



Orange County Sanitation District
ADMINISTRATION COMMITTEE
Regular Meeting Agenda
Wednesday, November 13, 2019 - 5:00 PM
Board Room
Administration Building
10844 Ellis Avenue
Fountain Valley, CA 92708
(714) 593-7433

ACCOMMODATIONS FOR THE DISABLED: Meeting Rooms are wheelchair accessible. If you require any special disability related accommodations, please contact the Orange County Sanitation District Clerk of the Board's office at (714) 593-7433 at least 72 hours prior to the scheduled meeting. Requests must specify the nature of the disability and the type of accommodation requested.

AGENDA POSTING: In accordance with the requirements of California Government Code Section 54954.2, this agenda has been posted outside the main gate of the Sanitation District's Administration Building located at 10844 Ellis Avenue, Fountain Valley, California, and on the Sanitation District's website at www.ocsd.com not less than 72 hours prior to the meeting date and time above. All public records relating to each agenda item, including any public records distributed less than 72 hours prior to the meeting to all, or a majority of the Board of Directors, are available for public inspection in the office of the Clerk of the Board.

AGENDA DESCRIPTION: The agenda provides a brief general description of each item of business to be considered or discussed. The recommended action does not indicate what action will be taken. The Board of Directors may take any action which is deemed appropriate.

MEETING AUDIO: An audio recording of this meeting is available within 24 hours after adjournment of the meeting. Please contact the Clerk of the Board's office at (714) 593-7433 to request the audio file.

NOTICE TO DIRECTORS: To place items on the agenda for a Committee or Board Meeting, the item must be submitted in writing to the Clerk of the Board: Kelly A. Lore, MMC, (714) 593-7433 / klore@ocsd.com at least 14 days before the meeting.

FOR ANY QUESTIONS ON THE AGENDA, BOARD MEMBERS MAY CONTACT STAFF AT:

General Manager: Jim Herberg, jherberg@ocsd.com / (714) 593-7300
Asst. General Manager: Lorenzo Tyner, ltyner@ocsd.com / (714) 593-7550
Asst. General Manager: Rob Thompson, rthompson@ocsd.com / (714) 593-7310
Director of Human Resources: Celia Chandler, cchandler@ocsd.com / (714) 593-7202
Director of Engineering: Kathy Millea, kmillea@ocsd.com / (714) 593-7365
Director of Environmental Services: Lan Wiborg, lwiborg@ocsd.com / (714) 593-7450

CALL TO ORDER**PLEDGE OF ALLEGIANCE****DECLARATION OF QUORUM:****PUBLIC COMMENTS:**

If you wish to address the Committee on any item, please complete a Speaker's Form (located at the table outside of the Board Room) and submit it to the Clerk of the Board or notify the Clerk of the Board the item number on which you wish to speak. Speakers will be recognized by the Chairperson and are requested to limit comments to three minutes.

REPORTS:

The Committee Chairperson and the General Manager may present verbal reports on miscellaneous matters of general interest to the Directors. These reports are for information only and require no action by the Directors.

CONSENT CALENDAR:

Consent Calendar Items are considered to be routine and will be enacted, by the Board of Directors, after one motion, without discussion. Any items withdrawn from the Consent Calendar for separate discussion will be considered in the regular order of business.

1. APPROVAL OF MINUTES**[2019-640](#)****RECOMMENDATION:**

Approve Minutes of the Regular Meeting of the Administration Committee held September 11, 2019.

Originator: Kelly Lore

Attachments: [Agenda Report](#)
[09-11-2019 Administration Committee Minutes](#)

2. 2019 CONFLICT OF INTEREST CODE**[2019-666](#)**

RECOMMENDATION: Recommend to the Board of Directors to:

Adopt Resolution No. OCSD 19-XX entitled, "A Resolution of the Board of Directors of Orange County Sanitation District adopting a Conflict of Interest Code which supersedes all prior Conflict of Interest Codes and amendments previously adopted".

Originator: Kelly Lore

Attachments: [Agenda Report](#)
[OCSD Resolution 2019 Conflict of Interest Code](#)
[2019 DRAFT Conflict of Interest Code](#)

3. **UPDATE TO THE ESTABLISHED RULES OF PROCEDURE FOR THE CONDUCT OF BUSINESS OF THE ORANGE COUNTY SANITATION DISTRICT** [2019-699](#)

RECOMMENDATION: Recommend to the Board of Directors to:

Adopt Resolution No. OCSD 19-XX entitled, "A Resolution of the Board of Directors of Orange County Sanitation District establishing Rules of Procedure for the Conduct of Business of the Orange County Sanitation District; and repealing Resolution No. OCSD 18-12".

Originator: Kelly Lore

Attachments: [Agenda Report](#)
[Rules of Procedure Resolution - Redline](#)

4. **GENERAL MANAGER APPROVED PURCHASES AND ADDITIONS TO THE PRE-APPROVED OEM SOLE SOURCE LIST** [2019-709](#)

RECOMMENDATION: Recommend to the Board of Directors to:

- A. Receive and file Orange County Sanitation District purchases made under the General Manager's authority for the period of July 1, 2019 to September 30, 2019; and
- B. Approve the following additions to the pre-approved OEM Sole Source List for the period of July 1, 2019 to September 30, 2019:
- ALLEN-BRADLEY - Medium Voltage Variable Frequency Drive
 - CLEAVER-BROOKS - Burner Elements
 - EATON - Self-Cleaning Strainers
 - SONETICS - Wireless headsets and system
 - TRM/Maximo - Rules Manager SE and Lock out Tag Out (LOTO) Software
 - VAUGHAN - Mixing Nozzles

Originator: Lorenzo Tyner

Attachments: [Agenda Report](#)

5. **CONSOLIDATED FINANCIAL REPORT FOR THE FIRST QUARTER ENDED SEPTEMBER 30, 2019** [2019-707](#)

RECOMMENDATION: Recommend to the Board of Directors to:

Receive and file the Orange County Sanitation District First Quarter Financial Report for the period ended September 30, 2019.

Originator: Lorenzo Tyner

Attachments: [Agenda Report](#)
[Consolidated Financial Report for the First Quarter Ended September 30, 2019](#)

6. LEASE AGREEMENT WITH MEGDAL GREEN, LLC PROVIDING ORANGE COUNTY SANITATION DISTRICT PARCEL FOR PARKING AND/OR RELATED ACTIVITIES [2019-702](#)

RECOMMENDATION: Recommend to the Board of Directors to:

Approve a five-year lease agreement with Megdal Green, LLC, a California limited liability company, to allow paving, striping, parking, and related improvements over a 4-foot wide portion of the Orange County Sanitation District's 50-foot wide utility corridor which abuts 21532 South Brookhurst Street in Huntington Beach owned by Megdal Green, LLC, at an annual cost of \$250, for a term of five-years.

Originator: Lorenzo Tyner

Attachments: [Agenda Report](#)
[Lease Agreement with Megdal Green, LLC](#)

NON-CONSENT:

7. ORANGE COUNTY SANITATION DISTRICT COMPREHENSIVE ANNUAL FINANCIAL REPORT (CAFR) FOR THE YEAR END JUNE 30, 2019 [2019-705](#)

RECOMMENDATION: Recommend to the Board of Directors to:

Receive and file the Orange County Sanitation District's Comprehensive Annual Financial Report for the year ended June 30, 2019, prepared by staff and audited by Macias Gini & O'Connell LLP (MGO), Certified Public Accountants, along with the following reports prepared by MGO:

1. Report to the Board of Directors; and
2. Independent Accountants' Report on Agreed-Upon Procedures Applied to Appropriations Limit Worksheets.

Originator: Lorenzo Tyner

Attachments: [Agenda Report](#)
[Report to the Board of Directors](#)
[Independent Accountant's Report on Applying Agreed-Upon Procedures Related to Appropriations Limit Calculation](#)
[Comprehensive Annual Financial Report for the Year Ended June 30, 2019 \(separately bound document\)](#)
[Single Audit Reports](#)

8. PROFESSIONAL RISK MANAGEMENT CONSULTANT AGREEMENT [2019-708](#)**RECOMMENDATION:**

Approve a sole source Professional Consultant Services Agreement with John J. Preston, Specification No. SSJ 2174, to perform professional risk management consulting services for the Orange County Sanitation District, which includes overseeing property and general liability loss control and setting loss control requirements on public bids and contracts, risk transfer, loss prevention, and risk reduction in an amount not to exceed \$150,000 per year, for a term of one year beginning December 1, 2019 - November 30, 2020; with a one-year renewal option.

Originator: Lorenzo Tyner

Attachments: [Agenda Report](#)
[Professional Consultant Services Agreement](#)

9. POSITION CHANGES FOR FISCAL YEAR 2019-20 [2019-711](#)**RECOMMENDATION:** Recommend to the Board of Directors to:

Approve a position exchange and corresponding salary upgrade from a vacant Senior Mechanic (Salary Grade LOC67) position to Maintenance Specialist (Salary Grade PRO80).

Originator: Celia Chandler

Attachments: [Agenda Report](#)
[Preventative Maintenance Optimization Position Exchanges](#)

INFORMATION ITEMS:**10. CLIMATE RESILIENCY STUDY, PROJECT NO. SP-152 [2019-713](#)****RECOMMENDATION:**

Information Item.

Originator: Kathy Millea

Attachments: [Agenda Report](#)
[SP-152 OCSD Climate Resiliency Executive Summary](#)

OTHER BUSINESS AND COMMUNICATIONS OR SUPPLEMENTAL AGENDA ITEMS, IF ANY:**BOARD OF DIRECTORS INITIATED ITEMS FOR A FUTURE MEETING:**

At this time Board members may request staff to place an item on a future agenda.

ADJOURNMENT:

The next Administration Committee meeting is scheduled for Wednesday, December 11, 2019 at 5:00 p.m.



Orange County Sanitation District

ADMINISTRATION COMMITTEE

Administration Building
10844 Ellis Avenue
Fountain Valley, CA 92708
(714) 593-7433

Agenda Report

File #: 2019-640

Agenda Date: 11/13/2019

Agenda Item No: 1.

FROM: James D. Herberg, General Manager
Originator: Kelly A. Lore, Clerk of the Board

SUBJECT:

APPROVAL OF MINUTES

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION:

Approve Minutes of the Regular Meeting of the Administration Committee held September 11, 2019.

BACKGROUND

In accordance with the Board of Directors Rules of Procedure, an accurate record of each meeting will be provided to the Directors for subsequent approval at the following meeting.

RELEVANT STANDARDS

- Resolution No. OCSD 18-12

ATTACHMENT

The following attachment(s) are included in hard copy and may also be viewed on-line at the OCSD website (www.ocsd.com) with the complete agenda package:

- Minutes of the Administration Committee meeting held September 11, 2019



CALL TO ORDER

A regular meeting of the Administration Committee of the Orange County Sanitation District was called to order by Committee Chairman Chad Wanke on September 11, 2019 at 5:01 p.m. in the Administration Building of the Orange County Sanitation District. Director Erik Peterson led the Flag Salute and a moment of silence was observed for the occurrences of September 11, 2001.

A quorum was declared present as follows:

DECLARATION OF QUORUM:

Present: Chad Wanke, Richard Murphy, James Ferryman, Peter Kim, Mark Murphy, Steve Nagel, Andrew Nguyen, Glenn Parker, Erik Peterson, Christina Shea, David Shawver, John Withers and David Penaloza (Alternate)

Absent: None

STAFF PRESENT:

Jim Herberg, General Manager; Rob Thompson, Assistant General Manager; Lorenzo Tyner, Assistant General Manager; Celia Chandler, Director of Human Resources; Kathy Millea, Director of Engineering; Lan Wiborg, Director of Environmental Services; Tina Knapp, Assistant Clerk of the Board; Jennifer Cabral; Rod Collins; Rhea de Guzman; Al Garcia; Derek Harp; Laura Maravilla; Tyler Ramirez; and Paula Zeller.

OTHERS PRESENT:

Brad Hogin, General Counsel; Steve Delaney, Orange County Employees Retirement System (OCERS); Molly Murphy, OCERS; and Brenda Shott, OCERS.

PUBLIC COMMENTS:

None.

REPORTS:

Chair Wanke did not provide a report.

General Manager Jim Herberg invited the Committee to the recognition for recent excellent beach report cards event being held on September 18 from 3:15 - 4:45 p.m., prior to the

Special Board Meeting, at both Plant Nos. 1 and 2.

Assistant General Manager Lorenzo Tyner indicated that the termination of the necessary leases on the properties across the street have been obtained and he will provide more information at the Board Meeting on September 25.

CONSENT CALENDAR:

Chair Wanke indicated that the Information Item, Item No. 5, would immediately follow the Consent Calendar, Item Nos. 1-3.

1. APPROVAL OF MINUTES [2019-517](#)

Originator: Kelly Lore

MOVED, SECONDED, AND DULY CARRIED TO:

Approve Minutes of the Special Meeting of the Administration Committee held July 17, 2019.

Ayes: Chad Wanke, Richard Murphy, James Ferryman, Peter Kim, Mark Murphy, Steve Nagel, Andrew Nguyen, Glenn Parker, Erik Peterson, Christina Shea, David Shawver and David Penaloza (Alternate)

Noes: None

Absent: John Withers

Abstentions: None

2. SCRIPPS INSTITUTION OF OCEANOGRAPHY BEST PRACTICE DEVELOPMENT AND SEAWATER ANALYSIS FOR PH [2019-538](#)

Originator: Lan Wiborg

MOVED, SECONDED, AND DULY CARRIED TO:

Approve and authorize the Purchasing and Contracts Manager to enter into a one (1) year Sole Source Service Contract with The Regents of the University of California on behalf of its San Diego campus' Scripps Institution of Oceanography, for a total amount not to exceed \$40,000, with two (2) optional one (1) year renewals at \$40,000 per renewal, for a total amount not to exceed \$120,000 for the three-year period, to develop best practices and analyze seawater for pH in compliance with permit mandated data quality requirements and regional comparability as recommended by the Bight'13 Nutrients Study.

Ayes: Chad Wanke, Richard Murphy, James Ferryman, Peter Kim, Mark Murphy, Steve Nagel, Andrew Nguyen, Glenn Parker, Erik Peterson, Christina Shea, David Shawver and David Penaloza (Alternate)

Noes: None

Absent: John Withers

Abstentions: None

3. REIMBURSEMENTS TO BOARD MEMBERS AND STAFF

[2019-563](#)

Originator: Lorenzo Tyner

MOVED, SECONDED, AND DULY CARRIED TO: Recommend to the Board of Directors to:

Receive and file report of reimbursements to Board Members and Staff per Government Code Section 53065.5 for the period July 1, 2018 through June 30, 2019.

Ayes: Chad Wanke, Richard Murphy, James Ferryman, Peter Kim, Mark Murphy, Steve Nagel, Andrew Nguyen, Glenn Parker, Erik Peterson, Christina Shea, David Shawver and David Penaloza (Alternate)

Noes: None

Absent: John Withers

Abstentions: None

Board Vice-Chair Withers arrived at 5:20 p.m., during the OCERS presentation.

INFORMATION ITEMS:

5. ORANGE COUNTY EMPLOYEE RETIREMENT SYSTEM (OCERS)
INFORMATION UPDATE

[2019-565](#)

Originator: Lorenzo Tyner

Mr. Tyner introduced Steve Delaney, Molly Murphy, and Brend Shott from OCERS. The OCERS representatives provided the Committee with a PowerPoint presentation that included information on OCERS investment policies, 2018 investment results, and impacts on the Sanitation District. Staff and the OCERS representatives responded to questions from the Committee.

INFORMATIONAL ITEM HEARD ON:

OCERS will present information regarding its investment policies, 2018 investment results, and impacts on the Orange County Sanitation District.

NON-CONSENT:

4. 2019 ORANGE COUNTY REGIONAL WATER AND WASTEWATER
HAZARD MITIGATION PLAN

[2019-547](#)

Originator: Celia Chandler

MOVED, SECONDED, AND DULY CARRIED TO: Recommend to the Board of Directors to:

Adopt Resolution No. OCSD 19-XX entitled, "A Resolution of the Board of Directors of the Orange County Sanitation District Approving and Adopting the 2019 Orange County Regional Water and Wastewater Hazard Mitigation Plan," in accordance with the Disaster Mitigation Act (DMA) of 2000.

Ayes: Chad Wanke, Richard Murphy, James Ferryman, Peter Kim, Mark Murphy, Steve Nagel, Andrew Nguyen, Glenn Parker, Erik Peterson, David Shawver, John Withers and David Penaloza (Alternate)

Noes: None

Absent: Christina Shea

Abstentions: None

Director Shea stepped out of the room during Item No. 4 and was not present for the vote.

DEPARTMENT HEAD REPORTS:

None.

CLOSED SESSION:

None.

OTHER BUSINESS AND COMMUNICATIONS OR SUPPLEMENTAL AGENDA ITEMS, IF ANY:

Board Chair Shawver reported that he attended the staff volunteer recognition event on September 10 and that it was a great event recognizing the outstanding efforts of staff that volunteer at various Sanitation District events throughout the year.

Committee Chair Wanke requested that staff look into the possibility of issuing identification cards to the Directors and providing the Directors with a Board contact list.

BOARD OF DIRECTORS INITIATED ITEMS FOR A FUTURE MEETING:

None.

ADJOURNMENT:

Chair Wanke declared the meeting adjourned at 6:11 p.m. to the Regular meeting to be held on Wednesday, October 9, 2019 at 5:00 p.m.

Submitted by:

Tina Knapp, MMC
Assistant Clerk of the Board



Orange County Sanitation District

ADMINISTRATION COMMITTEE

Administration Building
10844 Ellis Avenue
Fountain Valley, CA 92708
(714) 593-7433

Agenda Report

File #: 2019-666

Agenda Date: 11/13/2019

Agenda Item No: 2.

FROM: James D. Herberg, General Manager
Originator: Kelly A. Lore, Clerk of the Board

SUBJECT:

2019 CONFLICT OF INTEREST CODE

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION: Recommend to the Board of Directors to:

Adopt Resolution No. OCSD 19-XX entitled, "A Resolution of the Board of Directors of Orange County Sanitation District adopting a Conflict of Interest Code which supersedes all prior Conflict of Interest Codes and amendments previously adopted".

BACKGROUND

The last biennial review, and formal amendment, to the Orange County Sanitation District's Conflict of Interest Code was completed in April 2018. Although the Political Reform Act requires that every local agency review its Conflict of Interest Code biennially (which would bring forth the next amendment in 2020), staff is proposing this new amendment in order to reflect the current positions of those designated employees that are required to file statements of economic interests.

RELEVANT STANDARDS

- Political Reform Act, Government Code Sections 81000, et seq.
- California Government Code Sections 87300-87306
- Fair Political Practices Commission (2 Cal. Code of Regs. Section 18100, et seq.)

PROBLEM

During the last budget cycle and due to reorganization of the agency, several positions have been added, reclassified, or eliminated. These positions are required to file statements of economic interests and the updated Conflict of Interest Code must be adopted.

PROPOSED SOLUTION

Staff recommends that the Board of Directors adopt the updated 2019 Conflict of Interest Code to reflect the following changes:

- Addition of the following new positions: Administration Manager, Administration Supervisor, Cost Estimator, Lead Source Control Inspector, Principal Buyer, and Principal Public Affairs Specialist
- Addition of Assistant Clerk of the Board (deletion of Deputy Clerk of the Board)
- Addition of Environmental Supervisor (deletion of Laboratory Supervisor)
- Addition of Purchasing and Contracts Manager (deletion of Contracts and Purchasing Manager)
- Deletion of the following eliminated positions: Facilities Manager, Information Technology Manager, and Senior Construction Inspection Supervisor

If approved by the Board, the newly approved code will be forwarded to the County of Orange for amendment approval.

TIMING CONCERNS

The changes in position control have taken place and therefore cannot wait until a future meeting.

RAMIFICATIONS OF NOT TAKING ACTION

Non-compliance with state law.

PRIOR COMMITTEE/BOARD ACTIONS

April 2018 - Board of Directors amended the Conflict of Interest Code and approved Resolution No. OCSD 18-04.

ATTACHMENT

The following attachment(s) are included in hard copy and may also be viewed on-line at the OCSD website (www.ocsd.com) with the complete agenda package:

- Resolution No. OCSD 19-XX
- 2019 DRAFT Conflict of Interest Code

RESOLUTION NO. OCSD 19-XX

A RESOLUTION OF THE BOARD OF DIRECTORS OF ORANGE COUNTY SANITATION DISTRICT ADOPTING A CONFLICT OF INTEREST CODE WHICH SUPERSEDES ALL PRIOR CONFLICT OF INTEREST CODES AND AMENDMENTS PREVIOUSLY ADOPTED

WHEREAS, the Political Reform Act of 1974, Government Code Section 81000 et seq. ("the Act"), requires a local government agency to adopt a Conflict of Interest Code pursuant to the Act; and

WHEREAS, the Orange County Sanitation District has previously adopted a Conflict of Interest Code and that Code now requires updating; and

WHEREAS, amendments to the Act have in the past and foreseeably will in the future require conforming amendments to be made to the Conflict of Interest Code; and

WHEREAS, the Fair Political Practices Commission has adopted a regulation, 2 California Code of Regulations, Section 18730, which contains terms for a standard model Conflict of Interest Code, which, together with amendments thereto, may be adopted by public agencies and incorporated by reference to save public agencies time and money by minimizing the actions required of such agencies to keep their codes in conformity with the Political Reform Act; and

WHEREAS, the reorganization of the Orange County Sanitation District workforce resulted in the reclassification of a position; and

WHEREAS, the Orange County Sanitation District's existing Conflict of Interest Code must be amended in order to reflect the current positions of those designated employees that are required to file statements of economic interests.

NOW, THEREFORE, the Board of Directors of the Orange County Sanitation District, DOES HEREBY RESOLVE, DETERMINE, AND ORDER:

Section 1. The terms of 2 California Code of Regulations, Section 18730, any amendments to it duly adopted by the Fair Political Practices Commission, and all additional guidance by the Fair Political Practices Commission, are hereby incorporated by reference and, together with the 2018 Conflict of Interest Code for the Orange County Sanitation District, including Exhibits A and B in which members and employees are designated and disclosure categories are set forth, constitute the Conflict of Interest Code of the Orange County Sanitation District.

Section 2. The provisions of all Conflict of Interest Codes and Amendments thereto previously adopted by the Orange County Sanitation District are hereby superseded.

Section 3. The Filing Officer is hereby authorized to forward a copy of this Resolution to the Clerk of the Orange County Board of Supervisors for review and approval by the Orange County Board of Supervisors as required by California Government Code Section 87303.

PASSED AND ADOPTED at a regular meeting of the Board of Directors held November 20, 2019.

David John Shawver
Board Chairman

ATTEST:

Kelly A. Lore, MMC
Clerk of the Board

**2019 CONFLICT OF INTEREST CODE FOR THE
ORANGE COUNTY SANITATION DISTRICT**

The Political Reform Act, Government Code Sections 81000, et seq., requires state and local government agencies to adopt and promulgate Conflict of Interest Codes. The Fair Political Practices Commission has adopted a regulation (2 Cal. Code of Regs. Section 18730) which contains the terms of a standard Conflict of Interest Code, which may be incorporated by reference in an agency's code. After public notice and hearing, it may be amended by the Fair Political Practices Commission to conform to amendments in the Political Reform Act. Therefore, the terms of 2 California Code of Regulations Section 18730, any amendments to it duly adopted by the Fair Political Practices Commission, and all additional guidance by the Fair Political Practices Commission, are hereby incorporated by reference. This regulation and the attached Appendix designating officials and employees and establishing disclosure categories, shall constitute the Conflict of Interest Code of the Orange County Sanitation District (Sanitation District).

The following designated employees shall file statements of economic interests electronically with the Clerk of the Orange County Board of Supervisors: Orange County Sanitation District Board of Directors, Orange County Sanitation District Financing Corporation, General Manager, General Counsel, Assistant General Manager, Director of Finance and Administrative Services, Director of Engineering, Director of Operations & Maintenance, Director of Environmental Services, Director of Human Resources, and the Clerk of the Board. The Sanitation District's Filing Officer (Clerk of the Orange County Sanitation District Board of Directors) will thereafter verify the completion of the filing statements. If the Sanitation District's Filing Officer receives any statements of economic interests by other means, the Filing Officer shall make and retain a copy and forward the original of these statements to the Clerk of the Orange County Board of Supervisors.

Statements for all other designated employees will be retained by the Sanitation District's Filing Officer.

