09	\$ 301,717,479	\$ 5,894,003	\$ 307,611,482	5.08%
2009-10	299,038,654	6,116,530	305,155,184	-0.80%
2010-11	298,099,034	6,238,834	304,337,868	-0.27%
2011-12	302,526,970	6,163,979	308,690,949	1.43%
2012-13	310,451,986	5,901,040	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%

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
2008-09	\$254,092	\$ 254,106	100.01	\$ 395	\$ 254,501	100.16	\$ (14)	(0.01)	\$ -
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

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

Assessed Property Value (2)		Non- Residential Construction (3)		Residential Construction (3)		Total Construction Value (3)
Fiscal Year	Value	Calendar Year	Value	No. of Units	Value	
2008-09	\$ 428,809,224	2009	\$ 952,480	2,200	\$ 855,193	\$ 1,807,673
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	2,284,000	9,593	3,321,000	5,605,000
2017-18	563,662,044	2018	2,787,000	11,204	3,908,000	6,695,000 (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, 2018

Type	Insurer	Deductible	Limit
All-Risk Property			
Fire and Other Perils	Public Entity Property Insurance Program (multiple insurers)	\$500,000 per occurrence	\$1 billion/occurrence
Flood	Public Entity Property Insurance Program	\$100,000 per occurrence	\$300 million/occurrence
Earthquake (certain structures only)	Three insurers	5% per structure, min. \$5,000,000	\$25 million
Boiler & Machinery	Public Entity Property Insurance Program (multiple insurers)	\$25,000 to \$350,000	\$100 million/occurrence
Crime Insurance	National Union Fire	\$25,000	\$5 million
Cyber Insurance	Lloyd's of London (Beazley)	\$100,000	\$2 million
Excess General Liability	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
Travel & Accident	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.
Excess Workers' Compensation	CSAC Excess Insurance Authority Program	\$1,000,000 Each Accident	Unlimited statutory coverage each accident, each employee \$4 million employer's liability
Pollution Liability	CSAC Excess Insurance Authority Program	\$75,000 to \$250,000	\$10,000,000 per loss
Watercraft			
Liability	Atlantic Specialty	\$10,000	\$10 million
Hull & Machinery	Atlantic Specialty	\$10,000	\$1.3 million
Pollution Liability	Great American Ins. Co.	None	\$5 million

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

(THIS PAGE INTENTIONALLY LEFT BLANK)



**ORANGE COUNTY SANITATION DISTRICT
FINANCIAL MANAGEMENT DIVISION**

10844 Ellis Avenue
Fountain Valley, California 92708-7018
714.962.2411
www.ocsd.com
06/30/18