EXHIBIT A

ORANGE COUNTY SANITATION DISTRICT

**LIST OF DESIGNATED POSITIONS
CONFLICT OF INTEREST CODE**

Designated Positions	Disclosure Categories
Accounting Supervisor	OC-05
*Administration Manager (addition)	OC-05
*Administration Supervisor (addition)	OC-05
*Assistant Clerk of the Board (addition)	OC-05
Assistant General Manager	OC-01
Buyer	OC-05
Capital Improvement Program Project Manager	OC-41
Chief Plant Operator	OC-05
Clerk of the Board	OC-05
Construction Inspection Supervisor	OC-05
Construction Inspector	OC-10
Consultant	OC-30
*Contracts & Purchasing Manager (deletion) <i>Reclassified as Purchasing & Contracts Manager</i>	OC-05
Contracts Administrator	OC-05
Contracts Supervisor	OC-05
Controller	OC-05
*Cost Estimator (addition)	OC-41
*Deputy Clerk of the Board (deletion) <i>Reclassified as Assistant Clerk of the Board</i>	OC-05
Director of Engineering	OC-41
Director of Environmental Services	OC-41
Director of Finance & Administrative Services	OC-41; OC-12
Director of Human Resources	OC-41, OC-11
Director of Operations & Maintenance	OC-41
Engineer	OC-29, OC-41
Engineering Manager	OC-41
Engineering Supervisor	OC-41
Environmental Laboratory & Ocean Monitoring Manager	OC-05
Environmental Supervisor	OC-29
*Facilities Manager (deletion) <i>Position eliminated</i>	OC-05
General Counsel	OC-01
General Manager	OC-01
Human Resources & Risk Manager	OC-11; OC-12
Human Resources Supervisor	OC-11
*Information Technology Manager (deletion) <i>Position eliminated</i>	OC-08

Information Technology Supervisor	OC-08
Information Technology Systems & Operations Manager	OC-08
*Laboratory Supervisor (deletion) <i>Previously reclassified as Environmental Supervisor</i>	OC-21
*Lead Source Control Inspector (addition)	OC-05; OC-29
Maintenance Manager	OC-05
Maintenance Superintendent	OC-05
Maintenance Supervisor	OC-05
Materials Control Supervisor	OC-05
Operations Manager	OC-05
Operations Supervisor	OC-05
Orange County Sanitation District Financing Corporation Board of Directors	OC-01
Principal Accountant	OC-41
Principal Contracts Administrator	OC-05
*Principal Buyer (addition)	OC-05
Principal Human Resources Analyst	OC-11
*Principal Public Affairs Specialist (addition)	OC-05
Principal Staff Analyst	OC-05; OC-12
*Purchasing and Contracts Manager (addition)	OC-05
Public Affairs Supervisor	OC-05
Purchasing Supervisor	OC-05
Safety & Health Supervisor	OC-05
Secretary of the Orange County Financing Corporation	OC-05
Senior Buyer	OC-05
*Senior Construction Inspection Supervisor (deletion) <i>Position eliminated</i>	OC-05
Senior Construction Inspector	OC-10
Senior Contracts Administrator	OC-05
Senior Engineer	OC-05
Senior Scientist	OC-21
Source Control Supervisor	OC-29
Treasurer of the Orange County Financing Corporation	OC-41

***The following amendments are made:**

ADDITIONS:

Administration Manager - OC-05
Administration Supervisor - OC-05
Assistant Clerk of the Board - OC-05
Cost Estimator - OC-41
Principal Buyer - OC-05
Principal Public Affairs Specialist - OC-05
Purchasing and Contracts Manager - OC-05

DELETIONS:

Contracts & Purchasing Manager - *Reclassified as Purchasing & Contracts Manager*

Deputy Clerk of the Board - *reclassified as Assistant Clerk of the Board*

Facilities Manager - *Position eliminated*

Information Technology Manager - *Position eliminated*

Laboratory Supervisor - *Reclassified as Environmental Supervisor*

Senior Construction Inspection Supervisor - *Position eliminated*

EXHIBIT B

ORANGE COUNTY SANITATION DISTRICT

DISCLOSURE CATEGORIES CONFLICT OF INTEREST CODE

Disclosure Category	Disclosure Description
OC-01	All interests in real property in Orange County or located entirely or partly within the Sanitation District's boundaries, as well as investments, business positions and sources of income (including gifts, loans and travel payments).
OC-05	All investments in, business positions with and income (including gifts, loans and travel payments) from sources that provide services, supplies, materials, machinery, equipment (including training and consulting services) used by the Sanitation District.
OC-08	All investments in, business positions with and income (including gifts, loans and travel payments) from sources that develop or provide computer hardware/software, voice data communications, or data processing goods, supplies, equipment, or services (including training and consulting services) used by the Sanitation District.
OC-10	All investments in, business positions with and income (including gifts, loans and travel payments) from sources that are engaged in any real estate activity including, but not limited to real estate appraisal, development, construction, planning/architectural design, engineering, sales, brokerage, leasing, lending, insurance, rights of way, and/or studies; and/or property or facilities management/maintenance/custodial and utility services used by the Sanitation District or provides capital for the purchase of property used or sold by the Sanitation District.
OC-11	All interests in real property in Orange County or located entirely or partly within the Sanitation District's boundaries, as well as investments in, business positions with and income (including gifts, loans and travel payments) from sources that are engaged in the supply of equipment related to (i) recruitment, employment search & marketing, classification, training, or negotiation with personnel; (ii) employee benefits; and (iii) health and welfare benefits.
OC-12	All interests in real property in Orange County or located entirely or partly within the Sanitation District's boundaries, as well as investments in, business positions with and income (including gifts, loans and travel payments) from sources that invest funds or engage in the business of insurance including, but not limited to insurance companies, carriers, holding companies, underwriters, brokers, solicitors, agents, adjusters, claims managers and actuaries; from financial institutions including but not limited to, banks, savings & loan associations and credit unions or sources that have filed a claim, or have a claim pending, against the Sanitation District.

EXHIBIT B

ORANGE COUNTY SANITATION DISTRICT

**DISCLOSURE CATEGORIES
CONFLICT OF INTEREST CODE**

Disclosure Category	Disclosure Description
OC-21	All investments in, business positions with and income (including gifts, loans and travel payments) from sources that provide laboratory or chemical – related goods, supplies, equipment, or services (including training and consulting services).
OC-29	All investments in, business positions with and income (including gifts, loans and travel payments) from sources that are subject to inspection or regulation by the Sanitation District.
OC-30	Consultants shall be included in the list of designated employees and shall disclose pursuant to the broadest category in the code subject to the following limitation: The Department Head/Director/General Manager may determine that a particular consultant, although a “designated position,” is hired to perform a range of duties that is limited in scope and thus is not required to fully comply with the disclosure requirements in this section. Such written determination shall include a description of the consultant’s duties and, based upon that description, a statement of the extent of disclosure required. The determination of disclosure is a public record and shall be filed with the Form 700 and retained by the Filing Officer for public inspection.
OC-41	All interests in real property in Orange County, as well as investments in, business positions with and income (including gifts, loans and travel payments) from sources that provide services, supplies, materials, machinery, vehicles, or equipment (including training and consulting services) used by the Sanitation District.



Orange County Sanitation District

Administration Building
10844 Ellis Avenue
Fountain Valley, CA 92708
(714) 593-7433

ADMINISTRATION COMMITTEE

Agenda Report

File #: 2019-699

Agenda Date: 11/13/2019

Agenda Item No: 3.

FROM: James D. Herberg, General Manager
Originator: Kelly A. Lore, Clerk of the Board

SUBJECT:

UPDATE TO THE ESTABLISHED RULES OF PROCEDURE FOR THE CONDUCT OF BUSINESS OF THE ORANGE COUNTY SANITATION DISTRICT

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION: Recommend to the Board of Directors to:

Adopt Resolution No. OCSD 19-XX entitled, "A Resolution of the Board of Directors of Orange County Sanitation District establishing Rules of Procedure for the Conduct of Business of the Orange County Sanitation District; and repealing Resolution No. OCSD 18-12".

BACKGROUND

At this time, the procedures are being updated to include changes to the Legislative and Public Affairs Committee dates, adding the order of business, updating decorum language, and minor clerical revisions.

RELEVANT STANDARDS

- California Government Code Section 54950 et seq.
- Comply with transparency and communication requirements, including the Brown Act

PRIOR COMMITTEE/BOARD ACTIONS

July 2018 - Adopted Resolution No. OCSD 18-12 entitled, "A Resolution of the Board of Directors of Orange County Sanitation District establishing Rules of Procedure for the Conduct of Business of the District; and repealing Resolution No. OCSD 17-18", which will amend the rules of procedure to provide for the appointment of a Chairperson and Vice Chairperson of the Legislative and Public Affairs Committee by the Chairperson of the Board of Directors.

ATTACHMENT

The following attachment(s) are included in hard copy and may also be viewed on-line at the OCSD website (www.ocsd.com) with the complete agenda package:

- Draft Resolution No. OCSD 19-XX (Redline)

RESOLUTION NO. OCSD ~~18-1219-XX~~

A RESOLUTION OF THE BOARD OF DIRECTORS OF ORANGE COUNTY SANITATION DISTRICT ESTABLISHING RULES OF PROCEDURE FOR THE CONDUCT OF BUSINESS OF THE ORANGE COUNTY SANITATION DISTRICT, AND REPEALING RESOLUTION NO. OCSD ~~17-1818-12~~

WHEREAS it is necessary to establish rules of procedure to facilitate the orderly handling of business to come before the Orange County Sanitation District Board of Directors and Standing, Steering, Special and Ad Hoc Committees.

NOW THEREFORE, the Board of Directors of the Orange County Sanitation District DOES HEREBY RESOLVE, DETERMINE AND ORDER:

Section 1: Rules of Procedure. That the following rules of procedure be adopted for the conduct of business of the Orange County Sanitation District (Sanitation District):

A. Regular Meetings. There shall be a regular monthly meeting of the Board of Directors of the Sanitation District on the fourth Wednesday of every month at 6:00 p.m., in the Administrative Offices of the Sanitation District, located at 10844 Ellis Avenue, Fountain Valley, California; provided, however, if the fourth Wednesday of the month falls upon a legal holiday, said monthly meeting shall be held on the next day thereafter, at the same time and place, unless the Board adjourns to a different date and time.

The Board of Directors may adjourn any regular, special or adjourned special meeting to a time and place certain, as specified in the order of adjournment.

B. Special Meetings. A special meeting of the Board of Directors may be called in either one of the following ways:

- (1) By the Chairperson of the Board of Directors; or
- (2) By the written request of a majority of the Steering Committee delivered to the Clerk of the Board.

The call or notice for special meeting shall be in writing and delivered personally or by mail at least twenty-four (24) hours before the time of such meeting, as specified in the notice. Any notice deposited in the regular mail addressed to a Director at the address he or she has on file with the Clerk of the Board postage prepaid, sixty (60) hours in advance of any such meeting as specified in the notice, shall be presumed to have been delivered.

The call or notice shall specify the time and place of the special meeting, a description of the business to be transacted and copies of all pertinent written materials.

Such written notice may be dispensed with as to any Director or Alternate Director who, at or prior to the time the meeting convenes, files with the Clerk of the Board a written waiver of notice. Such waiver may be given by facsimile or electronic mail. Such written notice may also be dispensed with as to any member who is actually present at the meeting at the time it convenes. The Clerk of the Board shall diligently attempt to notify each Director personally of the time, place and purpose of said meeting, not less than twenty-four (24) hours before the time of said meeting.

The call or notice shall be posted in the administrative offices' public lobby and in a location freely accessible to the public at least twenty-four (24) hours prior to the special meeting.

C. Meetings Adjourned by Clerk of the Board. If at any regular, adjourned regular, special or adjourned special meeting there is not a quorum of Directors present, the Clerk of the Board may declare the meeting adjourned to a stated time and place and shall cause written notice of the adjournment to be given in the same manner as for a special meeting, unless such notice is waived as provided for in special meetings. Within twenty-four (24) hours after the time of the adjournment, a copy of the order or notice of adjournment shall be conspicuously posted on or near the door of the place where the meeting was held and, in a location, freely accessible to the public.

D. Notices to News Media. When any local newspaper of general circulation, radio or television station requests, in writing, notices of meetings of the Board of Directors, the Clerk of the Board shall thereafter, until receipt of a notice terminating said request, deliver notices of regular, regular adjourned and special adjourned meetings to such newspapers, radio or television stations. Delivery shall be made in the same manner as delivery is made to the Directors.

E. Conduct of Meetings.

(1) Procedural Rules. The procedural rules for debate and action shall be as set forth in Table 1, attached hereto and adopted herein by reference. Robert's Rules of Order shall not be applicable or govern the procedures for the conduct of Sanitation District business.

(2) Legal Officer. In any case of ambiguity or uncertainty in the interpretation or application of these Rules to any procedure, the presiding officer may direct such question for a ruling to the Board's General Counsel, who shall be the parliamentarian of the Board.

(3) Obtaining the Floor and Making Motions. Any member of the Board wishing to speak, or any member of the public wishing to address the Board, must first

be recognized by the Chairperson. The Chairperson must recognize any member of the Board who seeks the floor when appropriately entitled to address the Board.

Any member of the Board, including the Chairperson, may bring a matter of business properly before the Board by making a motion. Any member, including the Chairperson, except the member making the motion, may second the motion. Once a motion is seconded, it may be opened for discussion and debate, in accordance with the procedures in Subsection (4) below.

(4) Rules for Discussion, Debate and Deliberation by the Board. The procedures for consideration and action on all matters to come before the Board shall be in compliance with the terms of this Section, as follows:

(a) Each item on the Agenda will be introduced in a form of a report by either the General Manager, a member of the Executive Management Team, ~~or~~ General Counsel, Special Counsel, or Clerk of the Board.

(b) Upon completion of the report, the Chairperson will allow for direct questions regarding the item, by Directors, each in turn, and in the order as selected by the Chairperson.

(c) Upon completion of the question period, the Chairperson will entertain a motion and second for consideration by the Board.

(d) Discussion among the Directors will follow. Each Director will be recognized to address the Board in the order selected by the Chairperson, with a five (5) minute time limit for each Member wishing to speak on the Agenda item, unless the time limit is waived by the Chairperson. Directors should limit comment to the subject matter, item, or motion currently being considered. There will be no interruptions of the Director who has been recognized. Attempted interruptions will be declared out-of-order, and the Board Member attempting to interrupt will be asked to remain silent until recognized.

(e) As an additional courtesy to everyone, repetition of comments will be discouraged in the interest of time and, at the discretion of the Chairperson, can be declared out-of-order.

(f) After each Member who wishes to speak has been recognized and completed his/her remarks, a single three (3) minute period of rebuttal will be allowed any Director, unless the time limit is waived by the Chairperson.

(g) If it appears to the Chairperson that any Director is pursuing a line of questioning or commentary due to lack of preparation or prior review with the Sanitation District's Staff, the Director's time will be declared to have been used up, and no further inquiry will be allowed.

(h) Upon adoption of a motion on an Agenda item, there will be no further discussion of that item.

(5) Decorum in Debate. All Members shall address their remarks to the Chairperson and confine them to the business then pending and subject to discussion before the Board, avoiding personalities and reflections upon anyone's motives.

(6) Closing or Limiting Debate. At all times, the Board shall endeavor to allow free and open debate among Members of the Board. However, in the discretion of the Chairperson, it may become necessary to close or limit debate, so that action can be taken by the Board. An order by the Chairperson closing or limiting the debate can only be set aside by a majority vote of the Board.

F. Quorum. A majority of the Directors shall constitute a quorum of the Board.

G. Chairperson and Vice Chairperson of the Board. A Chairperson and Vice Chairperson of the Board shall be elected by a majority vote of Directors at the regular meeting in June of each year and will assume office July 1st. The nominations for Chairperson and Vice Chairperson shall be made at the regular Board meeting in May of each year. Any person nominated for Chairperson shall be deemed to be nominated for Vice Chairperson in the event the person is not elected as Chairperson. Thereafter, the nominees shall prepare a statement setting forth their qualifications for the office sought. The statements should be forwarded to the Clerk of the Board who will in turn mail to the members of the Board of Directors with the Agenda and other meeting material for the June regular meeting. If only one individual is nominated for Chairperson at the regular Board meeting in May, that individual shall be deemed elected as Chairperson, no election shall be held in June, and the individual shall assume office July 1st. If only one individual is nominated for Vice Chairperson at the regular Board meeting in May, that individual shall be deemed elected as Vice Chairperson, no election shall be held in June, and the individual shall assume office July 1st.

The Chairperson and Vice Chairperson shall serve at the pleasure of a majority of the Directors. In the event the office of Chairperson becomes vacant due to resignation or retirement of the incumbent prior to the expiration of the regular term, the Vice Chairperson shall automatically succeed to the office of the Chairperson and shall continue to serve through the remainder of the regular term unless sooner removed by action of a majority of the Directors. In the event the office of Vice Chairperson becomes vacant prior to the expiration of the regular term, nominations and the election of a Director to serve in that capacity shall be conducted at the next regular Board meeting. The person so elected shall serve the balance of the regularly scheduled term unless sooner removed as a result of action by a majority of the Directors.

The Chairperson shall not serve more than two consecutive one-year terms for which he/she has been elected to the office of Chairperson. The Vice Chairperson shall not serve more than two consecutive one-year terms for which he/she has been elected to the office of Vice Chairperson.

H. Presiding Officer. The Chairperson of the Board shall preside during meetings of the Directors. In the absence of the Chairperson, the Vice Chairperson shall preside.

I. Clerk of the Board and Minutes. The Board of Directors shall have a person designated to serve as Clerk of the Board. The Clerk of the Board will be appointed to the position by the General Manager and shall report to the General Manager or ~~a Department Head~~ ~~their designees~~ ~~designated by the General Manager.~~ The Clerk of the Board will be a regular full-time employee, subject to all the rules and policies applicable to all regular full-time employees. The Clerk of the Board shall attend all meetings of the Board of Directors, unless excused by the Chairperson, and shall prepare an accurate record of each meeting for submission to the Directors and subsequent approval at the following meeting; provided, however, that when an adjourned, special or special adjourned meeting of the Board of Directors immediately precedes a regular meeting, Minutes of said meeting shall be submitted for approval at the next meeting of the Board following said regular meeting.

In the preparation of Official Minutes of a meeting of the Board of Directors, the Clerk of the Board will not record the name of the Director who moves or who seconds the adoption of a motion or Resolution but will reflect the votes by name of each Director on each item brought before the Board.

In the absence of the Clerk of the Board, an ~~Deputy Assistant~~ Clerk of the Board shall be appointed to exercise the duties of the Clerk of the Board.

J. Regular Business to Come Before the Board of Directors. Insofar as practicable, all items of business to be taken up at a regular meeting of the Board shall be submitted to the Clerk of the Board, who shall include on the Agenda all such items submitted by Directors, the General Manager and General Counsel, and all formal communications.

The Order of Business on the agenda for regular meetings of the Board of Directors shall be:

- Call to Order
- Invocation and Pledge of Allegiance
- Roll Call and Declaration of Quorum
- Public Comment
- Special Presentations
- Board Chairperson / General Manager Reports
- Public Hearings
- Elections (when necessary)
- Consent Calendar
- Receive and File
- Committee Items
- Non-Consent

Information Items

AB 1234 Disclosure Reports

Closed Session

Other Business and communications or Supplemental agenda items

Board of Directors initiated items for a future meeting

Adjournment

Formatted: Indent: First line: 0"

The Board Chairperson shall have the discretion to change the order of business.

The Clerk of the Board shall mail to each Director a notice of such regular meetings, together with a proposed Agenda, not later than the Friday immediately preceding such regular meetings. Said Agenda, insofar as possible, shall include copies of Resolutions, except as hereafter provided, and a description of all matters to be considered, together with any pertinent written materials.

Agendas shall be posted in a location freely accessible to the public not less than seventy-two (72) hours in advance of the meeting.

Resolutions designated as "standard" and adopted by the Board of Directors from time to time, and approved as to form and content, need not be included with said Agenda; provided, however, that the information completing said standard Resolutions shall be set forth on the Agenda listing, and copies of said standard Resolutions shall be on file with the Clerk of the Board at the meeting time and place.

Items of business not known at the time the regular Agenda is mailed as herein provided, may be considered as supplemental Agenda items; provided that all requirements of the Ralph M. Brown Act (California Government Code Sections 54950 et seq.) are satisfied.

No business, except with consent of two-thirds of the Directors present (a majority of Directors present for emergency actions), and only if permitted by the Ralph M. Brown Act, not appearing on the regular or supplemental Agendas may be brought before the Board of Directors.

The meeting Agenda shall provide for an opportunity for members of the public to address the Board on items on the Agenda and non-Agenda items of public interest. As determined by the Chairperson, speakers may be deferred until the specific Agenda item is taken for discussion, and remarks may be limited to three (3) minutes. Speakers on non-Agenda items may address only items that are within the subject matter jurisdiction of the Board of Directors. Time allotted for such presentations is limited to three (3) minutes or less. Total time allotted for all public input on each non-Agenda item is limited to thirty (30) minutes to one (1) hour, taking into consideration the number of persons filing a request to address the Board. However, time allotments may be waived by a majority vote of the Board.

K. Handling of Business and Voting. During the course of a Board meeting, routine matters listed on the Agenda for consideration will be referred to by Agenda Item Number only.

Voting on all Resolutions shall be by roll call, except if waived by unanimous voice vote, in which event, the Chairperson may order a unanimous ballot cast in favor of the motion or Resolution under discussion. The name of each Director shall be called only once.

On matters of considerable interest or on which there appears to be a controversy, the motion or Resolution shall be read by title or repeated by the Chairperson. The Chairperson shall thereafter call for discussion of the motion or Resolution, at which time any member may discuss the pending matter. Any person other than a Director present at the meeting may speak on the motion if recognized by the Chairperson. Sole discretion as to the extent of discussion outside of the membership of the Board shall rest with the Chairperson. At the close of discussion, the Chairperson may, at the Chairperson's discretion, repeat the motion or Resolution pending, and thereafter, call for a vote.

The Clerk of the Board shall determine and state whether or not a motion or Resolution is adopted by roll call vote. On all other matters, the Chairperson shall determine the outcome of the voting.

L. Committees.

(1) Standing Committees.

(a) Steering Committee: There shall be a permanent Committee designated as the Steering Committee, comprised of the Chairperson of the Board, the Vice Chairperson of the Board, the Chairperson of each of the Standing Committees and two at-large members selected by the Chairperson of the Board. The Vice Chairperson of each of the three Standing Committees shall serve as the designated Alternate, in the absence or inability to serve by any Chairperson. In the absence or inability of any designated member of the Steering Committee to serve, his/her city/agency appointed Alternate Director may not serve in that member's absence.

The Committee shall conduct an annual performance evaluation of the General Manager and submit recommendations on his/her compensation to the Board of Directors. The Committee shall also review the General Manager's evaluation and compensation of the executive management employees, based on established criteria, and executive management's goals and objectives for the following year.

The Committee shall also conduct an annual performance evaluation of General Counsel and submit recommendations to the Board of Directors as provided by Resolution No. OCSD 12-03.

The Committee shall make recommendations to the Board of Directors on labor negotiations and other related activities as may be needed or appropriate.

The Committee shall also be authorized to assign new subjects of significant importance to the appropriate Standing Committee for study, evaluation and recommendation.

The Steering Committee shall meet on the fourth Wednesday of each month at 5:00 p.m. preceding the Board's meeting, or at the call of the Chairperson of the Board of Directors.

(b) Administration Committee: There shall be a permanent Administration Committee (Finance & Administrative Services, Environmental Services, and Human Resources) to advise the Staff and make recommendations on matters related to the financial, budgeting, administrative and personnel policies and programs of the Sanitation District.

The Committee shall review with the Staff the procedures for development, preparation and format of the annual budget and recommend appropriate change, and counsel the Staff during the budget process to assure the proper interpretation and implementation of the Board's policies and that the desired procedures have been followed.

The responsibility for consideration and adoption of the Sanitation District budget rests with the Board of Directors.

The Committee shall periodically interview and recommend the selection of outside auditors. The Committee shall review the result of the annual audit of the Sanitation District's accounts with representatives of the outside audit firm, including any comments received recommending improvements. The Committee shall review management's response to these comments and make appropriate recommendations for implementation.

Periodically, the Committee shall recommend employment of an outside firm to audit internal control procedures to safeguard the assets of the Sanitation District.

The Committee shall interview and make recommendations on the employment of investment-banking firms, bond counsel and, if necessary or desired, financial advisors, to be used in connection with the Sanitation District's financing programs.

The Committee shall periodically coordinate recommendations on personnel audits of the Sanitation District's operations or segments of the operations on an as-needed basis.

The Committee shall make recommendations on personnel policies and procedures, insurers and coverage, procurement procedures and such other related activities as may be needed or appropriate.

The Chairperson of the Board of Directors shall appoint a Committee Chairperson and a Committee Vice Chairperson for the Administration Committee. The Committee Chairperson and Committee Vice Chairperson shall serve at the pleasure of the Chairperson of the Board of Directors.

The Administration Committee shall consist of thirteen members, as follows:

- (1) The Chairperson of the Board of Directors;
- (2) The Vice Chairperson of the Board of Directors;
- (3) The Committee Chair of the Administration Committee;
- (4) The Committee Vice Chair of the Administration Committee; and
- (5) Nine additional Board members appointed by the Chairperson of the Board of Directors.

Other than the Board Chairperson and the Board Vice Chairperson, no Director who serves on the Operations Committee shall be eligible to serve concurrently on the Administration Committee. In the absence of the Board Chairperson, his or her alternate Director may attend meetings of the Administration Committee.

The Administration Committee shall meet on the second Wednesday of each month at 5:00 p.m., or at the call of its Chairperson.

(c) Operations Committee: There shall be a permanent Committee designated the Operations Committee (Engineering, ~~and~~ Operations & Maintenance ~~and Environmental Services~~). With the goal of compliance with all public health and environmental laws and regulations, the Operations Committee shall review and submit appropriate recommendations on the matters pertaining to the operation of the Sanitation District ~~treatment Works~~, including such matters as current and projected service/flow needs, level and quality of treatment, conservation, recycling and reuse activities and air quality issues.

The Committee shall also review issues pertaining to the Sanitation District's National Pollutant Discharge Elimination System Ocean Outfall Discharge Permit, including annual review of the contractor(s) performing the ocean monitoring and research programs required as a condition of said permit, and related issues regarding protection of the marine waters off metropolitan Orange County's coastline from impacts resulting from the Sanitation District's operations and discharge of treated wastewater.

The Committee shall also review matters pertaining to contractual arrangements by the Sanitation District to provide sewerage services to areas outside the Sanitation District's boundaries or approved spheres of influence.

The Committee shall review plans for the future needs of the Sanitation District, explore alternatives and make recommendations to the Board of Directors.

The Operations Committee shall also review and submit appropriate recommendations on matters pertaining to capital projects which address operational needs, including the selection of professional consulting services to assist in studying, planning and designing needed Sanitation District ~~Treatment Works~~ and support facilities, including computerized systems, in accordance with the Board's established policies and procedures for procuring such services; the Committee shall further review construction projects for said facilities in accordance with applicable public works laws and Board policies. Said oversight shall include the contracts for professional services and public works construction projects and addenda or change orders thereto. In carrying out its responsibilities, the Committee shall receive advance notice and regular status reports on the projects from Staff, and monitor, visit and observe the Sanitation District ~~Treatment Works~~' operational functions and major capital construction projects.

The Chairperson of the Board of Directors shall appoint a Committee Chairperson and a Committee Vice Chairperson of the Operations Committee. The Committee Chairperson and Committee Vice Chairperson shall serve at the pleasure of the Chairperson of the Board of Directors.

The Operations Committee shall consist of fourteen members, as follows:

- (1) The Chairperson of the Board of Directors;
- (2) The Vice Chairperson of the Board of Directors;
- (3) The Committee Chair of the Operations Committee;
- (4) The Committee Vice Chair of the Operations Committee; and
- (5) Ten (10) additional Board members appointed by the Chairperson of the Board of Directors.

Other than the Board Chairperson and the Board Vice Chairperson, no Director who serves on the Administration Committee shall be eligible to serve concurrently on the Operations Committee. In the absence of the Board Vice-Chairperson, his or her Alternate Director may attend meetings of the Operations Committee.

The Operations Committee shall meet on the first Wednesday of each month at 5:00 p.m., or at the call of its Chairperson.

(d) Legislative and Public Affairs Committee: There shall be a permanent Committee designated as the Legislative and Public Affairs (LaPA) Committee.

The Committee shall review issues pertaining to the impact on OCSD of legislative and regulatory proposals and submit appropriate recommendations on the matters.

The Committee shall also be responsible for overseeing the contractual arrangements with the Sanitation District's legislative advocates to provide advocacy services in Sacramento and Washington, D.C. In carrying out its responsibilities, the Committee shall receive regular status reports from the advocates and staff and monitor and recommend positions on legislative and regulatory proposals.

The Committee shall also review issues pertaining to the Sanitation District's public outreach, branding, and communications activities, evaluate alternatives and make recommendations to the Board of Directors.

The Chairperson of the Board of Directors shall appoint a Committee Chairperson and a Committee Vice Chairperson to the LaPA committee. The Committee Chairperson and Vice Chairperson shall serve at the pleasure of the Chairperson of the Board of Directors.

Formatted: Justified

The LaPA Committee shall consist of seven members, as follows:

- (1) The Chairperson of the Board of Directors
- (2) The Vice Chairperson of the Board of Directors
- ~~(3)~~ (3) The Committee Chairperson of the LaPA Committee
- (4) The Committee Vice Chairperson of the LaPA committee
- (5) Three (3) additional Board Members appointed by the Chairperson of the Board of Directors

Formatted: Indent: Left: 0.75", No bullets or numbering

Formatted: Justified

The LaPA Committee shall meet on the second Monday of ~~each the months of~~ February, March, May, September and December at 12:00 p.m. and the months of April and July at 3:30 p.m. or at the call of its Chairperson.™

Formatted: Justified

(2) Special and Ad Hoc Committees. In addition to the Standing Committees, the Chairperson of the Board of Directors, the Chairperson of a Standing Committee or a majority of the Directors, may appoint from time to time, Special or Ad Hoc Committees to study and report on specific matters. Such Committees shall be temporary in nature, and their assignments shall pertain to a current, specific issue. Upon completion of the assigned task, the Ad Hoc or Special Committee will be dissolved.

The Chairperson and Vice Chairperson of Special and Ad Hoc Committees shall be appointed by the Chairperson of the appointing authority.

Each Special and Ad Hoc Committee shall meet at the call of its Chairperson.

M. Alternate Directors: If a regular Director cannot attend a meeting of the Operations Committee, the Administration Committee or the full Board of Directors, the Director's alternate may attend in place of his or her regular Director. An alternate Director may not, however, attend a meeting of any other Committee in the absence of his or her regular Director. If the regular Director and the Alternate Director are both unable to attend the meeting, the regular Director may request that the meeting be teleconferenced. The request may be approved, at the Board Chairperson's discretion, provided that all requirements of the Ralph M. Brown Act (California Government Code Sections 54950 et seq.) are able to be satisfied.

N. Motion to Refer to a Standing Committee. Any Director at a Board meeting may move to have a policy or any other activity affecting the Sanitation District, or any one of the member Agencies, referred to a Standing Committee for study and report. This motion shall be a privileged motion, and when duly seconded, discussion thereof shall be limited to Directors only. Said motion shall receive an affirmative vote of a majority of the Directors for adoption.

Section 2: Procedure for Consideration of Demands for Corrective Action.

A. Requirement of Written Demand. Prior to any person commencing a judicial action for injunction or mandamus to declare any action taken by the Board void because of failure to observe Brown Act requirements, such person must first serve upon the Clerk of the Board a written demand describing the alleged violation and demanding corrective action. Such demand must be served upon the Clerk of the Board within thirty (30) days of the complained of action. Failure to serve any such demand within this thirty (30) day period shall result in the loss of any right to challenge any action to have been taken in violation of Sections 54953, 54954.2 or 54956 of the California Government Code.

B. Consideration of Corrective Action. Upon receipt of such a demand, consideration of the demand shall immediately be placed on the Agenda for the next meeting of the Board of Directors. If the demand is received less than seventy-two (72) hours prior to the time set for the next meeting, the Board may determine that the notice constitutes the initiation of litigation, and that the need to take action on the threatened litigation arose subsequent to the posting of the Agenda and may consider it at that meeting pursuant to Section 1(J) above. A description of any item so placed on the Agenda shall include both consideration of the demand, and the possibility of corrective action, by the Board.

In considering such demands, the Board shall first determine, by motion, whether corrective action should be taken. If no motion to take corrective action is carried,

the Clerk of the Board shall inform the demanding party in writing of the Board's decision not to cure or correct the challenged action.

C. Implementing Corrective Action. If a motion to take corrective action passes, the Chairperson may entertain a motion implementing corrective action. Any motion implementing corrective action shall address the concerns raised in the consideration of corrective action. The motion implementing corrective action may include a motion to rescind prior action taken, as appropriate. Passage of a motion to rescind invalidates prior action only as of the time of the passage of the motion, and not from the date of the initial action. A motion implementing corrective action resulting from a written demand is out-of-order if the action complained of (a) was in connection with the sale or issuance of notes, bonds or other evidences of indebtedness, or any contract, agreement or incident thereto; or (b) gave rise to a contractual obligation upon which a party has, in good faith, detrimentally relied. In any event, the Board shall notify the party making the demand in writing of its decision to take corrective action and shall describe any corrective action taken. This notice shall be given to the demanding party as soon as possible after the meeting, but in no event more than thirty (30) days after receipt of the demand.

Section 3: Resolution No. OCSD ~~17-1818-12~~ is hereby repealed.

Section 4: This Resolution shall become effective immediately.

PASSED AND ADOPTED at a regular meeting of the Board of Directors held ~~July 25, 2018~~ November 20, 2019.

~~Gregory C. Sebourn, PLS~~ David John Shawver
Board Chairman

ATTEST:

Kelly A. Lore, MMC
Clerk of the Board

APPROVED AS TO FORM:

Bradley R. Hogin
General Counsel

STATE OF CALIFORNIA)
) ss
COUNTY OF ORANGE)

I, Kelly A. Lore, Clerk of the Board of Directors of the Orange County Sanitation District, do hereby certify that the foregoing Resolution No. OCSD ~~18-12-19-XX~~ was passed and adopted at a regular meeting of said Board on the ~~25th day of July 2018~~^{20th day of November 2019}, by the following vote, to wit:

Formatted: Superscript

- AYES:**
- NOES:**
- ABSTENTIONS:**
- ABSENT:**

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of Orange County Sanitation District this ~~25th day of July 2018~~^{20th day of November 2019}.

Formatted: Superscript

Kelly A. Lore, MMC
Clerk of the Board of Directors
Orange County Sanitation District

TABLE 1

**BOARD PROCEDURES AND ORGANIZATION
SUMMARY OF MOTIONS**

A. PRIVILEGED MOTIONS

<i>Kind of Motion</i>	<i>Second Required</i>	<i>Debatable</i>	<i>Amendable</i>	<i>Vote Required</i>	<i>Purpose</i>
Adjourn	Yes	No	No	Majority	To end the meeting
To Take a Recess	Yes	No	No	Majority	To interrupt a meeting for a short time or to provide an intermission
Raise a Question of Privilege	No	No	No	None	To obtain action immediately in an emergency

**B. MAIN MOTION AND RELATED
SUBSIDIARY MOTIONS**

<i>Kind of Motion</i>	<i>Second Required</i>	<i>Debatable</i>	<i>Amendable</i>	<i>Vote Required</i>	<i>Purpose</i>
Main Motion	Yes	Yes	Yes	Majority	To introduce new business
Amend Main Motion	Yes	Yes	Yes	Majority	To modify or alter a motion
Substitute Motion	Yes	Yes	Yes	Majority	To replace the main motion entirely

Previous Question	Yes	No	No	Majority	To close debate on the main or amended motion immediately
Continue to a Certain Time	Yes	Yes	Yes	Majority	To defer action
To Table	Yes	No	No	Majority	To discontinue consideration until brought back by vote of the Board
Take a Motion from the Table	Yes	No	No	Majority	To bring before the group a motion previously tabled
Limit or Extend Limits of Debate	Yes	No	Yes	Majority	To limit or extend limits of debate
Refer to a Committee	Yes	Yes	Yes	Majority	To place business in hands of a Committee
Withdraw a Motion	No	No	No	None	To withdraw a motion before it is voted on
Reconsider	Yes	Yes	No	Majority must be by a Director who voted for the prevailing side on the original motion	To secure a new vote on a motion previously voted upon

**C. INCIDENTAL RULES
NON-RANKING**

<i>Kind of Motion</i>	<i>Second Required</i>	<i>Debatable</i>	<i>Amendable</i>	<i>Vote Required</i>	<i>Purpose</i>
Request to Suspend the Rules	Yes	No	No	Two-Thirds	To facilitate business ordinarily contrary to the rules of the organization
Override Order of the Chair	Yes	No	No	Majority	To have Board majority rule on the order
Point of Order	No	No	No	None	To enforce the rules of the organization



Orange County Sanitation District

ADMINISTRATION COMMITTEE

Administration Building
10844 Ellis Avenue
Fountain Valley, CA 92708
(714) 593-7433

Agenda Report

File #: 2019-709

Agenda Date: 11/13/2019

Agenda Item No: 4.

FROM: James D. Herberg, General Manager
Originator: Lorenzo Tyner, Assistant General Manager

SUBJECT:

GENERAL MANAGER APPROVED PURCHASES AND ADDITIONS TO THE PRE-APPROVED OEM SOLE SOURCE LIST

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION: Recommend to the Board of Directors to:

- A. Receive and file Orange County Sanitation District purchases made under the General Manager's authority for the period of July 1, 2019 to September 30, 2019; and
- B. Approve the following additions to the pre-approved OEM Sole Source List for the period of July 1, 2019 to September 30, 2019:
- ALLEN-BRADLEY - Medium Voltage Variable Frequency Drive
 - CLEAVER-BROOKS - Burner Elements
 - EATON - Self-Cleaning Strainers
 - SONETICS - Wireless headsets and system
 - TRM/Maximo - Rules Manager SE and Lock out Tag Out (LOTO) Software
 - VAUGHAN - Mixing Nozzles

BACKGROUND

Staff provides the Administration Committee and the Board of Directors quarterly reports of General Manager approved and executed purchases between \$50,000 and \$100,000; maintenance and repair Services Task Orders between \$50,000 and \$300,000; and additions to the pre-approved OEM Sole Source List.

The list of additions to the pre-approved OEM Sole Source List displays the original equipment manufacturers (OEM) added this quarter that require sole source procurement to maintain, service, or replace equipment currently in operation at Orange County Sanitation District facilities, because the parts and/or service can only be provided by the OEM or their designated representative.

RELEVANT STANDARDS

- Quarterly financial reporting
- Ensure the public's money is wisely spent

PRIOR COMMITTEE/BOARD ACTIONS

The Board of Directors authorizes the General Manager to ratify additions and deletions to the OEM Sole Source list quarterly on the General Manager's approved purchases agenda report.

ADDITIONAL INFORMATION

In accordance with Board purchasing policies, Ordinance No. OCSD-52, the General Manager has authority to approve and execute purchases between \$50,000 and \$100,000. Below is a summary of General Manager approved purchases, in amounts exceeding \$50,000, for the first quarter of fiscal year 2019-20:

Vendor Name	Amount	Department	Description/Discussion
CE SCHMIDT, ENVIRONMENTAL CONSULTANT	\$70,248.00	Engineering	Sampling Methodology and Field Testing Services for Trickling Filter Research Test at Plant No. 1, Project No. RE18-01 Sole Source Justification 2164 Reason: Unique Product/Service
FIRE SERVICE CORP.	\$69,251.50	Operations & Maintenance	Annual Service Maintenance and Preventative Maintenance, Testing and Inspection for Fire Sprinkler, Fire Extinguishers and Misc. Systems 7/1/19 to 6/30/20 with 4 Optional 1-yr Renewal Periods Specification No. S-2019-1073
GST	\$66,590.51	Administrative Services	Purchase, Installation and Configuration of Audio Visual Equipment for OCSD Boardroom Specification No. S-2019-1023
KEENAN & ASSOCIATES	\$95,000.00	Human Resources	Consulting Services from a Risk Management Professional 8/26/19 to 12/31/19 HR Sole Source Justification
MICROSOFT CORPORATION	\$92,890.00	Administrative Services	Microsoft Premier Support Services 9/17/19 to 9/16/20 Board Approved OEM Sole Source List M.O. 12/14/16, Item 12
MURPHY INDUSTRIAL COATINGS, INC.	\$66,570.00	Operations & Maintenance	Plant 1 Secondary Clarifier #31 Catwalk Coating Repairs Specification No. S-2019-1057

NORTH AMERICAN CRANE COMPANY	\$55,000.00	Operations & Maintenance	Crane Inspection Finding Repairs Sole Source Justification 2157 Reason: Emergency
PROTEIN MATRIX LLC	\$74,250.00	Engineering	Pilot Test Use of a Proprietary Product that may Improve Accumulation of Fats, Oils and Grease (FOG) Sole Source Justification 2136 Reason: Unique Product/Service
PROTEIN MATRIX LLC	\$74,250.00	Engineering	Super Base for Pilot Test at Plant 1 Sole Source Justification 2165 Reason: Unique Product/Service
QUINCY COMPRESSOR	\$63,912.13	Operations & Maintenance	Provide Quincy Air Compressor per Proposal No. BMA-656512 Sole Source Justification 2146 Reason: Time Sensitive/Standardization of Air Compressors
SC FUELS	\$76,635.97	Operations & Maintenance	Purchase of 5,000 Gallons (Bulk Oil) of Chevron 5200 HDAX Low Ash 40 (No Sub) Sole Source Justification 2137 Reason: Unique Product/Service
SGS US WEST COAST LLC	\$59,500.00	Operations & Maintenance	120-Inch Ocean Outfall Pipeline External ROV Video Inspection Services Specification No. S-2019-1027
SIEMENS INDUSTRY, INC.	\$75,685.00	Operations & Maintenance	Three (3) Year Technical Service Agreement to Perform Annual Preventative Maintenance 10/1/19 to 9/30/22 Board Approved OEM Sole Source List M.O. 12/14/16, Item 12

Additionally, in accordance with Board purchasing policies, Ordinance No. OCSD-52, the General Manager has authority to approve and execute maintenance and repair Services Task Orders between \$50,000 and \$300,000. Below is a summary of General Manager approved maintenance and repair Services Task Orders, in amounts exceeding \$50,000, for the first quarter of fiscal year 2019-20:

Vendor Name	Amount	Department	Description/Discussion
AECOM ENERGY & CONSTRUCTION, INC.	\$115,000.00	Operations & Maintenance	Standby Generator replacements at Power Building 3A (P1) and Power Building "C" (P2) Specification No. TOB-2019-1064 of Master Service Contract S-2018-942BD-1

AECOM ENERGY & CONSTRUCTION, INC.	\$89,741.00	Operations & Maintenance	Plant 2 Digester F Valves Replacement, and Pipe and Concrete Repair (P2-91-1K) Specification No. TOB-2019-1101 of Master Service Contract S-2018-942BD-1
J R FILANC CONSTRUCTION	\$139,664.00	Operations & Maintenance	Primary Basin 4 Repairs at Plant 1 Specification No. TOB-2019-1080 of Master Service Contract S-2018-942BD-4
J R FILANC CONSTRUCTION	\$265,230.60	Operations & Maintenance	Elevator Modernization Project, Phase II at Plant 1 (MP-301) Specification No. TOB-2019-1082 of Master Service Contract S-2018-942BD-4
W.A. RASIC CONSTRUCTION CO., INC.	\$71,060.00	Operations & Maintenance	Lighting Replacement at Plant 1 Specification No. TOB-2019-1094 of Master Service Contract S-2018-942BD-7

CEQA

N/A

FINANCIAL CONSIDERATIONS

N/A

ATTACHMENT

The following attachment(s) may be viewed on-line at the OCS D website (www.ocsd.com) with the complete agenda package:

N/A



Orange County Sanitation District

ADMINISTRATION COMMITTEE

Administration Building
10844 Ellis Avenue
Fountain Valley, CA 92708
(714) 593-7433

Agenda Report

File #: 2019-707

Agenda Date: 11/13/2019

Agenda Item No: 5.

FROM: James D. Herberg, General Manager
Originator: Lorenzo Tyner, Assistant General Manager

SUBJECT:

CONSOLIDATED FINANCIAL REPORT FOR THE FIRST QUARTER ENDED SEPTEMBER 30, 2019

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION: Recommend to the Board of Directors to:

Receive and file the Orange County Sanitation District First Quarter Financial Report for the period ended September 30, 2019.

BACKGROUND

Included in this consolidated report are the following quarterly financial reports for the period ended September 30, 2019:

- **First Quarter Budget Review**
The Budget Review Summary provides the Directors, staff, and general public with a comprehensive overview of the financial results of the Orange County Sanitation District (Sanitation District) through the first quarter ended September 30, 2019.
- **Quarterly Treasurer's Report**
This section reports on financial portfolio performance with respect to the Sanitation District's funds. Both Long-Term and Liquid Operating Monies Portfolios are summarized. A performance summary table can be found on page 2 of this agenda report. The report also contains information on the U.S. and global economic outlook from the Sanitation District's investment manager, Chandler Asset Management.
- **Certificates of Participation Quarterly Report**
The report includes a summary of each outstanding debt issuance and a comparative chart illustrating the COP rate history.

RELEVANT STANDARDS

- Quarterly financial reporting

ADDITIONAL INFORMATION

The quarterly treasurer’s report contained within the Consolidated Financial Reports for the First Quarter Ended September 30, 2019 is being submitted in accordance with the Sanitation District’s investment policy that requires the report be submitted to the governing body following the end of each quarter and includes the following information:

- Performance results in comparison with the ICE BAML 3-month treasury bill index for the liquid operating portfolio; and the ICE BAML Corp./Govt. 1-5 Year Bond index for the long-term portfolio as identified in the investment policy; and the time-weighted total rate of return for the portfolio for the prior three months, six months, nine months, twelve months, and since inception compared to the Benchmark returns for the same periods:

**Portfolio Performance Summary
As of September 30, 2019**

	Liquid Operating Monies (%)		Long-Term Operating Monies (%)	
	Total Rate of Return	Benchmark	Total Rate of Return	Benchmark
3 Months	0.59	0.56	0.88	0.82
6 Months	1.28	1.20	2.59	2.69
9 Months	1.92	1.81	4.14	4.15
12 Months	2.50	2.39	5.52	5.79
Annualized Since Inception 30 Nov 2014	1.12	1.02	1.84	1.79

- A listing of individual securities held at the end of each reporting period (see the detailed listings of each security contained within the report).

- Cost and market values of the portfolios:

	<u>Liquid Operating</u>	<u>Long-Term</u>
Cost	\$67.8 M	\$535.6 M
Market Value	\$68.2 M	\$548.1 M

- Modified duration of the portfolio compared to the Benchmark:

	<u>Liquid Operating</u>	<u>Long-Term</u>
District Policy	< 0.50	< 5.00
Benchmark	0.16	2.53
Portfolio	0.30	2.46

- Dollar change in value of the portfolio for a one percent (1%) change in interest rates:

Liquid Operating - \$207,478
 Long- Term - \$13,474,939

- None of the portfolios are currently invested in reverse repurchase agreements.

- The percent of the Liquid Operating Monies portfolio maturing within 90 days: 21.5%
- Average portfolio credit quality:
Liquid Operating - AA+/Aa1
Long- Term - AA/Aa1
- Percent of portfolio with credit ratings below "A" by any rating agency and a description of such securities:
Liquid Operating - no exceptions
Long- Term - Percent of portfolio - 0.6%

	Cost	Maturity Date	Moody	S&P	Fitch
SLMA 2008-9 A	\$13,290.71	4/25/2023	Baa3	B	B
AMRESKO Residential Securities 1999-1 A	\$92,461.32	6/25/2029	NR	A+	BBB
Morgan Stanley Note	\$3,200,848.00	7/28/2021	A3	BBB+	A

- All investments are in compliance with this policy and the California Government Code, except for the following Lehman Brother holdings that the Sanitation District is pursuing collection through the bankruptcy court:

Lehman Brothers Note-Defaulted \$ 600,000 par value purchased 9/19/2008
Lehman Brothers Note-Defaulted \$2,000,000 par value purchased 9/18/2008
- Sufficient funds are available for the Sanitation District to meet its operating expenditure requirements for the next six months.

CEQA

N/A

FINANCIAL CONSIDERATIONS

N/A

ATTACHMENT

The following attachment(s) may be viewed on-line at the OCSD website (www.ocsd.com) with the complete agenda package:

- Consolidated Financial Report for the First Quarter Ended September 30, 2019



Orange County Sanitation District

First Quarter Financial Report

for the period ended September 30, 2019



Orange County, California

Table of Contents

<u>Executive Summary</u>	1
<u>Budget Review</u>	
Section 1 – Consolidated Financial Reports.....	1
Section 2 – Operating Budget Review	
Chart of the Cost per Million Gallons by Department – Budget and Actual.....	1
Chart of the Net Expenses by Major Category – Budget and Actual	1
Divisional Contributions to Cost Per Million Gallons	2
Comparison of Expenses by Department.....	3
Summary of Collection, Treatment, and Disposal Expenses by Major Category	4
Summary of District-Wide Revenues	5
Summary of Collection, Treatment and Disposal Revenues	5
Summary of Collection, Treatment, and Disposal Expenses by Line Item.....	6
Summary of Collection, Treatment, and Disposal Expenses by Process.....	8
Chart of Staffing Trends	9
Section 3 – Capital Improvement Program Budget Review	
Capital Improvement Program Graphs by Type and Funding Source.....	1
Summary of Capital Improvement Construction Requirements - Current Year.....	2
Summary of Capital Improvement Construction Requirements - Project Life	6
Section 4 – Capital Assets Schedule & Debt Service Budget Review	
Capital Assets Schedule	1
Debt Service Budget Review.....	1
Section 5 – Self Insurance Budget Review	
General Liability and Property Fund Budget Review.....	1
Workers’ Compensation Fund Budget Review.....	2
<u>Quarterly Treasurer’s Report</u>	1
<u>Quarterly COP Report</u>	1

This Page Intentionally Left Blank

Executive Summary

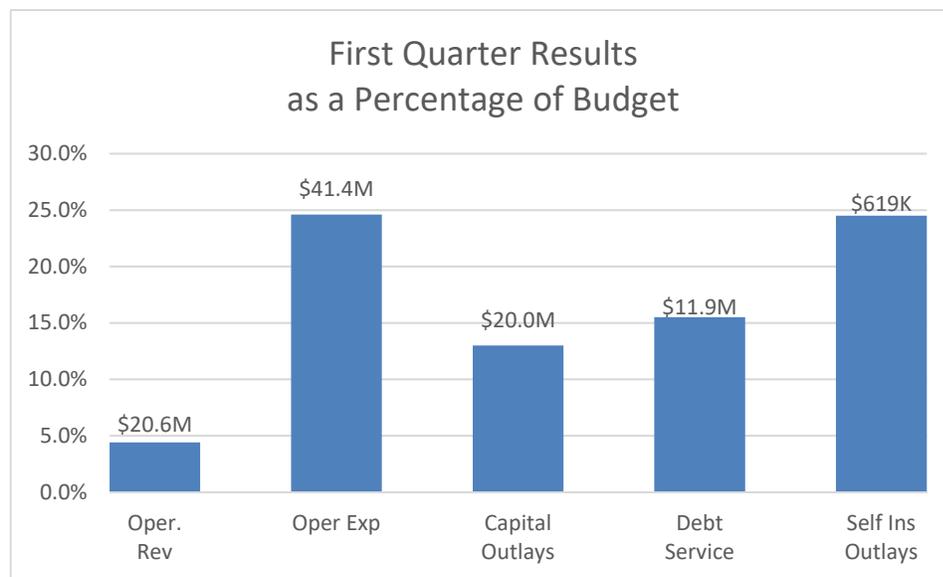
Consolidated Financial Reports For the First Quarter Ended September 30, 2019

Included in this consolidated report are the following quarterly financial reports for the period ended September 30, 2019:

- **First Quarter Budget Review:**

The Consolidated Financial Reports Section provides the Directors, staff, and the general public with a comprehensive overview of the financial results of the Sanitation District through the first quarter ended September 30, 2019.

Contained within the Consolidated Financial Reports is the budget-to-actual status of the Collections, Treatment and Disposal Operations, the Capital Improvement Program, the Self-Insurance Program, and Debt Service Outlays. Also included is a Capital Assets Schedule as of September 30, 2019. The chart below provides for a summary of these activities.



Various detail information can be found in this report. Below is a descriptive summary of these activities through September 30th:

- a) Most major expense categories are anticipated to be at or below budget.
- b) Total revenues are at 4.4 percent of the \$465.7 million budget, mainly due to the timing of property tax and sewer fee distribution from the County that occurs mostly after the first quarter. These two revenue sources make up 84.7 percent of the District's total budgeted revenue. Except for Service Fees, Property Taxes, Capital Assessments-IRWD, CIP Reimbursements, Grant Revenue, Rents & Leases, and Other Revenues, most major revenue sources are currently tracking close to or exceeding revenue estimates.

FY 2019-20 First Quarter Financial Report

Overall, total revenues are projected to approximate budget at year-end. More detailed information on District revenues is provided within Section 1 – Pages 3 through 5.

c) **Collection, Treatment and Disposal Costs:**

As indicated within the Consolidated Financial Reports Section of this report, the net operating requirements through the first quarter of \$41.4 million is currently tracking at 24.6 percent of the \$168.2 million budget. In addition, net operating expenses have increased \$5.4 million or 14.9 percent in comparison with the same period last year. Overall, staff expects the total operating costs to remain within budget throughout the remainder of the year. More detailed information on District operating expenses is provided within Section 1- Pages 1 through 3.

The total cost per million gallons is \$2,396 based on flows of 188 million gallons per day. This is \$55 per million gallons, or 2.2 percent lower than the budgeted cost per million gallons per day. A further description of these costs and benchmarking with other agencies is contained within Section 1 – Pages 6 through 8.

d) The total projected capital outlay cash flow of the Capital Improvement Program (CIP) for FY 2019-20 has been revised to \$155.5 million, or 101.4 percent of the board approved cash outlay of \$153.3 million. The actual cash outlay spending through the first quarter is \$20.0 million, or 13.0 percent of the total budgeted outlay. More detailed information on the CIP budget review can be found in Section 3.

- **Quarterly Treasurer's Report**

This section reports on financial portfolio performance with respect to the Sanitation District's funds. Both Long-Term and Liquid Operating Monies Portfolios are summarized. A performance summary table can be found on page 2 of this section. The report also contains information on the national economic outlook from the Sanitation District's money manager, Chandler Asset Management (Chandler).

Chandler notes the Long-Term Portfolio quarterly return of 88 basis points outperformed the ICE BAML 1-5 Year US Corp/Govt Rated AAA-A Index return of 82 basis points, while the Liquid Operating Monies Portfolio quarterly return of 59 basis points outperformed the ICE BAML 3-Month US Treasury Bill Index return of 56 basis points.

Chandler further notes that the labor market and consumer fundamentals remain favorable, but manufacturing data continue to disappoint. We believe economic growth has slowed from earlier this year and downside risks to the outlook remain elevated. The US economy continues to face headwinds from trade disputes, slowing global economic growth, and an uncertain outlook for Brexit. However, we believe accommodative US monetary policy and a collective dovish stance by all

Executive Summary

of the major global central banks should help to combat the headwinds. We also believe the Trump administration faces significant political pressure to make progress toward a trade agreement with China as we head into an election year.

The Federal Open Market Committee (FOMC) lowered the target fed funds rate by 25 basis points in September (for the second time this year) to a range of 1.75%-2.00%. There were three dissenting votes; one policymaker favored a 50-basis point rate cut, and two policymakers favored leaving the fed funds rate unchanged. According to the Fed's dot plot, only seven out of 17 policymakers are anticipating another rate cut before year-end. Although there is a growing disparity among policymakers about the appropriate path of monetary policy, Fed Chair Powell's press conference suggested the Fed will be flexible and data dependent. Powell indicated more rate cuts may be appropriate if the economy slows further, but the Fed is not on a preset course. We continue to believe the FOMC is likely to cut the fed funds target rate again before year-end, in the absence of a trade resolution or meaningful improvement in market-based measures of inflation. The next FOMC meeting is scheduled for October 29-30.

The Treasury yield curve steepened modestly in September, although the curve remains partially inverted. The 3-month T-bill yield declined nearly 17 basis points to 1.81%, the 2-year Treasury yield increased nearly twelve basis points to 1.62%, and the 10-year Treasury yield increased about 17 basis points to 1.67%. An inversion of the yield curve in which the 10-year Treasury yield is lower than the 3-month T-bill yield is generally viewed as a powerful predictive signal of an upcoming recession. However, we believe increased short-term Treasury issuance to fund the deficit, and negative sovereign bond yields in other countries may be distorting the US Treasury yield curve. German sovereign bond yields (from 1-month out to 30-years) remained negative at September month-end.

The shape of the Treasury yield curve has changed significantly on a year-over-year basis. As of September month-end, the 3-month T-bill yield was down 39 basis points, the 2-Year Treasury yield was down nearly 120 basis points, and the 10-Year Treasury yield was down nearly 140 basis points, year-over-year. The current shape of the yield curve implies that market participants are pricing-in additional rate cuts. We believe the year-over-year decline in long-term Treasury yields reflects a high level of market participants' nervousness about the outlook for global economic growth and a decline in global inflation expectations.

The Consumer Price Index (CPI) was up 1.7% year-over-year in August, versus up 1.8% year-over-year in July. Core CPI (CPI less food and energy) was up 2.4% year-over-year in August, versus up 2.2% year-over-year in July. The Personal Consumption Expenditures (PCE) index was up 1.4% year-over-year in August, unchanged from July. Core PCE, which is the Fed's primary inflation gauge, was up 1.8% year-over-year in August versus 1.7% year-over-year in July. Core PCE remains below the Fed's 2.0% inflation target.

FY 2019-20 First Quarter Financial Report

Economic Outlook

US Treasury yields dropped precipitously during the quarter as the US/China trade impasse continued to negatively influence global manufacturing trends. In particular, the manufacturing weakness in Europe is becoming acute, with German purchasing managers indices rolling over into recessionary territory. The manufacturing weakness helped to accelerate the negative yield conundrum in Europe, with the ten-year German Bund bottoming out at negative 72 basis points during September and closing the quarter at negative 57 basis points. The lack of any meaningful fiscal response in Europe is exacerbating the downturn; considering the empirical evidence thus far on utilizing negative interest rates as a policy tool fiscal stimulus is long overdue in Germany in Chandler's judgement.

The Chandler team has long held the view the inability of interest rates to normalize in developed overseas markets, arguably most importantly Germany, would serve as a ceiling for how high US interest rates could adjust. The team's beginning of year analysis did not accurately account for the degree to which developed market benchmark rates overseas could move into negative territory which served as a catalyst for the US ten-year Treasury notes to close the quarter at 1.67%, compared to 2.01% at the end of June and 2.69% at year-end. In a pre-emptive move to sustain the economic expansion the Federal Reserve was active during the quarter, cutting the Fed Funds rate two times to a current range of 1.75% to 2.00%, compared to 2.25% to 2.50% at the end of June. Policymakers are describing the monetary stimulus adjustment as "mid-cycle" and in Chandler's view have little interest in pushing the policy rate close to the zero lower bound considering the current readings on the health of the US economy. One of the primary factors influencing the dovish shift by the Federal Reserve is the market's pricing of long-term inflation becoming unanchored. The ten-year TIPS break even rate continued to drift lower during the quarter, with a spread of 1.52% as of quarter-end, well below the 2.25% to 2.60% considered "normal" and consistent with the Federal Reserve's 2.0% inflation objective. TIPS breakeven rates moving higher will mitigate the pressure on the Federal Reserve to remain hyper accommodative with monetary policy settings.

The service sector focus of the US economy continues to insulate the domestic economy from the global manufacturing weakness. The underlying tenets of the US economy remain sound, with current unemployment rate at 3.5%, the underemployment rate at 6.9%, weekly jobless claims hovering at multi-year lows with a recent reading of 210k, and the domestic saving rates elevated as the US personal savings rate as a percentage of disposable income is currently at 8.1%. Additionally, the reduction in interest rates is providing a positive catalyst for the more cyclical sectors of the economy, with the housing market improving as both new and existing home sales have seen an uptick in volume with the contraction in mortgage rates. Given the lack of visibility globally, business investment remains soft, but the lower cost of capital linked to the reduction in interest rates should ultimately lead to an uptick in capital spending. The Chandler team continues to look for modest incremental progress on the US/China trade

Executive Summary

negotiations to help sustain economic growth. The key issue for a more comprehensive deal remains intellectual property reform in China. In our view President Trump's administration will become more motivated to make progress on US/China trade as the Democratic field for the Presidential nomination narrows; the probability of President Trump hitting the campaign trail with little progress on US/China trade is low. The fixed income markets are forecasted to remain volatile but given our internal view the domestic economy is not on the precipice of a recession, the relative performance of the portfolio compared to the benchmark should improve as the economic expansion is sustained.

- **Quarterly Certificates of Participation (COP) Report**

The report includes a summary of each outstanding debt issuance and a comparative chart illustrating the COP rate history.

This Page Intentionally Left Blank

Consolidated Financial Reports

First Quarter Financial Report September 30, 2019

Financial Management is pleased to present the FY 2019-20 first quarter financial report. This report provides a comprehensive overview of the financial condition of the Sanitation District and reports on the status of all capital projects in progress. A summary of the sections contained within this report is provided below.

Operating Budget Review: This section reports on collection, treatment and disposal net operating requirements. At September 30, 2019, 24.6 percent, or \$41.4 million of the FY 2019-20 net operating budget of \$168.2 million has been expended. Net operating expenses increased from the same period last year by \$5.4 million, or 14.9 percent, mainly due to an increase of \$3.5 million in Repairs and Maintenance, \$701,000 in Operating Materials and Supplies, \$671,000 in Salaries and Benefits, \$571,000 in Research and Monitoring, \$311,000 in Administrative Expenses, \$225,000 in Other Operating Supplies, \$93,000 in Professional Services, and a decrease of \$109,000 in indirect costs allocated out to capital projects, partially offset by a decrease of \$653,000 in Contractual Services, \$111,000 in Utilities, and \$28,000 in Training and Meetings. These and other variances that factor into this net increase in expenses are discussed in more detail below. **Overall, staff expects the total operating costs to remain at or slightly below budget throughout the remainder of the year.**

Significant operating results as of September 30, 2019 include the following:

- **Salaries, Wages and Benefits – Personnel costs of \$24.2 million are on target at 24.6 percent of budget through the first quarter of FY 2019-20.** Although the budget is based on a 5 percent vacancy factor, staffing is 24 full-time equivalents (FTE's), or 3.8 percent below the total 640 FTE's approved in the FY 2019-20 budget. Salary and benefit costs are \$671,000 or 2.9 percent higher than the \$23.5 million incurred in the same period last year, mainly due to an increase of \$345,000 in salaries and wages resulting from cost of living adjustments included in the current Memorandums of Understanding for all employee bargaining units and \$326,000 in employee benefits due to increases in costs for retirement and group insurances. **Net operating personnel costs are expected to approximate budget throughout the remainder of the year.**
- **Administrative Expenses – Administrative Expenses totaled \$780,000, or 38.5 percent of the \$2.0 million budget through September 30.** These costs are \$311,000 or 66.4 percent higher at September 30 in comparison with the prior year, mainly due to increases of \$153,000 in purchases of small computer items including HP Elitebooks, \$85,000 in memberships, attributable to timing of payments, and \$39,000 in minor furniture and fixtures for workstation installations and ergonomic chairs. **It is anticipated that administrative costs will approximate budget at year-end.**

FY 2019-20 First Quarter Financial Report

- Printing and Publication Expenses – **Printing and Publication Expenses totaled \$72,000, or 21.7 percent of the \$330,000 budget through September 30.** These costs are \$9,000 or 14.4 percent higher at September 30 in comparison with the prior year. **Printing and publication costs are expected to approximate budget at year-end.**
- Training and Meetings – **Training and meetings of \$130,000 are below target at 11.7 percent of the \$1.1 million budget.** This account is lower than the proportionate budget due to the timing and need for training throughout the year. These costs have decreased over the same period last year by \$28,000 or 17.6 percent. **Total training and meeting costs are anticipated to be below budget at year-end.**
- Operating Materials and Supplies – **Operating materials and supplies of \$4.8 million is on target at 23.1 percent of the \$21.0 million budget through September 30.** Operating Materials and Supplies are higher than the prior year by \$701,000 or 16.9 percent, primarily due to an increase in Chemical Coagulants of \$1.2 million brought about by higher chemical unit costs and usage as compared to the prior year, partially offset by a decrease in Odor Control of \$438,000. **Based on current processes, operating materials and supplies are anticipated to approximate budget at year-end.**
- Contractual Services – **Contractual services is below target at \$4.5 million or 20.3 percent of the \$22.0 million budget through September 30.** Contractual Services is lower by \$653,000 or 12.7 percent over the same period last year. Solids Removal costs, budgeted at \$13.4 million, comprise the majority of this expense category at \$3.0 million, or 22.5 percent of budget at September 30. These costs decreased by \$897,000 or 22.9 percent, due to a reduction in biosolids production attributable to the new dewatering centrifuges that replaced aging belt presses. This decrease is offset by increases in Other Contractual Services of \$157,000 for industrial cleaning and digester assessment services and Temporary Services of \$51,000 as a result of position vacancies in the current period. County Service Fees totaled only \$5,000, or 0.9 percent of the \$512,000 budget through the first quarter as the preponderance of these fees are billed by the County in the fourth quarter. **Total contractual services costs are anticipated to approximate budget at year-end.**
- Professional Services – **Professional services costs totaled \$762,000 or 13.6 percent of the \$5.6 million budget through September 30.** Professional service costs, such as Audit & Accounting, Engineering, Environmental Scientific Consulting, Industrial Hygiene, and Other Services, are proportionately low through September 30 due to a variety of factors such as timing of services and re-evaluation of needs for services. These costs are \$93,000 or 13.9 percent higher at September 30 in comparison with the prior year, mainly due to increases of \$139,000 in Legal costs and \$47,000 in Software Program Consulting, offset by a decrease of \$90,000 in Engineering services. **It is anticipated that the costs for this category will be below budget at year-end.**

Consolidated Financial Reports

- Research and Monitoring – **Research and monitoring costs totaled \$720,000, or 65.4 percent of the \$1.1 million budget through September 30.** These costs are \$571,000, or 384.3 percent higher at September 30 in comparison with the prior year, mainly due to increases of \$363,000 in Research costs, reflecting the annual contribution to Southern California Coastal Water Research Project which is now expensed in full when paid instead of allocating on a quarterly basis, \$150,000 in Environmental Monitoring costs for ocean water quality analysis, and \$59,000 in Air Quality Monitoring costs for emissions testing. **Total research and monitoring costs are anticipated to exceed budget at year-end.**
- Repairs and Maintenance – **Repair and maintenance costs totaled \$7.5 million, or 31.8 percent of the \$23.5 million budget through September 30.** These costs are \$3.5 million, or 86.9 percent higher at September 30 in comparison with the prior year, mainly for repair and maintenance services such as digester cleaning and mechanical rehabilitation and overhaul of primary clarifier tanks. **It is anticipated that the costs for this category will exceed budget at year-end.**
- Utilities – **Utilities costs totaled \$2.4 million, or 25.5 percent of the \$9.3 million budget through September 30.** These costs are \$111,000 or 4.5 percent lower at September 30 in comparison with the prior year, primarily due to a decrease in natural gas costs because of a volatile natural gas market in the prior period that caused unit prices to spike. **It is anticipated that the costs will approximate budget at year-end.**
- Other Operating Supplies – **Other operating supplies costs totaled \$685,000, or 23.0 percent of the \$3.0 million budget through September 30.** Property and General Liability Insurance, budgeted at \$1.7 million, comprise the majority of this expense category at \$430,000. These costs are \$105,000 or 32.4 percent higher at September 30 in comparison with the prior year primarily due to an increase in budgeted in-lieu premium charges to maintain recommended reserve balances. In addition, Regulatory Operating Fees increased by \$93,000 due to timing of payments for equipment permit fees. **It is anticipated that other operating supplies costs will approximate budget at year-end.**
- Revenues – Service Fees and Property Taxes – **Through September 30, revenues from service fees are at \$7,000, or 0.0 percent of the \$298.1 million budget and property taxes are at \$2.3 million, or 2.4 percent of the \$96.4 million budget.** These items comprise the majority of the Sanitation District's revenues and are mostly collected by the County through the property tax roll and distributed to the Sanitation District throughout the year based on a set distribution schedule that begins in November of each year. The low sewer service fee revenue is attributable to no sewer service fee apportionments scheduled or received from the County through the first quarter, while sewer service rebates have been issued for overcharges in prior years. The increase of \$338,000 is due to a reduction in user fee rebates issued in the current period as well as higher sewer service rates. The property tax revenue reduction of \$123,000 or 5.0 percent over the prior period is a result of timing of property tax collections from the County, offset by growth in

FY 2019-20 First Quarter Financial Report

assessed property values. **These revenues are expected to approximate budget at year-end.**

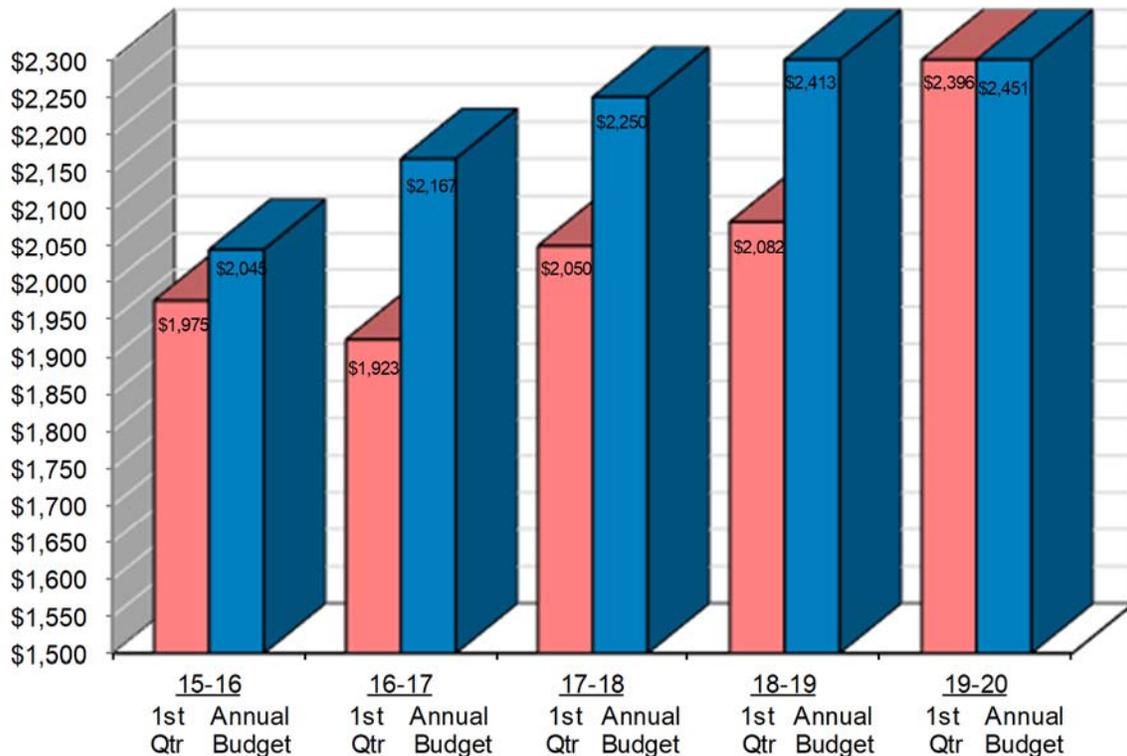
- Revenues – Permittee User Fees – Permittee User Fees are at **\$3.3 million, or 33.2 percent of the \$9.9 million budget.** The revenues through the first quarter are lower than the same period last year by \$1.5 million or 30.9 percent due to the actual discharge for industrial users was significantly less than the estimated billings in the prior year, with adjustments made in the current year. The number of permittees fluctuates from year to year as businesses are established or close their operations. **Permit user fees revenues are expected to approximate or exceed budget at year-end.**
- Revenues – Inter District Sewer Use – SAWPA and SBSB – Inter District Sewer revenues - SAWPA and SBSB are at **\$726,000, or 27.4 percent of the \$2.7 million budget.** This revenue is derived from charges to the Santa Ana Watershed Protection Agency (SAWPA) and Sunset Beach Sanitary District (SBSB) for treatment of flows. The revenues through the first quarter are higher than the same period last year by \$101,000 or 16.1 percent due to an increase in flows received from these agencies and a resulting increase in operation and maintenance charges. **These revenues are expected to approximate budget at year-end.**
- Revenues – Intra District Sewer Use – IRWD – Intra District Sewer revenues - IRWD are at **\$1.2 million, or 17.0 percent of the \$6.9 million budget.** This revenue is derived from charges to the Irvine Ranch Water District (IRWD) for treatment of flows. The revenues through the first quarter are higher than the same period last year by \$155,000 or 15.3 percent, mainly due to an increase of \$79,000 in operation and maintenance charges to IRWD and a decrease of \$76,000 in interest income allocated to IRWD based on lower cash reserves. **These revenues are expected to be below budget at year-end.**
- Revenues - Sludge Disposal – IRWD – Sludge Disposal fees - IRWD are at **\$2.2 million, or 41.6 percent of the \$5.4 million budget.** The revenue is for the handling, treatment and disposal of solids, derived from flows discharged from IRWD to the Sanitation District. The revenues through the first quarter are higher than the same period last year by \$252,000 or 12.6 percent, mainly due to increased solids received from IRWD. The current fiscal year quarterly billing to IRWD is based on estimates. The budget reflects the anticipated completion of IRWD solids processing facilities that would cease solids to the OCSB line. However, the timeline is no longer forecasted to be complete during the current fiscal year. **It is anticipated that IRWD sludge disposal revenues will exceed budget at year-end.**
- Revenues – Capital Assessments – IRWD – Capital Assessments-IRWD are at **\$502,000, or 9.3 percent of the \$5.4 million budget.** The revenues through the first quarter are lower than the same period last year by \$530,000 or 51.4 percent, mainly due to a decrease in joint capital costs allocable to IRWD. **It is estimated that IRWD capital assessments revenues will be below budget at year-end.**

Consolidated Financial Reports

- Revenues – Capital Facilities Capacity Charges (CFCC) – **CFCC are at \$3.3 million, or 18.5 percent of the \$18.0 million budget.** The revenues through the first quarter are lower than the same period last year by \$1.4 million or 28.9 percent, due to less supplemental capital facilities capacity charges assessed to industrial dischargers than at this time last year, partially offset by an increase in connection fees collected from cities. **These revenues are expected to be below the budget at year-end.**
- Revenues – Interest Earnings – **Interest Earnings are at \$5.8 million or 87.7 percent of the \$6.6 million budget.** The revenues through the first quarter are higher than the same period last year by \$3.5 million or 151.7 percent due to higher account balances and yields earned on securities held in the investment portfolios. **It is estimated that interest earnings will exceed the budget amount at year-end.**
- Revenues – CIP Reimbursements – **CIP Reimbursements are at \$657,000 or 11.0 percent of the \$6.0 million budget.** This revenue is \$657,000 or 100.0 percent higher than the same period last year. The increase is due to timing of reimbursements received for construction projects from the Orange County Water District for P2-122 Headworks Modifications at Plant 2 for GWRS Final Expansion. No reimbursements were received for these projects during the same period in the prior year. **These revenues are expected to be below budget at year-end.**
- Revenues – Wastehauler – **Wastehauler revenues are at \$194,000 or 25.9 percent of the \$750,000 budget.** This revenue is derived from fees charged to wastehaulers allowing them to dump waste into the Sanitation District's system. The revenues through the first quarter are higher than the same period last year by \$56,000 or 40.0 percent due to an increase in waste dumping. **These revenues are expected to approximate budget at year-end.**
- Revenues – CNG Sales – **CNG Sales revenues are at \$71,000 or 17.7 percent of the \$400,000 budget.** This revenue is derived from public sales at the District's Compressed Natural Gas (CNG) fueling station. The revenues through the first quarter are lower than the same period last year by \$2,000 or 2.6 percent. **These revenues are expected to be below budget at year-end.**
- Revenues – Rents & Leases – **Rents & Leases revenues are at \$227,000 or 10.0 percent of the \$2.3 million budget.** The revenues through the first quarter are lower than the same period last year by \$173,000 or 43.3 percent due to less rent received as tenants move out of the properties acquired for construction of the new headquarters building. **These revenues are expected to be below budget at year-end.**

FY 2019-20 First Quarter Financial Report

Comparison of First Quarter Cost per Million Gallon Results with Budget Last Five Years



As demonstrated in the preceding graph for each of the last four fiscal years, the cost per million gallons at the end of the first quarter has been between 3.4 percent to 13.7 percent lower than the annual budget. The FY 2019-20 first quarter cost per million gallons of \$2,396 is 2.2 percent lower when compared with this year's budget. The increase in cost per million gallons of \$314 from the previous year is primarily due to an increase in operating expenses, which are 14.9 percent higher than the same period last year and a decrease in flows, which are 0.1 percent lower than the same period last year. Staff believes that overall operating costs will be below budget at year-end.

The total cost per million gallons at September 30 is \$2,396 based on flows of 188 million gallons per day. This is \$55 per million gallons, or 2.2 percent, lower than the budgeted cost per million gallons of \$2,451. There is an inverse relationship between the amount of flows and the cost per unit of collection, treatment, and disposal. Consequently, the lower cost per million gallons is due to net expenses being 1.6 percent less than the proportionate budget through September 30, with flows of 188 million gallons per day being equal to the budgeted flow of 188 million gallons per day.

More detailed information on operating revenues, costs, and related information is provided within Section 2.

Consolidated Financial Reports

Following are data tables showing the last five years of Single Family Residential User Fees (SFR) and the cost per MG to collect, treat, and dispose of wastewater for OCSD and for similar agencies. The agencies used in the table were determined to be those that most closely resembled OCSD in terms of services provided and treatment levels. The summaries demonstrate that OCSD's SFR and cost per million gallons are each one of the lowest in their respective group.

Benchmark Study Five-Year Single Family Residential Rate

Agency	Rates as of July					Notes
	2015 SFR	2016 SFR	2017 SFR	2018 SFR	2019 SFR	
San Francisco	\$ 784	\$ 842	\$ 937	\$ 988	\$ 1,076	
Vallejo Sanitation/Flood Control District	\$ 520	\$ 520	\$ 520	\$ 585	\$ 656	
Central Contra Costa Sanitary District	\$ 471	\$ 503	\$ 530	\$ 567	\$ 598	
City of Los Angeles	\$ 464	\$ 495	\$ 527	\$ 561	\$ 597	Note 1
City of San Diego	\$ 573	\$ 573	\$ 573	\$ 573	\$ 573	Note 4
Dublin San Ramon Services District	\$ 382	\$ 382	\$ 397	\$ 423	\$ 447	
Sacramento County	\$ 384	\$ 420	\$ 432	\$ 444	\$ 444	
East Bay MUD	\$ 355	\$ 373	\$ 391	\$ 410	\$ 423	
Union Sanitary District	\$ 377	\$ 380	\$ 393	\$ 407	\$ 421	
City of Hayward	\$ 347	\$ 358	\$ 375	\$ 394	\$ 412	
Orange County Sanitation District	\$ 322	\$ 327	\$ 331	\$ 335	\$ 339	
Irvine Ranch Water District	\$ 289	\$ 309	\$ 309	\$ 309	\$ 313	Note 2
City of Fresno	\$ 309	\$ 309	\$ 309	\$ 309	\$ 309	Note 3
Oro Loma Sanitary District	\$ 206	\$ 221	\$ 238	\$ 256	\$ 275	
Los Angeles County	\$ 177	\$ 182	\$ 186	\$ 191	N/A	Note 5

Notes:

- (1) - Data is for the typical SFR customer rate.
 - (2) - Data represents the usage of 10 hundred cubic feet per unit.
 - (3) - Data represents the minimum SFR rate not including flow.
 - (4) - Data represents the base sewer fee plus the average usage of 9 hundred cubic feet per month.
 - (5) - Data represents the Average Service Charge Rates for the prior fiscal year.
- N/A - Not currently available.

FY 2019-20 First Quarter Financial Report

Benchmark Study Five-Year Cost per MG

Agency	Svc.	Trt.	FY 13-14 Cost/MG	FY 14-15 Cost/MG	FY 15-16 Cost/MG	FY 16-17 Cost/MG	FY 17-18 Cost/MG	Notes
Central Contra Costa Sanitary District	B	4	\$ 5,778	\$ 6,281	\$ 6,454	\$ 6,081	\$ 5,588	
Vallejo Sanitation/Flood Control District	B	3	\$ 6,153	\$ 5,590	\$ 5,396	\$ 4,745	\$ 5,393	
San Francisco	B	3	\$ 5,400	\$ 5,358	\$ 5,268	\$ 4,916	\$ 5,295	
Union Sanitary District	B	3	\$ 3,832	\$ 3,911	\$ 3,957	\$ 4,039	\$ 4,757	
City of San Diego	B	4	\$ 3,156	\$ 3,592	\$ 3,606	\$ 3,834	\$ 4,147	
Dublin San Ramon Services District	B	4	\$ 2,507	\$ 2,522	\$ 2,896	\$ 2,961	\$ 3,422	
East Bay MUD	T	3	\$ 2,559	\$ 2,728	\$ 2,599	\$ 2,353	\$ 3,137	
Sacramento County	T	4	\$ 2,375	\$ 2,494	\$ 2,571	\$ 2,752	\$ 2,831	
City of Los Angeles	B	4	\$ 2,163	\$ 2,269	\$ 2,452	\$ 2,487	\$ 2,329	Note 2
Orange County Sanitation District	B	3	\$ 1,935	\$ 2,071	\$ 2,110	\$ 2,055	\$ 2,069	
City of Fresno	B	4	\$ 1,552	\$ 1,629	\$ 1,678	\$ 1,796	\$ 1,813	
Los Angeles County	B	4	\$ 1,224	\$ 1,239	\$ 1,371	\$ 1,151	\$ 1,365	Note 1

Legend for Service Provided and Treatment Level:

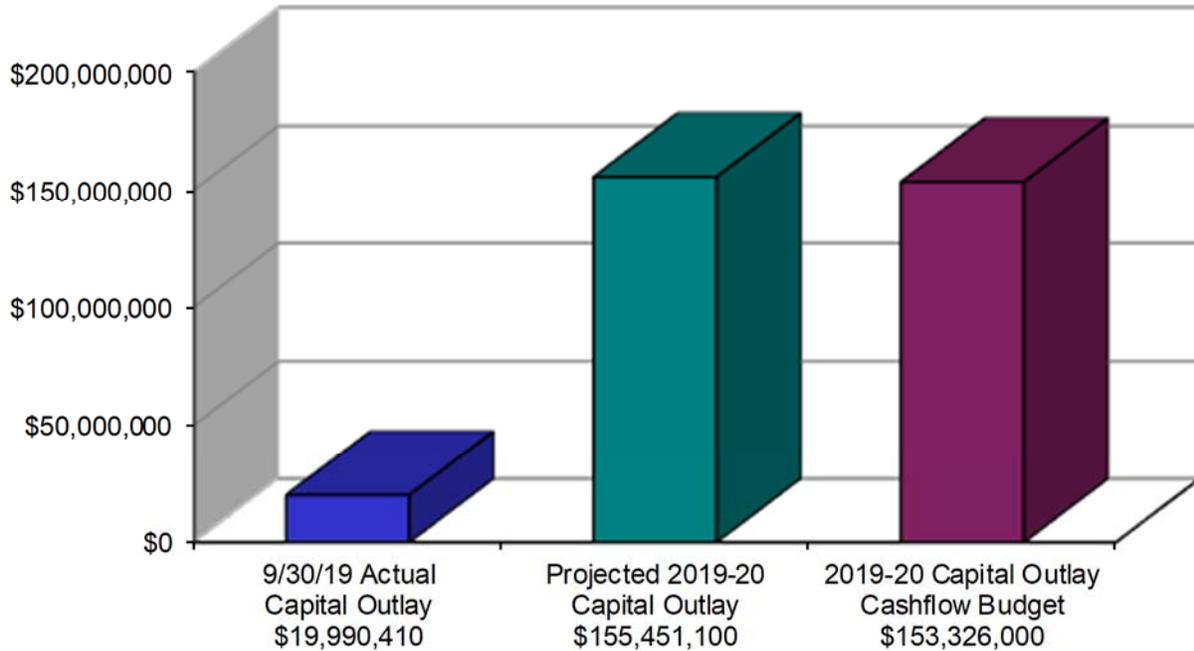
- B - Agency operates both collection and treatment facilities
- T - Agency provides treatment services but not collection
- 3 - Secondary treatment
- 4 - Advanced secondary or secondary with some tertiary treatment

Notes:

- (1) - Does not include source control or overhead costs.
- (2) - 2017 Influent flow has not been reduced by the amount of sludge discharged to the sewers from DCTWRP and LAGWRP.

Consolidated Financial Reports

Capital Outlay Review:



As depicted by the preceding chart, Capital Outlays totaled \$20.0 million or 13.0 percent of the capital outlay cash flow budget for FY 2019-20 as of September 30, 2019. Costs are proportionately low through the first quarter as some projects are still in the design phase or have experienced various delays or deferrals. Examples as of September 30 are Ocean Outfall System Rehabilitation, which has a budget of \$26.9 million but actual costs of \$3.7 million, Newhope-Placentia Trunk Replacement, which has a budget of \$22.7 million but actual costs of \$2.8 million, Headquarters Complex and Site Security at Plant 1, which has a budget of \$9.8 million but actual costs of \$300,000, and Rehabilitation of Western Regional Sewers, which has a budget of \$9.6 million but actual costs of \$466,000. Overall, the capital outlay costs of the capital improvement program are expected to approximate \$155.5 million, or 101.4 percent of the capital outlay cash flow budget at year-end.

More detailed information on the capital improvement program is provided within Section 3.

Capital Assets Schedule and Debt Service Budget Review: Section 4 is the Capital Assets Schedule and Debt Service Section. This section shows the cost value of the Sanitation District's capital facilities at September 30, 2019, as well as the debt service costs resulting from the need to provide funding for the construction of capital facilities.

The majority of principal payments on debt issues are due in February during the third quarter of each fiscal year. As of September 30, 2019, no principal payments have been made through the end of the first quarter. Total principal payments, excluding

FY 2019-20 First Quarter Financial Report

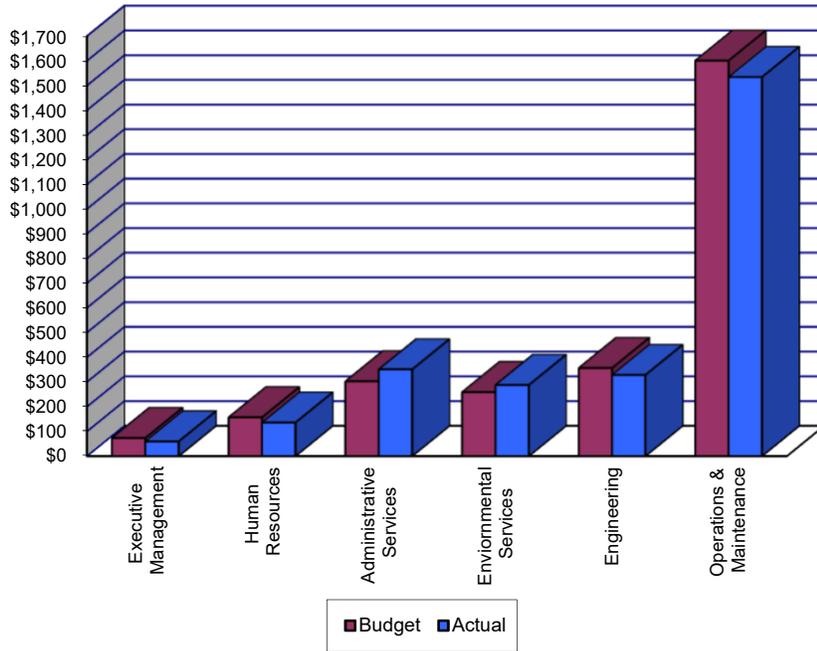
refundings, are expected to approximate budget at year-end. Interest costs are expensed ratably throughout the fiscal year. Interest expense is anticipated to approximate budget at year-end.

Self-Insurance Budget Reviews: Section 5 is the Self-Insurance Section. Through September 30, the Self-Insurance Fund revenues totaled \$787,000 or 31.1 percent of the budget, while expenses were \$619,000 or 24.5 percent of the budget.

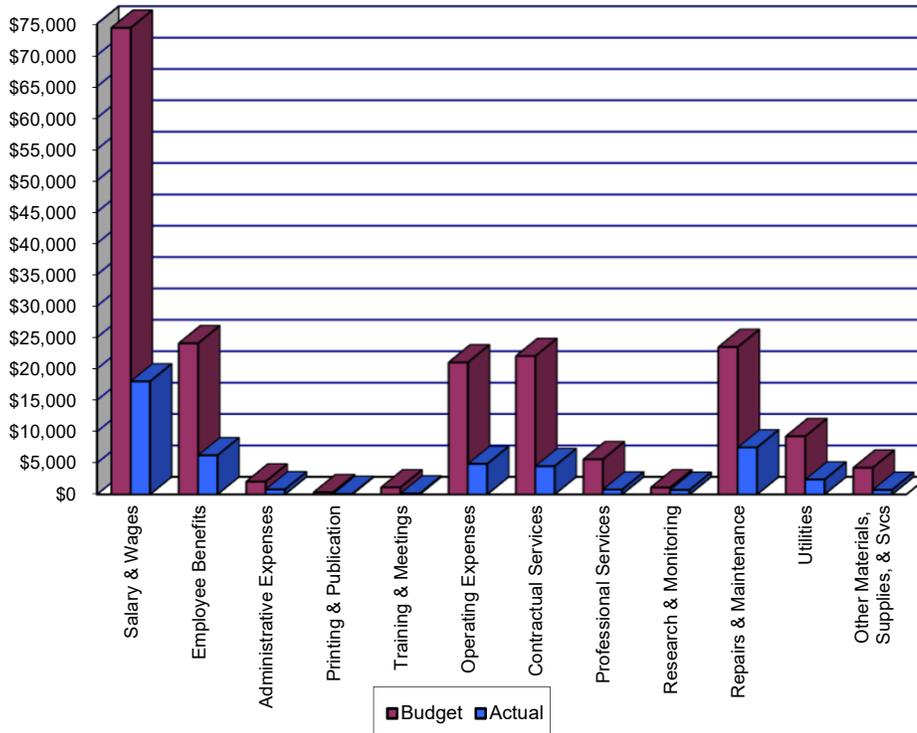
Separate fund accounting is used for recording the revenue and expenses incurred in managing these liability claims. The revenues to these funds represent charges to operating divisions. Expenses to these funds include actual claims paid, claims administration, and excess loss policies.

Operating Budget Review

**Cost per Million Gallons by Department
Budget and Actual
September 30, 2019**



**Collection, Treatment, & Disposal Expenses by Major Category
Budget and Actual (in thousands)
September 30, 2019**



FY 2019-20 First Quarter Financial Report

Divisional Contributions to Cost Per Million Gallons For the Three Months Ended September 30, 2019

	9/30/17 Actual	9/30/18 Actual	2019-20 Annual Budget	9/30/19 Actual
Flow in Million Gallons	17,320.06	17,286.08	68,620.00	17,268.33
Flow in Million Gallons per Day	188.26	187.89	188.00	187.70
Executive Management Department				
General Management Administration	\$ 30.70	\$ 28.94	\$ 46.24	\$ 33.90
Board Services	8.92	8.50	10.11	8.62
Public Affairs	13.82	13.74	16.84	16.84
Subtotal	53.44	51.18	73.19	59.36
Human Resources Department				
Human Resources	48.94	51.22	72.68	58.62
Risk Management / Safety / Security	83.53	68.34	84.31	77.04
Subtotal	132.47	119.56	156.99	135.66
Administrative Services Department				
Administrative Services	6.94	6.78	2.63	7.58
Financial Management	45.80	34.32	50.17	38.81
Contracts, Purchasing, & Materials Mgmt.	62.27	64.97	72.38	60.76
Information Technology	184.43	202.83	177.20	243.60
Subtotal	299.44	308.90	302.38	350.75
Environmental Services Department				
Environmental Services Administration	12.07	12.88	9.03	33.21
Resource Protection	75.62	83.11	83.86	77.56
Laboratory, Monitoring and Compliance	154.21	149.46	166.03	176.72
Subtotal	241.90	245.45	258.92	287.49
Engineering Department				
Engineering Administration	6.08	6.99	10.99	13.22
Planning	49.37	50.22	78.91	51.38
Project Management Office	34.83	42.65	73.15	65.18
Design	117.63	120.78	110.52	105.39
Construction Management	66.38	70.98	82.63	93.14
Subtotal	274.29	291.62	356.20	328.31
Operations & Maintenance Department				
Operations & Maintenance Administration	8.43	8.61	11.73	3.86
Collections Facilities O & M	186.66	194.08	194.83	160.12
Fleet Services	26.70	26.27	27.40	25.83
Plant No. 1 Operations	373.60	402.43	459.68	445.91
Plant No. 2 Operations	289.79	300.46	276.73	261.64
Plant No. 1 Maintenance	198.98	197.38	369.47	357.46
Maintenance Reliability and Planning	95.42	85.40	-	-
Plant No. 2 Maintenance	164.09	156.85	260.88	279.25
Subtotal	1,343.67	1,371.48	1,600.72	1,534.07
Total Operating Expenses	2,345.21	2,388.19	2,748.40	2,695.64
Cost Allocation	(295.42)	(305.76)	(297.40)	(299.74)
Net Operating Requirements	\$ 2,049.79	\$ 2,082.43	\$ 2,451.00	\$ 2,395.90

Operating Budget Review

Comparison of Expenses by Department For the Three Months Ended September 30, 2019

Department and Division	9/30/17 Actual	9/30/18 Actual	2019-20		
			Budget	Year to Date 9/30/19	Budget % Realized
Executive Management Department					
General Management Administration	\$ 531,754	\$ 500,317	\$ 3,172,680	\$ 585,471	18.45%
Board Services	154,476	146,867	693,980	148,781	21.44%
Public Affairs	239,435	237,539	1,155,600	290,832	25.17%
Subtotal	925,665	884,723	5,022,260	1,025,084	20.41%
Human Resources Department					
Human Resources	847,629	885,374	4,987,200	1,012,301	20.30%
Risk Management / Safety / Security	1,446,767	1,181,374	5,785,360	1,330,391	23.00%
Subtotal	2,294,396	2,066,748	10,772,560	2,342,692	21.75%
Administrative Services Department					
Administrative Services	120,275	117,171	180,710	130,873	72.42%
Financial Management	793,250	593,289	3,442,410	670,249	19.47%
Contracts, Purchasing, & Materials Mgmt.	1,078,522	1,123,009	4,966,960	1,049,256	21.12%
Information Technology	3,194,317	3,506,102	12,159,200	4,206,492	34.60%
Subtotal	5,186,364	5,339,571	20,749,280	6,056,870	29.19%
Environmental Services Department					
Environmental Services Administration	209,135	222,718	619,510	573,469	92.57%
Resource Protection	1,309,788	1,436,715	5,754,790	1,339,345	23.27%
Laboratory, Monitoring and Compliance	2,670,898	2,583,600	11,393,290	3,051,597	26.78%
Subtotal	4,189,821	4,243,033	17,767,590	4,964,411	27.94%
Engineering Department					
Engineering Administration	105,345	120,828	753,920	228,357	30.29%
Planning	855,091	868,073	5,414,675	887,257	16.39%
Project Management Office	603,334	737,206	5,019,310	1,125,582	22.43%
Design	2,037,393	2,087,898	7,583,810	1,819,922	24.00%
Construction Management	1,149,722	1,226,924	5,670,320	1,608,438	28.37%
Subtotal	4,750,885	5,040,929	24,442,035	5,669,556	23.20%
Operations & Maintenance Department					
Operations & Maintenance Administration	146,017	148,869	804,870	66,693	8.29%
Collections Facilities O & M	3,232,914	3,354,942	13,369,492	2,764,942	20.68%
Fleet Services	462,460	454,126	1,880,480	446,011	23.72%
Plant No. 1 Operations	6,470,777	6,956,506	31,542,920	7,700,099	24.41%
Plant No. 2 Operations	5,019,118	5,193,785	18,989,328	4,518,161	23.79%
Plant No. 1 Maintenance	3,446,394	3,411,921	25,352,831	6,172,705	24.35%
Maintenance Reliability and Planning	1,652,656	1,476,165	-	-	0.00%
Plant No. 2 Maintenance	2,842,015	2,711,247	17,901,451	4,822,142	26.94%
Subtotal	23,272,351	23,707,561	109,841,372	26,490,753	24.12%
Total Operating Expenses	40,619,482	41,282,565	188,595,097	46,549,366	24.68%
Cost Allocation	(5,117,058)	(5,285,554)	(20,378,610)	(5,176,213)	25.40%
Net Operating Requirements	\$ 35,502,424	\$ 35,997,011	\$ 168,216,487	\$ 41,373,153	24.60%

FY 2019-20 First Quarter Financial Report

Summary of Collection, Treatment, & Disposal Expenses by Major Category For the Three Months Ended September 30, 2019

Description	Budget 2019-20	Expense Through 9/30/19	Expense Through 9/30/18	Increase (Decrease) \$	Increase (Decrease) %	Percent Budget Realized	Remaining Budget
Salary & Wages	\$ 74,364,500	17,994,172	17,649,325	\$ 344,847	1.95%	24.20%	\$ 56,370,328
Employee Benefits	24,069,740	6,216,211	5,889,801	326,410	5.54%	25.83%	17,853,529
Administrative Expenses	2,027,930	780,131	468,759	311,372	66.42%	38.47%	1,247,799
Printing & Publication	329,970	71,705	62,684	9,021	14.39%	21.73%	258,265
Training & Meetings	1,109,740	129,506	157,090	(27,584)	-17.56%	11.67%	980,234
Operating Materials & Supplies	21,008,781	4,848,888	4,147,497	701,391	16.91%	23.08%	16,159,893
Contractual Services	22,033,974	4,480,474	5,133,841	(653,367)	-12.73%	20.33%	17,553,500
Professional Services	5,586,170	761,765	668,690	93,075	13.92%	13.64%	4,824,405
Research & Monitoring	1,099,600	719,513	148,567	570,946	384.30%	65.43%	380,087
Repairs & Maintenance	23,469,642	7,469,206	3,996,894	3,472,312	86.88%	31.82%	16,000,436
Utilities	9,250,310	2,356,960	2,468,268	(111,308)	-4.51%	25.48%	6,893,350
Other Materials, Supplies, and Services	4,244,740	720,835	491,149	229,686	46.77%	16.98%	3,523,905
Net Cost Allocation	<u>(20,378,610)</u>	<u>(5,176,213)</u>	<u>(5,285,554)</u>	<u>109,341</u>	<u>-2.07%</u>	<u>25.40%</u>	<u>(15,202,397)</u>
Net Operating Requirements	168,216,487	41,373,153	35,997,011	5,376,142	14.93%	24.60%	126,843,334
Gallage Flow (MG)	<u>68,620.00</u>	<u>17,268.33</u>	<u>17,286.08</u>	<u>(17.75)</u>	<u>-0.10%</u>		
Gallage Flow (MGD)	<u>188.00</u>	<u>187.70</u>	<u>187.89</u>	<u>(0.19)</u>	<u>-0.10%</u>		
Gallage Flow (\$'s /MG)	<u>\$2,451.00</u>	<u>\$2,395.90</u>	<u>\$2,082.43</u>	<u>\$313.47</u>	<u>15.05%</u>		

Operating Budget Review

Summary of Revenues For the Three Months Ended September 30, 2019

Description	Budget 2019-20	Revenue Through 9/30/19	Percent Budget Realized	Remaining Budget	Revenue Through 9/30/18	Increase (Decrease) \$	Increase (Decrease) %
Service Fees	\$ 298,144,000	\$ 7,095	0.00%	\$ 298,136,905	\$ (330,829)	\$ 337,924	102.14%
Permit Fees	9,917,000	3,289,220	33.17%	6,627,780	4,760,889	(1,471,669)	-30.91%
Inter District Sewer Use-SAWPA & SBSB	2,654,000	726,065	27.36%	1,927,935	625,418	100,647	16.09%
Intra District Sewer Use-IRWD	6,861,560	1,168,597	17.03%	5,692,963	1,013,278	155,319	15.33%
Sludge Disposal-IRWD	5,400,000	2,244,149	41.56%	3,155,851	1,992,636	251,513	12.62%
Capital Assessments-IRWD	5,397,000	502,008	9.30%	4,894,992	1,032,191	(530,183)	-51.36%
Capital Facilities Capacity Charges	18,000,000	3,324,839	18.47%	14,675,161	4,678,078	(1,353,239)	-28.93%
Property Taxes	96,354,000	2,326,912	2.41%	94,027,088	2,449,863	(122,951)	-5.02%
Interest Earnings	6,602,000	5,788,216	87.67%	813,784	2,299,559	3,488,657	151.71%
CIP Reimbursements	5,987,869	657,477	10.98%	5,330,392	-	657,477	100.00%
Wastehauler	750,000	194,244	25.90%	555,756	138,721	55,523	40.02%
Grant Revenue	464,000	-	0.00%	464,000	-	-	0.00%
CNG Sales	400,000	70,670	17.67%	329,330	72,538	(1,868)	-2.58%
Rents & Leases	2,260,100	226,838	10.04%	2,033,262	399,845	(173,007)	-43.27%
Other Revenues	6,413,529	73,051	1.14%	6,340,478	68,460	4,591	6.71%
Power Sales	25,000	32,306	129.22%	(7,306)	12,204	20,102	164.72%
Other Sales	50,000	8,867	17.73%	41,133	40,998	(32,131)	-78.37%
Total Revenues	\$ 465,680,058	\$ 20,640,554	4.43%	\$ 445,039,504	\$ 19,253,849	\$ 1,386,705	7.20%

FY 2019-20 First Quarter Financial Report

Summary of Collection, Treatment, & Disposal Expenses by Line Item For the Three Months Ended September 30, 2019

Description	Budget 2019-20	Expense Through 9/30/19	Percent Budget Expended	Remaining Budget	Expense Through 9/30/18	Increase (Decrease) \$	Increase (Decrease) %
Salaries, Wages & Benefits							
Salaries & Wages	\$ 74,364,500	\$ 17,994,172	24.20%	\$ 56,370,328	\$ 17,649,325	\$ 344,847	1.95%
Employee Benefits							
Retirement	11,478,840	3,073,082	26.77%	8,405,758	2,874,236	198,846	6.92%
Group Insurances	11,006,200	2,715,032	24.67%	8,291,168	2,641,026	74,006	2.80%
Tuition & Certification Reimb	98,100	20,241	20.63%	77,859	24,604	(4,363)	-17.73%
Edu. degrees, Cert. & Lic.	470,300	157,169	33.42%	313,131	131,458	25,711	19.56%
Uniform Rental	140,800	29,322	20.83%	111,478	33,516	(4,194)	-12.51%
Workers' Compensation	780,000	194,998	25.00%	585,002	146,649	48,349	32.97%
Unemployment Insurance	3,200	328	10.25%	2,872	1,244	(916)	-73.63%
EMT Supplemental Benefits	92,300	26,039	28.21%	66,261	37,068	(11,029)	-29.75%
Total Benefits	24,069,740	6,216,211	25.83%	17,853,529	5,889,801	326,410	5.54%
Salaries, Wages & Benefits	98,434,240	24,210,383	24.60%	74,223,857	23,539,126	671,257	2.85%
Matl, Supply, & Services							
Administrative Expenses							
Memberships	639,660	320,515	50.11%	319,145	235,829	84,686	35.91%
Office Exp - Supplies	71,330	15,832	22.20%	55,498	7,163	8,669	121.02%
Postage	43,330	7,097	16.38%	36,233	11,957	(4,860)	-40.65%
Books & Publications	62,340	35,617	57.13%	26,723	3,634	31,983	880.10%
Forms	970	-	0.00%	970	1,245	(1,245)	-100.00%
Small Computer Items	900,300	350,785	38.96%	549,515	197,956	152,829	77.20%
Minor Furniture & Fixtures	310,000	50,285	16.22%	259,715	10,975	39,310	358.18%
Subtotal	2,027,930	780,131	38.47%	1,247,799	468,759	311,372	66.42%
Printing & Publication							
Repro-In-House	200,790	58,805	29.29%	141,985	50,569	8,236	16.29%
Printing-Outside	66,480	2,200	3.31%	64,280	4,215	(2,015)	-47.81%
Notices & Ads	62,650	10,700	17.08%	51,950	7,900	2,800	35.44%
Photo Processing	50	-	0.00%	50	-	-	N/A
Subtotal	329,970	71,705	21.73%	258,265	62,684	9,021	14.39%
Training & Meetings							
Meetings	170,850	23,932	14.01%	146,918	22,705	1,227	5.40%
Training	938,890	105,574	11.24%	833,316	134,385	(28,811)	-21.44%
Subtotal	1,109,740	129,506	11.67%	980,234	157,090	(27,584)	-17.56%
Operating Mat'l's & Supplies							
Chemical Coagulants	10,364,188	2,656,756	25.63%	7,707,432	1,506,429	1,150,327	76.36%
Odor Control	7,415,288	1,493,511	20.14%	5,921,777	1,931,936	(438,425)	-22.69%
Disinfection	233,000	63,200	27.12%	169,800	37,793	25,407	67.23%
Chemicals - Misc & Cogen	331,070	72,115	21.78%	258,955	84,507	(12,392)	-14.66%
Gasoline, Diesel & Oil	563,460	120,227	21.34%	443,233	152,692	(32,465)	-21.26%
Tools	469,135	103,645	22.09%	365,490	80,553	23,092	28.67%
Safety equipment/tools	624,500	129,730	20.77%	494,770	119,502	10,228	8.56%
Solv, Paints & Jan. Supplies	100,000	31,603	31.60%	68,397	25,136	6,467	25.73%
Lab Chemicals & Supplies	639,570	149,353	23.35%	490,217	166,564	(17,211)	-10.33%
Other Operating Supplies	176,880	27,703	15.66%	149,177	42,514	(14,811)	-34.84%
Property Tax Fees	91,690	1,045	1.14%	90,645	(129)	1,174	-910.08%
Subtotal	21,008,781	4,848,888	23.08%	16,159,893	4,147,497	701,391	16.91%
Contractual Services							
Solids Removal	13,403,700	3,019,756	22.53%	10,383,944	3,916,758	(897,002)	-22.90%
Other Waste Disposal	840,900	179,945	21.40%	660,955	191,293	(11,348)	-5.93%
Groundskeeping	193,000	49,562	25.68%	143,438	41,829	7,733	18.49%
Janitorial	444,360	129,636	29.17%	314,724	111,262	18,374	16.51%
Outside Lab Services	260,000	35,592	13.69%	224,408	30,012	5,580	18.59%
Oxygen	306,000	93,789	30.65%	212,211	77,712	16,077	20.69%
County Service Fee	512,410	4,560	0.89%	507,850	10,113	(5,553)	-54.91%
Temporary Services	810,000	86,676	10.70%	723,324	35,251	51,425	145.88%
Security Services	1,608,000	411,424	25.59%	1,196,576	406,713	4,711	1.16%
Other	3,655,604	469,534	12.84%	3,186,070	312,898	156,636	50.06%
Subtotal	22,033,974	4,480,474	20.33%	17,553,500	5,133,841	(653,367)	-12.73%

(Continued)

Operating Budget Review

Summary of Expenses by Line Item For the Three Months Ended September 30, 2019

Description	Budget 2019-20	Expense Through 9/30/19	Percent Budget Expended	Remaining Budget	Expense Through 9/30/18	Increase (Decrease) \$	Increase (Decrease) %
<u>Continued:</u>							
Professional Services							
Legal	1,565,820	303,212	19.36%	1,262,608	164,077	139,135	84.80%
Audit & Accounting	241,110	31,925	13.24%	209,185	52,198	(20,273)	-38.84%
Engineering	1,361,000	69,894	5.14%	1,291,106	160,183	(90,289)	-56.37%
Enviro Scientific Consulting	200,000	388	0.19%	199,612	10,000	(9,612)	-96.12%
Software Prgm Consulting	376,000	129,033	34.32%	246,967	82,287	46,746	56.81%
Advocacy Efforts	179,400	42,400	23.63%	137,000	39,000	3,400	8.72%
Industrial Hygiene Services	50,000	110	0.22%	49,890	7,208	(7,098)	-98.47%
Labor Negotiation Services	80,000	28,748	35.94%	51,252	-	28,748	N/A
Other	1,532,840	156,055	10.18%	1,376,785	153,737	2,318	1.51%
Subtotal	<u>5,586,170</u>	<u>761,765</u>	<u>13.64%</u>	<u>4,824,405</u>	<u>668,690</u>	<u>93,075</u>	<u>13.92%</u>
Research & Monitoring							
Environmental Monitoring	549,600	176,467	32.11%	373,133	26,510	149,957	565.66%
Air Quality Monitoring	100,000	68,046	68.05%	31,954	9,557	58,489	612.00%
Research	450,000	475,000	105.56%	(25,000)	112,500	362,500	322.22%
Subtotal	<u>1,099,600</u>	<u>719,513</u>	<u>65.43%</u>	<u>380,087</u>	<u>148,567</u>	<u>570,946</u>	<u>384.30%</u>
Repairs & Maintenance							
Materials & Services	19,774,364	5,409,985	27.36%	14,364,379	2,544,507	2,865,478	112.61%
Svc. Mtc. Agreements	3,695,278	2,059,221	55.73%	1,636,057	1,452,387	606,834	41.78%
Subtotal	<u>23,469,642</u>	<u>7,469,206</u>	<u>31.82%</u>	<u>16,000,436</u>	<u>3,996,894</u>	<u>3,472,312</u>	<u>86.88%</u>
Utilities							
Telephone	501,100	127,794	25.50%	373,306	104,367	23,427	22.45%
Diesel For Generators	17,000	5,635	33.15%	11,365	9,469	(3,834)	-40.49%
Natural Gas	722,140	242,957	33.64%	479,183	375,875	(132,918)	-35.36%
Power	7,237,990	1,738,100	24.01%	5,499,890	1,805,197	(67,097)	-3.72%
Water	772,080	242,474	31.41%	529,606	173,360	69,114	39.87%
Subtotal	<u>9,250,310</u>	<u>2,356,960</u>	<u>25.48%</u>	<u>6,893,350</u>	<u>2,468,268</u>	<u>(111,308)</u>	<u>-4.51%</u>
Other Operating Supplies							
Outside Equip Rental	122,000	21,766	17.84%	100,234	8,048	13,718	170.45%
Insurance Premiums	37,800	28,501	75.40%	9,299	27,155	1,346	4.96%
Prop & Gen Liab Insurance	1,720,000	429,999	25.00%	1,290,001	324,825	105,174	32.38%
Freight	87,050	22,562	25.92%	64,488	18,848	3,714	19.71%
Misc. Operating Expense	249,460	63,728	25.55%	185,732	55,058	8,670	15.75%
Regulatory Operating Fees	769,000	118,791	15.45%	650,209	26,271	92,520	352.18%
Subtotal	<u>2,985,310</u>	<u>685,347</u>	<u>22.96%</u>	<u>2,299,963</u>	<u>460,205</u>	<u>225,142</u>	<u>48.92%</u>
General Mgr Contingency & Reappropriations							
	1,133,800	-	0.00%	1,133,800	-	-	N/A
Other Non-Oper Expense							
	125,630	35,488	28.25%	90,142	30,944	4,544	14.68%
Total Materials, Supplies & Services							
	90,160,857	22,338,983	24.78%	67,821,874	17,743,439	4,595,544	25.90%
Total Expenditures							
	188,595,097	46,549,366	24.68%	142,045,731	41,282,565	5,266,801	12.76%
Cost Allocation							
	(20,378,610)	(5,176,213)	25.40%	(15,202,397)	(5,285,554)	109,341	-2.07%
Net Operating Requirements							
	<u>\$ 168,216,487</u>	<u>\$ 41,373,153</u>	<u>24.60%</u>	<u>\$ 126,843,334</u>	<u>\$ 35,997,011</u>	<u>\$ 5,376,142</u>	<u>14.93%</u>

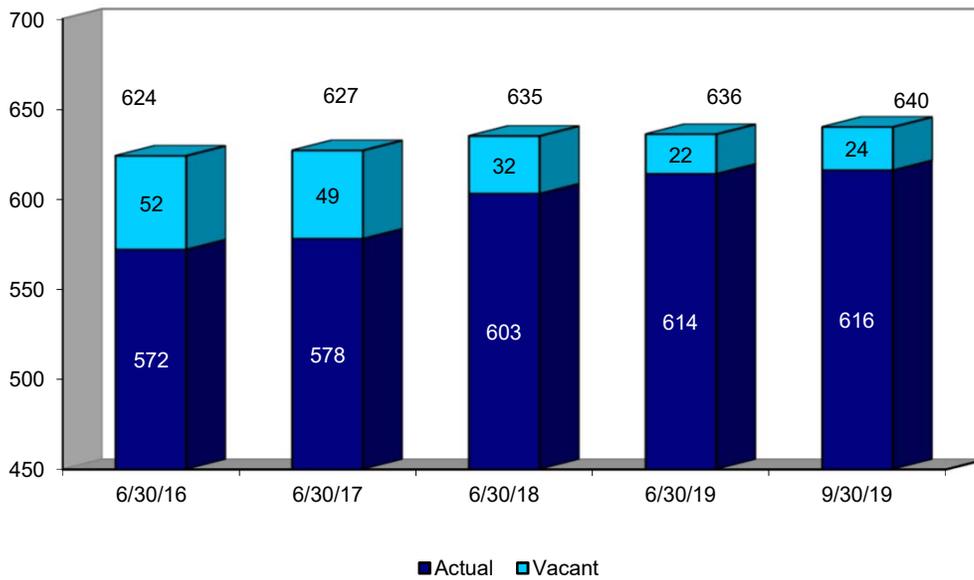
FY 2019-20 First Quarter Financial Report

Summary of Collection, Treatment, & Disposal Expenses by Process For the Three Months Ended September 30, 2019

Process:	Actual 9/30/19	Actual 9/30/18	Increase (Decrease) \$	Increase (Decrease) %
Preliminary Treatment	\$ 1,729,329	\$ 1,778,265	\$ (48,936)	-2.75%
Primary Treatment	6,252,735	3,384,203	2,868,532	84.76%
Secondary Treatment	2,738,688	2,169,677	569,011	26.23%
Cryogenic Plant (Plant 2)	190,774	162,770	28,004	17.20%
Effluent Disposal	183,311	225,825	(42,514)	-18.83%
Solids Handling	12,425,127	10,328,537	2,096,590	20.30%
Cogeneration	4,659,215	4,685,747	(26,532)	-0.57%
Utilities	948,216	738,357	209,859	28.42%
Electrical Distribution	418,488	418,054	434	0.10%
Miscellaneous Buildings	2,457,228	2,276,232	180,996	7.95%
External Location	87,689	82,512	5,177	6.27%
Nerissa Vessel	66,771	52,892	13,879	26.24%
Laboratory	4,451,240	3,786,837	664,403	17.55%
Collections	4,764,342	5,907,103	(1,142,761)	-19.35%
Net Operating Requirements	\$ 41,373,153	\$ 35,997,011	\$ 5,376,142	14.93%

Operating Budget Review

Staffing Trends Full Time Equivalents September 30, 2019

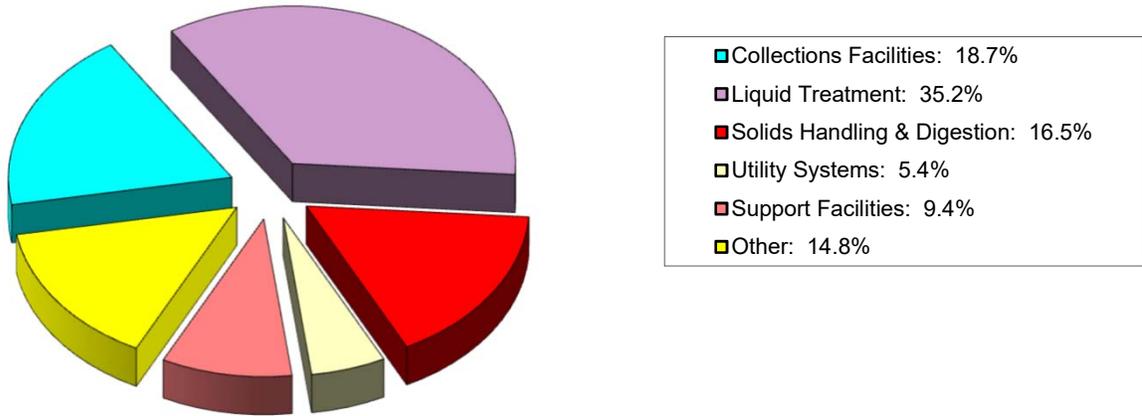


At September 30, 2019, the total head count was 633 employees, or a full time equivalency of 616.

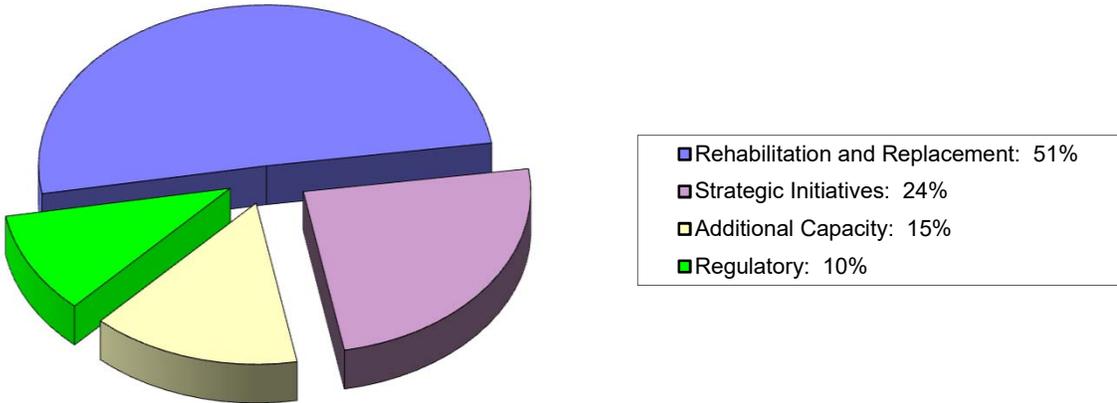
This Page Intentionally Left Blank

CIP Budget Review

Capital Improvement Program By Type and Funding Source For the Three Months Ended September 30, 2019



Total Capital Improvement Outlays - \$19,990,410



Total Capital Improvement Outlays - \$19,990,410

FY 2019-20 First Quarter Financial Report

Summary of Capital Improvement Construction Requirements - Current Year For the Three Months Ended September 30, 2019

	<u>2019-20 Cashflow Budget</u>	<u>2019-20 Actual at 9/30/2019</u>	<u>2019-20 Projected Outlay</u>
<u>Collection System Improvement Projects</u>			
<u>Collections Facilities</u>			
Taft Branch Improvements	105,676	-	105,700
Newhope - Placentia Trunk Grade Separation Replacement	71,875	270	54,000
Newhope-Placentia Trunk Replacement	22,653,359	2,835,034	17,141,100
Westminster Blvd Force Main Replacement	2,534,429	68,922	2,242,900
Rehabilitation of Western Regional Sewers	9,563,225	465,685	6,278,100
Interstate 405 Widening Project Impacts on OCSD Sewers	107,640	14,041	93,000
Seal Beach Pump Station Replacement	578,588	52,560	566,300
Newport Force Main Rehabilitation	-	2,056	61,600
Bay Bridge Pump Station Replacement	1,039,692	43,669	1,070,400
Newport Beach Pump Station Odor Control Improvements	148,187	9,461	58,400
District 6 Trunk Sewer Relief	465,049	40,219	821,700
Gisler - Red Hill Trunk Improvements - Reach B	-	1,865	195,300
Gisler - Red Hill Interceptor Rehabilitation	211,211	-	159,900
Main Street Pump Replacement & Force Main Rehabilitation	493,458	-	167,200
Small Construction Projects Program - Collections	1,688,579	124,189	124,200
Operations & Maintenance Capital Program - Collections	-	13,981	14,000
Planning Studies Program - Collections	-	21,878	21,900
SARI Rock Stabilizers Removal	4,065,703	32,404	3,267,000
Sunflower and Red-Hill Interceptor Repair	390,189	12,232	261,800
Additional Charges to CIP Closed at 6/30/19	-	(8,400)	(8,400)
Subtotal - Collections Facilities	<u>44,116,860</u>	<u>3,730,066</u>	<u>32,696,100</u>
Revenue Area 14			
Newport Force Main Rehabilitation (2.18%)	-	46	1,400
Subtotal - Revenue Area 14	<u>-</u>	<u>46</u>	<u>1,400</u>
Total Collection System Improvement Projects	<u>44,116,860</u>	<u>3,730,112</u>	<u>32,697,500</u>

(Continued)

CIP Budget Review

Summary of Capital Improvement Construction Requirements - Current Year For the Three Months Ended September 30, 2019

	<u>2019-20 Cashflow Budget</u>	<u>2019-20 Actual at 9/30/2019</u>	<u>2019-20 Projected Outlay</u>
Treatment & Disposal Projects			
Headworks			
Headworks Rehabilitation and Expansion at Plant 1	7,870,442	873,157	10,256,900
Headworks Modifications at P2 for GWRS Final Expansion	4,159,614	363,279	2,433,000
Subtotal - Headworks	<u>12,030,056</u>	<u>1,236,436</u>	<u>12,689,900</u>
Primary Treatment			
Primary Clarifier Reliability Improvements at Plant No. 1	480,336	61,788	651,400
Primary Treatment Rehabilitation at Plant 2	9,186,737	1,993,474	9,318,200
Subtotal - Primary Treatment	<u>9,667,073</u>	<u>2,055,262</u>	<u>9,969,600</u>
Secondary Treatment			
Return Activated Sludge Piping Replacement at Plant 1	2,803,867	40,054	3,973,800
Activated Sludge Aeration Basin Deck Repair at Plant 2	14,671	2,641	3,400
Return Activated Sludge Piping Replacement at Plant 2	3,234,395	52,851	1,264,500
Subtotal - Secondary Treatment	<u>6,052,933</u>	<u>95,546</u>	<u>5,241,700</u>
Solids Handling & Digestion			
Sludge Dewatering and Odor Control at Plant 1	6,781,194	2,253,034	5,849,800
Digester Ferric Chloride Piping Replacement at Plant No. 1	68,898	817	24,500
Plant No. 2 Digester Facilities Rehabilitation	2,770,904	-	1,208,300
Sludge Dewatering and Odor Control at Plant 2	5,998,220	906,789	4,763,300
Interim Food Waste Receiving Facility	641,684	75,995	630,600
TPAD Digester Facility at P2	874,204	53,254	971,200
Subtotal - Solids Handling & Digestion	<u>17,135,104</u>	<u>3,289,889</u>	<u>13,447,700</u>
Ocean Outfall Systems			
Ocean Outfall System Rehabilitation	26,862,720	3,654,612	24,552,900
Subtotal - Ocean Outfall Systems	<u>26,862,720</u>	<u>3,654,612</u>	<u>24,552,900</u>
Utility Systems			
Digester Gas Facilities Rehabilitation	3,957,325	138,460	3,512,800
Natural Gas Pipelines Replacement at Plants 1 and 2	283,122	129,807	252,100
Electrical Power Distribution System Improvements	851,397	29,526	597,000
Uninterruptable Power Supply Improvements at Plant 1	270,355	14,525	190,800
Consolidated Demolition and Utility Improvements at P2	3,545,396	768,191	5,061,600
Substation Replacement at Plant No. 2	506,550	-	506,600
Subtotal - Utility Systems	<u>9,414,145</u>	<u>1,080,509</u>	<u>10,120,900</u>

(Continued)

FY 2019-20 First Quarter Financial Report

Summary of Capital Improvement Construction Requirements - Current Year For the Three Months Ended September 30, 2019

	<u>2019-20 Cashflow Budget</u>	<u>2019-20 Actual at 9/30/2019</u>	<u>2019-20 Projected Outlay</u>
Process Related Special Projects			
Safety Improvements Program	7,701,072	1,349,664	7,532,900
Subtotal - Process Related Special Projects	<u>7,701,072</u>	<u>1,349,664</u>	<u>7,532,900</u>
Information Management Systems			
Process Control Systems Upgrades	578,902	-	579,000
Project Management Information System	1,860,070	53,647	700,800
Information Technology Capital Program	2,749,741	268,368	1,467,700
Geographic Information System	493,346	129,732	419,200
EAM Software and Process Implementation	976,100	72,335	651,000
Process Control Systems Upgrades Study	1,783,597	63,912	1,295,500
Subtotal - Information Management Systems	<u>8,441,756</u>	<u>587,994</u>	<u>5,113,200</u>
Strategic & Master Planning			
Planning Studies Program	5,562,122	269,025	7,357,500
Climate Resiliency Study	222,600	97,210	291,000
Subtotal - Strategic & Master Planning	<u>5,784,722</u>	<u>366,235</u>	<u>7,648,500</u>
Water Management Projects			
GWRS Final Expansion Coordination	182,157	12,712	372,100
Subtotal - Water Management Projects	<u>182,157</u>	<u>12,712</u>	<u>372,100</u>
Research			
Research Program	2,351,548	228,076	1,469,200
Subtotal - Research	<u>2,351,548</u>	<u>228,076</u>	<u>1,469,200</u>
Support Facilities			
Small Construction Projects Program	4,341,552	964,333	8,088,300
Fleet Services UST Leak Remediation at Plant 1	2,251,879	31,497	31,500
Operations & Maintenance Capital Program	5,061,149	297,708	2,877,300
18350 Mt. Langley Building Purchase and Improvement	155,080	7,570	205,700
Title 24 Access Compliance and Building Rehab Project	1,075,459	240,641	903,500
Headquarters Complex and Site Security at Plant 1	9,765,435	299,596	8,688,400
South Perimeter Security and Utility Improvements at Plant I	781,427	46,193	690,300
Plant 2 Warehouse Relocation	67,593	-	67,600
Subtotal - Support Facilities	<u>23,499,574</u>	<u>1,887,538</u>	<u>21,552,600</u>

(Continued)

CIP Budget Review

Summary of Capital Improvement Construction Requirements - Current Year For the Three Months Ended September 30, 2019

	<u>2019-20 Cashflow Budget</u>	<u>2019-20 Actual at 9/30/2019</u>	<u>2019-20 Projected Outlay</u>
Others			
Perimeter Screening at Plant 2	44,087	-	28,900
Capital Improvement Program Management Services	<u>118,846</u>	<u>(17)</u>	<u>90,200</u>
Subtotal - Others	<u>162,933</u>	<u>(17)</u>	<u>119,100</u>
Total Treatment and Disposal Projects	<u>129,285,793</u>	<u>15,844,456</u>	<u>119,830,300</u>
Capital Equipment Purchases	<u>2,923,300</u>	<u>415,842</u>	<u>2,923,300</u>
Total Collection, Treatment and Disposal Projects and Capital Equipment Purchases	176,325,953	19,990,410	155,451,100
Less: Savings and Deferrals	<u>(23,000,000)</u>	<u>-</u>	<u>-</u>
Net Collection, Treatment and Disposal Projects and Capital Equipment Purchases	<u>\$153,325,953</u>	<u>\$ 19,990,410</u>	<u>\$155,451,100</u>

FY 2019-20 First Quarter Financial Report

Summary of Capital Improvement Construction Requirements - Project Life For the Three Months Ended September 30, 2019

	Approved Project Budget	June 30, 2019 Accumulated Cost	Current Year Projected Cost	Total Projected Cost at June 30, 2020	Remaining Future Budget
Collection System Improvement Projects					
Collections Facilities					
Taft Branch Improvements	8,130,000	12,083	105,700	117,783	8,012,217
Newhope - Placentia Trunk Grade Separation Replacement	4,300,000	4,192,559	54,000	4,246,559	53,441
Newhope-Placentia Trunk Replacement	112,000,000	61,677,495	17,141,100	78,818,595	33,181,405
Yorba Linda Pump Station Abandonment	10,800,000	-	-	-	10,800,000
Beach Trunk/Knott Interceptor Sewer Relief	21,000,000	-	-	-	21,000,000
Westminster Blvd Force Main Replacement	54,000,000	6,690,994	2,242,900	8,933,894	45,066,106
Rehabilitation of Western Regional Sewers	202,000,000	15,684,536	6,278,100	21,962,636	180,037,364
Interstate 405 Widening Project Impacts on OCSD Sewers	528,000	94,547	93,000	187,547	340,453
Seal Beach Pump Station Replacement	78,900,000	141,174	566,300	707,474	78,192,526
Los Alamitos Sub-Trunk Extension	66,000,000	-	-	-	66,000,000
Newport Force Main Rehabilitation	58,367,238	58,305,659	61,600	58,367,259	(21)
Crystal Cove Pumping Station Upgrade and Rehabilitation	17,900,000	-	-	-	17,900,000
Bay Bridge Pump Station Replacement	64,000,000	1,241,764	1,070,400	2,312,164	61,687,836
Newport Beach Pump Station Odor Control Improvements	4,066,000	52,522	58,400	110,922	3,955,078
District 6 Trunk Sewer Relief	7,965,000	7,086,802	821,700	7,908,502	56,498
Gisler - Red Hill Trunk Improvements - Reach B	25,213,000	25,017,792	195,300	25,213,092	(92)
MacArthur Pump Station Rehabilitation	9,151,000	-	-	-	9,151,000
Main Street Pump Station Rehabilitation	40,660,000	-	-	-	40,660,000
Gisler - Red Hill Interceptor Rehabilitation	14,800,000	-	159,900	159,900	14,640,100
Main Street Pump Replacement & Force Main Rehabilitation	17,160,000	-	167,200	167,200	16,992,800
MacArthur Force Main Improvement	2,385,000	-	-	-	2,385,000
Edinger Bolsa Chica Trunk Improvements	5,159,000	-	-	-	5,159,000
Edinger Pump Station Upgrade and Rehabilitation	14,100,000	-	-	-	14,100,000
Slater Avenue Pump Station Rehabilitation	25,300,000	-	-	-	25,300,000
Small Construction Projects Program - Collections	9,258,000	3,606,091	124,200	3,730,291	5,527,709
Operations & Maintenance Capital Program - Collections	570,109	33,002	14,000	47,002	523,107
Planning Studies Program - Collections	4,258,600	3,178,275	21,900	3,200,175	1,058,425
Research Program - Collections	154,000	46,250	-	46,250	107,750
SARI Rock Stabilizers Removal	6,860,000	1,059,637	3,267,000	4,326,637	2,533,363
Sunflower and Red-Hill Interceptor Repair	5,500,000	20,888	261,800	282,688	5,217,312
Additional Charges to CIP Closed at 6/30/19	-	-	(8,400)	(8,400)	8,400
Subtotal - Collections Facilities	890,484,947	188,142,070	32,696,100	220,838,170	669,646,777
Revenue Area 14:					
Newport Force Main Rehabilitation (2.18%)	1,300,762	1,299,390	1,400	1,300,790	(28)
Subtotal - Revenue Area 14	1,300,762	1,299,390	1,400	1,300,790	(28)
Total Collection System Improvement Projects	891,785,709	189,441,460	32,697,500	222,138,960	669,646,749

(Continued)

CIP Budget Review

Summary of Capital Improvement Construction Requirements - Project Life For the Three Months Ended September 30, 2019

	Approved Project Budget	June 30, 2019 Accumulated Cost	Current Year Projected Cost	Total Projected Cost at June 30, 2020	Remaining Future Budget
Treatment & Disposal Projects					
Headworks					
Headworks Rehabilitation and Expansion at Plant 1	406,000,000	19,524,945	10,256,900	29,781,845	376,218,155
Headworks Modifications at P2 for GWRS Final Expansion	54,000,000	5,356,267	2,433,000	7,789,267	46,210,733
Subtotal - Headworks	460,000,000	24,881,212	12,689,900	37,571,112	422,428,888
Primary Treatment					
Primary Clarifiers Replacements and Improvements at P1	106,000,000	521,057	-	521,057	105,478,943
Primary Clarifier Reliability Improvements at Plant No. 1	12,000,000	198,647	651,400	850,047	11,149,953
Primary Treatment Rehabilitation at Plant 2	245,000,000	16,832,705	9,318,200	26,150,905	218,849,095
B/C-Side Primary Clarifiers Rehabilitation at Plant 2	249,560,000	-	-	-	249,560,000
Subtotal - Primary Treatment	612,560,000	17,552,409	9,969,600	27,522,009	585,037,991
Secondary Treatment					
Return Activated Sludge Piping Replacement at Plant 1	10,300,000	964,280	3,973,800	4,938,080	5,361,920
Activated Sludge Aeration Basin Deck Repair at Plant 2	1,800,000	1,612,387	3,400	1,615,787	184,213
Return Activated Sludge Piping Replacement at Plant 2	20,000,000	849,751	1,264,500	2,114,251	17,885,749
Subtotal - Secondary Treatment	32,100,000	3,426,418	5,241,700	8,668,118	23,431,882
Solids Handling & Digestion					
Digester Rehabilitation at Plant 1	66,000,000	65,609,228	-	65,609,228	390,772
Sludge Dewatering and Odor Control at Plant 1	199,500,000	191,251,029	5,849,800	197,100,829	2,399,171
Digester Ferric Chloride Piping Replacement at Plant No. 1	1,360,000	-	24,500	24,500	1,335,500
Plant No. 2 Digester Facilities Rehabilitation	15,500,000	14,717	1,208,300	1,223,017	14,276,983
Sludge Dewatering and Odor Control at Plant 2	90,477,000	80,701,878	4,763,300	85,465,178	5,011,822
Interim Food Waste Receiving Facility	6,300,000	448,580	630,600	1,079,180	5,220,820
TPAD Digester Facility at P2	405,100,000	-	971,200	971,200	404,128,800
Digester P, Q, R, and S Replacement	166,000,000	-	-	-	166,000,000
Subtotal - Solids Handling & Digestion	950,237,000	338,025,432	13,447,700	351,473,132	598,763,868
Ocean Outfall Systems					
Ocean Outfall System Rehabilitation	166,000,000	38,447,897	24,552,900	63,000,797	102,999,203
Subtotal - Ocean Outfall Systems	166,000,000	38,447,897	24,552,900	63,000,797	102,999,203
Utility Systems					
UPS System Upgrades	4,700,000	-	-	-	4,700,000
Digester Gas Facilities Rehabilitation	156,500,000	4,894,979	3,512,800	8,407,779	148,092,221
Natural Gas Pipelines Replacement at Plants 1 and 2	1,310,000	221,027	252,100	473,127	836,873
Electrical Power Distribution System Improvements	30,000,000	138,428	597,000	735,428	29,264,572

(Continued)

FY 2019-20 First Quarter Financial Report

Summary of Capital Improvement Construction Requirements - Project Life For the Three Months Ended September 30, 2019

	Approved Project Budget	June 30, 2019 Accumulated Cost	Current Year Projected Cost	Total Projected Cost at June 30, 2020	Remaining Future Budget
Utility Systems (continued)					
Central Generation Rehabilitation at Plant 1	87,000,000	-	-	-	87,000,000
Uninterruptable Power Supply Improvements at Plant 1	7,000,000	79,108	190,800	269,908	6,730,092
Consolidated Demolition and Utility Improvements at P2	31,000,000	26,399,159	5,061,600	31,460,759	(460,759)
Central Generation Rehabilitation at Plant 2	114,000,000	-	-	-	114,000,000
Substation Replacement at Plant No. 2	40,261,000	-	506,600	506,600	39,754,400
Subtotal - Utility Systems	471,771,000	31,732,701	10,120,900	41,853,601	429,917,399
Process Related Special Projects					
Safety Improvements Program	19,000,000	8,118,140	7,532,900	15,651,040	3,348,960
Subtotal - Process Related Special Projects	19,000,000	8,118,140	7,532,900	15,651,040	3,348,960
Information Management Systems					
Process Control Systems Upgrades	46,000,000	-	579,000	579,000	45,421,000
Project Management Information System	4,000,000	1,149,166	700,800	1,849,966	2,150,034
SCADA System and Network Upgrades	5,000,000	4,970,908	-	4,970,908	29,092
Information Technology Capital Program	10,000,000	1,250,053	1,467,700	2,717,753	7,282,247
Geographic Information System	4,568,000	3,058,209	419,200	3,477,409	1,090,591
EAM Software and Process Implementation	7,500,000	5,219,288	651,000	5,870,288	1,629,712
Process Control Systems Upgrades Study	3,554,000	1,224,489	1,295,500	2,519,989	1,034,011
Subtotal - Information Management Systems	80,622,000	16,872,113	5,113,200	21,985,313	58,636,687
Strategic & Master Planning					
Planning Studies Program	24,393,400	8,690,620	7,357,500	16,048,120	8,345,280
Climate Resiliency Study	878,000	586,978	291,000	877,978	22
Subtotal - Strategic & Master Planning	25,271,400	9,277,598	7,648,500	16,926,098	8,345,302
Water Management Projects					
GWRS Final Expansion Coordination	1,132,000	232,090	372,100	604,190	527,810
Subtotal - Water Management Projects	1,132,000	232,090	372,100	604,190	527,810
Research					
Research Program	8,346,000	617,093	1,469,200	2,086,293	6,259,707
Subtotal - Research	8,346,000	617,093	1,469,200	2,086,293	6,259,707

(Continued)

CIP Budget Review

Summary of Capital Improvement Construction Requirements - Project Life For the Three Months Ended September 30, 2019

	Approved Project Budget	June 30, 2019 Accumulated Cost	Current Year Projected Cost	Total Projected Cost at June 30, 2020	Remaining Future Budget
Support Facilities					
Small Construction Projects Program	29,040,000	12,847,554	8,088,300	20,935,854	8,104,146
Fleet Services UST Leak Remediation at Plant 1	14,952,000	374,111	31,500	405,611	14,546,389
Operations & Maintenance Capital Program	15,051,891	1,334,458	2,877,300	4,211,758	10,840,133
18350 Mt. Langley Building Purchase and Improvement	10,200,000	9,907,140	205,700	10,112,840	87,160
Laboratory Rehabilitation at Plant No. 1	15,000,000	-	-	-	15,000,000
Title 24 Access Compliance and Building Rehab Project	18,400,000	17,054,173	903,500	17,957,673	442,327
Headquarters Complex and Site Security at Plant 1	167,500,000	24,758,304	8,688,400	33,446,704	134,053,296
South Perimeter Security and Utility Improvements at Plant 1	10,500,000	543,599	690,300	1,233,899	9,266,101
Plant 2 Warehouse Relocation	9,800,000	-	67,600	67,600	9,732,400
Plant 2 Collections Yard Relocation	1,840,000	-	-	-	1,840,000
Subtotal - Support Facilities	292,283,891	66,819,339	21,552,600	88,371,939	203,911,952
Others					
Banning Gate Relocation and Grading at Plant 2	2,931,000	-	-	-	2,931,000
Perimeter Screening at Plant 2	2,800,000	64,040	28,900	92,940	2,707,060
Capital Improvement Program Management Services	700,000	184,309	90,200	274,509	425,491
Subtotal - Others	6,431,000	248,349	119,100	367,449	6,063,551
Total Treatment and Disposal Projects	3,125,754,291	556,250,791	119,830,300	676,081,091	2,449,673,200
Capital Equipment Purchases	9,727,153	-	2,923,300	2,923,300	6,803,853
Total Collection, Treatment and Disposal Projects and Capital Equipment Purchases	\$ 4,027,267,153	\$745,692,251	\$155,451,100	\$901,143,351	\$3,126,123,802

This Page Intentionally Left Blank

Capital Assets Schedule & Debt Service Budget Review

Capital Assets Schedule For the Three Months Ended September 30, 2019

Capital Facilities Budget Review

	<u>Balance 07/01/19</u>	<u>Year-to-Date Activity</u>	<u>Balance 6/30/19</u>
CONSTRUCTION IN PROGRESS:			
Treatment Plant	\$ 447,941,678	\$ 16,260,298	\$ 464,201,976
Collection System	73,889,956	3,730,112	77,620,068
Subtotal	<u>521,831,634</u>	<u>19,990,410</u>	<u>541,822,044</u>
PROPERTY, PLANT & EQUIPMENT (at cost):			
Land and Property Rights	41,967,355	-	41,967,355
Collection Lines and Pump Stations	886,790,503	-	886,790,503
Treatment Facilities	2,478,726,934	-	2,478,726,934
Effluent disposal facilities	96,972,016	-	96,972,016
Solids disposal facilities	3,463,236	-	3,463,236
General and administrative facilities	257,168,345	-	257,168,345
Excess purchase price over book value on acquired assets	19,979,000	-	19,979,000
Subtotal	<u>3,785,067,389</u>	<u>-</u>	<u>3,785,067,389</u>
Total Property, Plant & Equipment & CIP	<u>\$ 4,306,899,023</u>	<u>\$ 19,990,410</u>	<u>\$ 4,326,889,433</u>

Debt Service Budget Review

	<u>2019-20 Budget</u>	<u>Year-to-Date Payments</u>	<u>% of Budget</u>	<u>Remaining Budget</u>
Principal Payments by Debt Issue:				
2010A BABs	-	-	0.00%	-
2010C BABs	-	-	0.00%	-
2011A COP	-	-	0.00%	-
2012A COP	-	-	0.00%	-
2012B COP	20,915,000	-	0.00%	20,915,000
2014A COP	7,400,000	-	0.00%	7,400,000
2015A COP	-	-	0.00%	-
2016A COP	4,415,000	-	0.00%	4,415,000
2017A COP	-	-	0.00%	-
2018A CANs	-	-	0.00%	-
Subtotal Principal Payments	<u>32,730,000</u>	<u>-</u>	<u>0.00%</u>	<u>32,730,000</u>
Interest Expense by Debt Issue:				
2010A BABs	2,897,700	992,488	34.25%	1,905,212
2010C BABs	6,523,800	2,234,587	34.25%	4,289,213
2011A COP	3,348,400	837,175	25.00%	2,511,225
2012A COP	3,735,900	934,050	25.00%	2,801,850
2012B COP	2,191,400	547,800	25.00%	1,643,600
2014A COP	3,566,500	891,650	25.00%	2,674,850
2015A COP	6,375,500	1,593,850	25.00%	4,781,650
2016A COP	6,977,300	1,744,350	25.00%	5,232,950
2017A COP	3,318,500	829,650	25.00%	2,488,850
2018A CANs	5,110,000	1,277,500	25.00%	3,832,500
Subtotal Interest Expense	<u>44,045,000</u>	<u>11,883,100</u>	<u>26.98%</u>	<u>15,825,950</u>
Total Debt Service	<u>\$ 76,775,000</u>	<u>\$ 11,883,100</u>	<u>15.48%</u>	<u>\$ 48,555,950</u>

This Page Intentionally Left Blank

Self Insurance Budget Review

General Liability and Property Fund Budget Review For the Three Months Ended September 30, 2019

	2019-20 Budget	Actual Through 9/30/19	Percent of Budget Through 9/30/19	Remaining 2019-20 Budget	Actual Through 9/30/18	Increase (Decrease)
Revenues:						
In-Lieu Premiums	\$ 1,720,000	\$ 429,999	25.00%	\$ 1,290,001	\$ 324,825	\$ 105,174
Miscellaneous Other Revenue	10,000	135,416	1354.16%	-	-	135,416
Service Department Allocations	20,000	(774)	-3.87%	20,774	(774)	-
Total Revenues	<u>1,750,000</u>	<u>564,641</u>	<u>32.27%</u>	<u>1,310,775</u>	<u>324,051</u>	<u>240,590</u>
Expenses:						
Benefits/Claims	360,000	-	0.00%	360,000	-	-
Legal Services	40,000	-	0.00%	40,000	-	-
Professional Services	10,000	-	0.00%	10,000	-	-
Subtotal	410,000	-	0.00%	410,000	-	-
Policy Premium Expense	1,340,000	354,732	26.47%	985,268	319,224	35,508
Total Expenses	<u>1,750,000</u>	<u>354,732</u>	<u>20.27%</u>	<u>1,395,268</u>	<u>319,224</u>	<u>35,508</u>
Excess Revenue (Expense)	-	209,909		<u>\$ (84,493)</u>	4,827	205,082
Beginning Reserves	<u>55,000,000</u>	<u>55,389,842</u>			<u>55,367,246</u>	<u>22,596</u>
Ending Reserves	<u>\$ 55,000,000</u>	<u>\$ 55,599,751</u>			<u>\$ 55,372,073</u>	<u>\$ 227,678</u>

FY 2019-20 First Quarter Financial Report

Workers' Compensation Fund Budget Review For the Three Months Ended September 30, 2019

	<u>2019-20 Budget</u>	<u>Actual Through 9/30/19</u>	<u>Percent of Budget Through 9/30/19</u>	<u>Remaining 2019-20 Budget</u>	<u>Actual Through 9/30/18</u>	<u>Increase (Decrease)</u>
Revenues:						
In-Lieu Premiums	\$ 780,000	\$ 195,000	25.00%	\$ 585,000	\$ 146,650	\$ 48,350
Service Department Allocations	-	27,174	N/A	(27,174)	27,174	-
Total Revenues	<u>780,000</u>	<u>222,174</u>	<u>28.48%</u>	<u>557,826</u>	<u>173,824</u>	<u>48,350</u>
Expenses:						
Benefits/Claims	430,000	159,525	37.10%	270,475	89,848	69,677
Legal Services	80,000	38,978	48.72%	41,022	5,388	33,590
Professional Services	<u>60,000</u>	<u>11,417</u>	<u>19.03%</u>	<u>48,583</u>	<u>18,473</u>	<u>(7,056)</u>
Subtotal	<u>570,000</u>	<u>209,920</u>	<u>36.83%</u>	<u>360,080</u>	<u>113,709</u>	<u>96,211</u>
Policy Premium Expense	<u>210,000</u>	<u>54,441</u>	<u>25.92%</u>	<u>155,559</u>	<u>54,832</u>	<u>(391)</u>
Total Expenses	<u>780,000</u>	<u>264,361</u>	<u>33.89%</u>	<u>515,639</u>	<u>168,541</u>	<u>95,820</u>
Excess Revenue (Expense)	-	(42,187)		<u>\$ 42,187</u>	5,283	(47,470)
Beginning Reserves	<u>2,000,000</u>	<u>2,036,708</u>			<u>2,085,542</u>	<u>(48,834)</u>
Ending Reserves	<u>\$ 2,000,000</u>	<u>\$ 1,994,521</u>			<u>\$ 2,090,825</u>	<u>\$ (96,304)</u>



October 31, 2019

STAFF REPORT

Quarterly Treasurer's Report
For the Period Ended September 30, 2019

SUMMARY

Section 17.0 of the Sanitation District's Investment Policy includes quarterly reporting requirements for the Sanitation District's two investment portfolios. These two funds, the "Liquid Operating Monies," and the "Long-Term Operating Monies" are managed by Chandler Asset Management, the Sanitation District's external money manager.

The ongoing monitoring of the Sanitation District's investment program by staff and Callan Associates, the Sanitation District's independent investment advisor, indicates that the Sanitation District's investments are in compliance with the Sanitation District's adopted Investment Policy and the California Government Code, and that overall performance has tracked with benchmark indices. In addition, sufficient liquidity and anticipated revenues are available for the Sanitation District to meet budgeted expenditures for the next six months. The Sanitation District's portfolios do not include any reverse repurchase agreements or derivative securities.

ADDITIONAL INFORMATION

Performance Reports

The Quarterly Strategy Review, prepared by Chandler Asset Management, and the Investment Measurement Service Quarterly Review, prepared by Callan Associates, is attached for reference. Also attached are Long-Term and Liquid Operating Monies Summary of Performance Data and Portfolio Statistics charts that depict the performance results, estimated yield and duration, credit quality, and sector diversification of the Sanitation District's portfolios, as of September 30, 2019. The Liquid Operating Monies portfolio, with an average maturity of 113 days, consists entirely of high quality fixed income investments consistent with the Sanitation District's investment policy.

Portfolio Performance Summary

The following table presents a performance summary of the Sanitation District's portfolios as compared to their benchmarks as of September 30, 2019.

Quarterly Treasurer's Report
For the Period Ended September 30, 2019
Page 2 of 4

Portfolio Performance Summary As of September 30, 2019				
	Liquid Operating Monies (%)		Long-Term Operating Monies (%)	
	Total Rate of Return	Benchmark ⁽¹⁾	Total Rate of Return	Benchmark ⁽¹⁾
3 Months	0.59	0.56	0.88	0.82
6 Months	1.28	1.20	2.59	2.69
9 Months	1.92	1.81	4.14	4.15
12 Months	2.50	2.39	5.52	5.79
Annualized Since inception 30 Nov 2014	1.12	1.02	1.84	1.79
Market Value				
Market Value	\$68.2 M		\$548.1 M	
Average Quality	"AA+"/"Aa1"		"AA"/"Aa1"	
Current Yield (%)	1.88		2.29	
Estimated Yield to Maturity (%)	2.01		1.79	
Quarterly Deposits (Withdrawals)	(\$97.0 M)		(\$15.0 M)	
Estimated Annual Income	\$1.5 M		\$12.9 M	

(1) Benchmarks:

- Liquid Operating Portfolio: ICE BAML 3-Month Treasury Bill Index
- Long-Term Operating Portfolio: ICE BAML Corp/Govt. 1-5 Year Bond Index

Portfolio Market Values

Comparative marked-to-market quarter-end portfolio values are shown in the following table, and in the attached bar chart.

Quarter Ending	Liquid Operating Monies (\$M)	Long-Term Operating Monies (\$M)
31 Dec 18	176.7	498.8
31 Mar 19	108.5	506.2
30 Jun 19	164.5	558.1
30 Sep 19	68.2	548.1

The Sanitation District's Investment Account Balances as of September 30, 2019

Investment Accounts	Book Balances September 30, 2019	Estimated Yield (%)
State of California LAIF	\$61,265,396	2.28
Banc of California Checking Account	2,365,784	0.55
Banc of California Overnight Sweep Account	653,979	0.20
Banc of California W/C Checking	79,793	0.55
Union Bank Mount Langley Account	114,567	0.75
Union Bank Bandilier Account	617,377	0.75
Chandler/U.S. Bank – Short-term Portfolio	68,233,258	2.01
Chandler/U.S. Bank – Long-term Portfolio	548,126,927	1.79
Petty Cash	3,000	N/A
BNY Mellon OCIP Reserve	<u>3,649,362</u>	0.00
TOTAL	<u>\$685,109,443</u>	1.84
Debt Service Reserves w/Trustees	<u>\$1,571</u>	2.24

The Sanitation District's Cost of Funds on Debt Issues as of September 30, 2019

Cost of Funds Issue Description	Outstanding COP Balance	Annual Interest Rate (%)
2010A Fixed	80,000,000	3.68
2010C Fixed	157,000,000	4.11
2011A Fixed	75,370,000	2.61
2012A Fixed	100,645,000	3.54
2012B Fixed	46,475,000	1.50
2014A Fixed	71,330,000	2.34
2015A Fixed	127,510,000	3.30
2016A Fixed	145,880,000	3.02
2017A Fixed	66,370,000	2.55
2018A Fixed	<u>102,200,000</u>	2.02
TOTAL		
	<u>\$972,780,000</u>	
Weighted Avg. Cost of Funds		3.05

ATTACHMENTS

1. Chandler Quarterly Report
2. Summary of Performance Data and Portfolio Statistics – Liquid Operating Monies
3. Summary of Performance Data and Portfolio Statistics – Long Term Operating Monies
4. Investment Transactions and Balances in LAIF
5. Asset Summary by Asset Type – Liquid Operating Portfolio
6. Asset Summary by Asset Type – Long Term Portfolio
7. Asset Summary by Asset Type – Owner Controlled Insurance Program Escrow Account
8. Investment Listing (Yield Analysis Report)
9. Asset Detail – Consolidated
10. Custody Transaction History – Consolidated
11. Callan Quarterly Review
12. Chandler Quarterly Review
13. Rating Agency Comparisons

September 30, 2019

Mr. Lorenzo Tyner
Assistant General Manager
Director of Finance and Administrative Services
Orange County Sanitation District
10844 Ellis Avenue
Fountain Valley CA 92708-7018

Dear Lorenzo,

Bond Market Recap

Labor market and consumer fundamentals remain favorable, but manufacturing data continue to disappoint. We believe economic growth has slowed from earlier this year and downside risks to the outlook remain elevated. The US economy continues to face headwinds from trade disputes, slowing global economic growth, and an uncertain outlook for Brexit. However, we believe accommodative US monetary policy and a collective dovish stance by all of the major global central banks should help to combat the headwinds. We also believe the Trump administration faces significant political pressure to make progress toward a trade agreement with China as we head into an election year.

The Federal Open Market Committee (FOMC) lowered the target fed funds rate by 25 basis points in September (for the second time this year) to a range of 1.75%-2.00%. There were three dissenting votes; one policymaker favored a 50-basis point rate cut, and two policymakers favored leaving the fed funds rate unchanged. According to the Fed's dot plot, only seven out of 17 policymakers are anticipating another rate cut before year-end. Although there is a growing disparity among policymakers about the appropriate path of monetary policy, Fed Chair Powell's press conference suggested the Fed will be flexible and data dependent. Powell indicated more rate cuts may be appropriate if the economy slows further, but the Fed is not on a preset course. We continue to believe the FOMC is likely to cut the fed funds target rate again before year-end, in the absence of a trade resolution or meaningful improvement in market-based measures of inflation. The next FOMC meeting is scheduled for October 29-30.

The Treasury yield curve steepened modestly in September, although the curve remains partially inverted. The 3-month T-bill yield declined nearly 17 basis points to 1.81%, the 2-year Treasury yield increased nearly twelve basis points to 1.62%, and the 10-year Treasury yield increased about 17 basis points to 1.67%. An inversion of the yield curve in which the 10-year Treasury yield is lower than the 3-month T-bill yield is generally viewed as a powerful predictive signal of an upcoming recession. However, we believe increased short-term Treasury issuance to fund the deficit, and negative sovereign bond yields in other countries may be distorting the US Treasury yield curve. German sovereign bond yields (from 1-month out to 30-years) remained negative at September month-end.

The shape of the Treasury yield curve has changed significantly on a year-over-year basis. As of September month-end, the 3-month T-bill yield was down 39 basis points, the 2-Year Treasury yield was down nearly 120 basis points, and the 10-Year Treasury yield was down nearly 140 basis points, year-over-year. The current shape of the yield curve implies that market participants are pricing-in additional rate cuts. We believe the year-over-year decline in long-term Treasury yields reflects a high level of market participants' nervousness about the outlook for global economic growth and a decline in global inflation expectations.

Consumer Prices

The Consumer Price Index (CPI) was up 1.7% year-over-year in August, versus up 1.8% year-over-year in July. Core CPI (CPI less food and energy) was up 2.4% year-over-year in August, versus up 2.2% year-over-year in July. The Personal Consumption Expenditures (PCE) index was up 1.4% year-over-year in August, unchanged from July. Core PCE, which is the Fed's primary inflation gauge, was up 1.8% year-over-year in August versus 1.7% year-over-year in July. Core PCE remains below the Fed's 2.0% inflation target.

Retail Sales

Retail sales in August were moderately above consensus expectations, coming in at 0.4% compared to the 0.2% estimate. Excluding auto and gas, retail sales were up 0.1% compared to expectations for a 0.2% increase. On a year-over-year basis, retail sales increased by 4.1%, a modest increase from the prior year-over-year number of 3.6%.

Labor Market

U.S. nonfarm payrolls rose by 136,000 in September, slightly below expectations of 145,000. However, August payrolls were revised higher by 38,000. On a trailing 3-month and 6-month average basis, payrolls increased an average of about 157,000 and 154,000 per month, respectively. The unemployment rate declined to 3.5% (the lowest rate since December 1969) from 3.7% in August, and the participation rate held steady at 63.2%. A broader measure of unemployment called the U-6, which includes those who are marginally attached to the labor force and employed part time for economic reasons, dropped to 6.9% in September from 7.2% in August. Wages were flat in September, missing expectations for a 0.3% increase, and the average workweek was unchanged. On a year-over-year basis, wages were up 2.9% in September, versus up 3.2% in August.

Housing Starts

Housing starts were much stronger than expected in August, up 12.3% month-over-month to a 1.364 million annualized rate. Multi-family starts jumped 32.8% month-over-month to an annualized rate of 445,000, while single-family starts rose 4.4% to an annualized rate of 919,000. On a year-over-year basis, total housing starts were up 6.6% in August. Permits were also stronger than expected in the month. Although housing data tends to be volatile on a month-over-month basis, the August report and three-month moving averages suggest that housing activity is accelerating.

TREASURY YIELDS	9/30/2019	6/30/2019	CHANGE
3 Month	1.81	2.09	(0.28)
2 Year	1.62	1.76	(0.14)
3 Year	1.56	1.71	(0.15)
5 Year	1.54	1.77	(0.23)
7 Year	1.61	1.88	(0.27)
10 Year	1.67	2.01	(0.34)
30 Year	2.11	2.51	(0.40)

Economic Data Remains Consistent with Slow Growth

ECONOMIC INDICATOR	Current Release	Prior Release	One Year Ago
Trade Balance	(54.9) \$Bln AUG 19	(54.0) \$Bln JUL 19	(54.9) \$Bln AUG 18
GDP	2.0% JUN 19	3.1% MAR 19	3.5% JUN 18
Unemployment Rate	3.5% SEP 19	3.7% AUG 19	3.7% SEP 18
Prime Rate	5.0% SEP 19	5.25% AUG 19	5.25% SEP 18
CRB Index	173.9399 SEP 19	170.3556 AUG 19	195.1592 SEP 18
Oil (West Texas Int.)	\$54.07 SEP 19	\$55.1 AUG 19	\$73.25 SEP 18
Consumer Price Index (y/o/y)	1.7% AUG 19	1.8% JUL 19	2.7% AUG 18
Producer Price Index (y/o/y)	0.2% AUG 19	0.8% JUL 19	3.7% AUG 18
Dollar/Euro	1.09 SEP 19	1.10 AUG 19	1.160 SEP 18

Source: Bloomberg

Performance Attribution

Long-Term Portfolio

The portfolio outperformed the benchmark during the quarter, generating a return of 0.88% compared to the 0.82% return of the ICE Bank of America Merrill Lynch 1-5 Year US Corporate and Government AAA-A Index. The overall asset allocation of the portfolio led to the modest outperformance during the reporting period. In particular, the overweight exposure to the Agency, Asset Backed and Corporate sectors of the allocation all were additive to the quarterly results. From a term structure perspective, the positive deviations in exposure relative to the benchmark in the shorter and longer maturity segments of the portfolio were also positive differentiators to the total return of the portfolio.

A diverse set of securities in the Treasury, Agency, Asset Backed, Commercial Paper and Corporate sectors were purchased during the quarter to keep the portfolio positioned in-line with Chandler objectives. The purchased securities ranged in maturity from November 2019 to July 2024. One security was sold, one was called, and several matured to facilitate the new holdings in the portfolio. Additionally, \$15 million was withdrawn from the portfolio late in the quarter to account for the liquidity needs of the District. The sector allocation was relatively stable during the quarter. Notably the Money Market allocation decreased by 2.4% to 0.7% of the portfolio partially offset by the 2.0% increase in the Agency allocation to 25.6% of the portfolio. The duration of the portfolio moderately increased, currently 2.46 compared to 2.43 at the end of the prior reporting period. The Chandler team anticipates keeping the overall duration of the portfolio close to the benchmark in the coming quarter.

Liquid Portfolio

The Liquidity portfolio modestly outperformed the benchmark, generating a return of 0.59% compared to the 0.56% return of the ICE Bank of America Merrill Lynch US Treasury 3 Month Treasury Bill Index. Multiple securities were purchased across the Treasury, Agency, Commercial Paper and Corporate sectors of the market to keep the portfolio fully invested in the liquidity strategy. The purchased securities ranged in maturity from October 2019 to May 2020. One security was called and many matured to facilitate the two liquidity needs totaling \$97 million. The sector allocation evolved with the drop-in market value due to the liquidity needs during the reporting period. The two largest adjustments were the 4.6% decline in the US Treasury allocation, to 69.2% of the portfolio, more than offset by the 8.4% increase in the US Corporate allocation, to 17.0% of the portfolio. The duration of the portfolio moderately increased to 0.30 compared to 0.24 at the end of the prior reporting period. The Chandler team continues to utilize the Treasury and Agency sectors to immunize the large forecasted liquidity needs and overlay spread product (i.e. Commercial Paper and Corporates) to enhance the total return strategy of the portfolio.

Economic Outlook

US Treasury yields dropped precipitously during the quarter as the US/China trade impasse continued to negatively influence global manufacturing trends. In particular, the manufacturing weakness in Europe is becoming acute, with German purchasing managers indices rolling over into recessionary territory. The manufacturing weakness helped to accelerate the negative yield conundrum in Europe, with the ten-year German Bund bottoming out at negative 72 basis points during September and closing the quarter at negative 57 basis points. The lack of any meaningful fiscal response in Europe is exacerbating the downturn; considering the empirical evidence thus far on utilizing negative interest rates as a policy tool fiscal stimulus is long overdue in Germany in Chandler's judgement.

The Chandler team has long held the view the inability of interest rates to normalize in developed overseas markets, arguably most importantly Germany, would serve as a ceiling for how high US interest rates could adjust. The team's beginning of year analysis did not accurately account for the degree to which developed market benchmark rates overseas could move into negative territory which served as a catalyst for the US ten-year Treasury notes to close the quarter at 1.67%, compared to 2.01% at the end of June and 2.69% at year-end. In a pre-emptive move to sustain the economic expansion the Federal Reserve was active during the quarter, cutting the Fed Funds rate two times to a current range of 1.75% to 2.00%, compared to 2.25% to 2.50% at the end of June. Policymakers are describing the monetary stimulus adjustment as "mid-cycle" and in Chandler's view have little interest in pushing the policy rate close to the zero lower bound considering the current readings on the health of the US economy. One of the primary factors influencing the dovish shift by the Federal Reserve is the market's pricing of long-term inflation becoming unanchored. The ten-year TIPS break even rate continued to drift lower during the quarter, with a spread of 1.52% as of quarter-end, well below the 2.25% to 2.60% considered "normal" and consistent with the Federal Reserve's 2.0% inflation objective. TIPS breakeven rates moving higher will mitigate the pressure on the Federal Reserve to remain hyper accommodative with monetary policy settings.

The service sector focus of the US economy continues to insulate the domestic economy from the global manufacturing weakness. The underlying tenets of the US economy remain sound, with current unemployment rate at 3.5%, the underemployment rate at 6.9%, weekly jobless claims hovering at multi-year lows with a recent reading of 210k, and the domestic saving rates elevated as the US personal savings rate as a percentage of disposable income is currently at 8.1%. Additionally, the reduction in interest rates is providing a positive catalyst for the more cyclical sectors of the economy, with the housing market improving as both new and existing home sales have seen an uptick in volume with the contraction in mortgage rates. Given the lack of visibility globally, business investment remains soft, but the lower cost of capital linked to the reduction in interest rates should ultimately lead to an uptick in capital spending. The Chandler team continues to look for modest incremental progress on the US/China trade negotiations to help sustain economic growth. The key issue for a more comprehensive deal remains intellectual property reform in China. In our view President Trump's administration will become more motivated to make progress on US/China trade as the Democratic field for the Presidential nomination narrows; the probability of President Trump hitting the campaign trail with little progress on US/China trade is low. The fixed income markets are forecasted to remain volatile but given our internal view the domestic economy is not on the precipice of a recession, the relative performance of the portfolio compared to the benchmark should improve as the economic expansion is sustained.

Strategy

Strategy highlights for the Long-Term Portfolio in coming months:

- Continue to focus on optimizing the underlying mix of securities held in the Corporate sector allocation.
 - Focus on adding attractively valued foreign bank names that meet the requirements of the investment policy and California Government Code.
 - Continue to seek out exposure to entities with steeper credit curves to maintain the overall corporate duration of the portfolio at a greater level than the benchmark.
- Increase the diversification of the Asset Backed holdings via greater utilization of the new issue calendar.
- Within the Agency allocation, bias the portfolio more towards the Federal Home Loan Bank where valuations are more attractive compared to Fannie Mae and Freddie Mac.
- The portfolio will continue to be biased towards a barbell structure, relative to the benchmark, given the Chandler team's outlook for interest rates over the coming six months.

Strategy highlights for the Liquidity Portfolio in coming months:

- Continue to ladder the Treasury and Agency exposure to coincide with forecasted liquidity needs.
- Opportunistically add Corporate, Negotiable CD and Commercial Paper exposure to the portfolio where the additional spread compensation versus like maturity Treasury notes is attractive.
- Maintain a dedicated exposure to the Treasury sector on an ongoing basis to ensure ample liquidity in the portfolio for unexpected cash flow needs.

Compliance Issues

Orange County Sanitation District Long Term

Assets managed by Chandler Asset Management are in full compliance with state law and with the investment policy

Category	Standard	Comment
Treasury Issues	5 years maxmaturity; Minimum allocation of 10%	<i>Complies*</i>
U.S. Agencies	20% max issuer; 5 years max maturity	<i>Complies</i>
Supranational	"AA" rated or better by a NRSRO; 30% maximum; 5 years max maturity; USD denominated senior unsecured unsubordinated obligations issued or unconditionally guaranteed by IBRD, IFC, or IADB	<i>Complies</i>
Corporate (MTNs)	"A" rated or better long term debt by a NRSRO; 30% maximum; 5% max issuer; 5 years max maturity; Issued by corporations organized and operating within the U.S. or issued by depository institutions licensed by the U.S.	<i>Complies</i>
Municipal Securities	"A" rated or higher by a NRSRO; 10% maximum; 5% max issuer; 5 years max maturity	<i>Complies</i>
Asset Backed/ CMOs/ Mortgage-backed	"AA" rated or better by a NRSRO; "A" or higher issuer rating by a NRSRO; 20% maximum; 5% max issuer (excluding govt agency/mbs); 5 years max maturity	<i>Complies*</i>
Negotiable CDs	"A" rated or better long term debt by a NRSRO; or "A-1"/ highest short term rating by a NRSRO; 30% maximum; 5% max issuer; 5 years max maturity	<i>Complies</i>
Certificates of Deposit	5% max issuer; 5 years max maturity; Secured/ collateralized	<i>Complies</i>
Banker's Acceptances	A-1 rated or equivalent short term rating by a NRSRO; 40% maximum; 5% max issuer; 180 days max maturity	<i>Complies</i>
Commercial Paper	A-1 rated or equivalent short term rating by a NRSRO; "A" or better long term debt issuer by a NRSRO; Issued by a domestic corporation organized and operating in the US with AUM > \$500million; 25% maximum; 5% max issuer; 270 days max maturity	<i>Complies</i>
Mutual Fund & Money Market Mutual Fund	Highest rating or "AAA" rated by two NRSROs; SEC registered adviser with AUM > \$500 million and experience greater than 5 years; 10% per one Mutual Fund; 20% max per issuer on Money Market Mutual Funds; 20% max of the District's surplus money	<i>Complies</i>
Repurchase Agreements	102% collateralization	<i>Complies</i>
Reverse Repurchase Agreements	5% maximum, 90 days max maturity	<i>Complies</i>
LAIF	Not used by investment adviser	<i>Complies</i>
OCIP	Not used by investment adviser	<i>Complies</i>
Avg Duration	Not to exceed 60 months - (80% to 120% of the benchmark)	<i>Complies</i>
Max Per Issuer	5% of portfolio (except Supranationals, U.S. Government, Agencies, Mutual Fund)	<i>Complies</i>
Maximum Maturity	5 years maximum maturity	<i>Complies*</i>

**The portfolio has twenty (20) securities with maturities greater than 5 years including four (4) CMOs and sixteen (16) MBS. All securities were inherited from the previous manager and complied at time of purchase.*

Orange County Sanitation District Liquid

Assets managed by Chandler Asset Management are in full compliance with state law and with the investment policy

Category	Standard	Comment
Treasury Issues	1 year max maturity; Minimum allocation of 10%	Complies
U.S. Agencies	20% max issuer; 1 year max maturity	Complies
Supranational	"AA" rated or better by a NRSRO; 30% maximum; 1 year max maturity; USD denominated senior unsecured unsubordinated obligations issued or unconditionally guaranteed by IBRD, IFC, or IADB	Complies
Corporate (MTNs)	"A" rated or better long term debt by a NRSRO; 30% maximum; 5% max issuer; 1 year max maturity; Issued by corporations organized and operating within the U.S. or issued by depository institutions licensed by the U.S.	Complies
Asset Backed/ CMOs	"AA" rated or better by a NRSRO; "A" or higher issuer rating by a NRSRO; 20% maximum; 5% max issuer; 1 year max maturity	Complies
Negotiable CDs	"A" rated or better long term debt by a NRSRO; or "A-1"/ highest short term rating by a NRSRO; 30% maximum; 5% max issuer; 1 year max maturity	Complies
Certificates of Deposit	5% max issuer; 1 year max maturity; Secured/collateralized	Complies
Banker's Acceptances	A-1 rated or equivalent short term rating by a NRSRO; 40% maximum; 5% max issuer; 180 days max maturity	Complies
Commercial Paper	A-1 rated or equivalent short term rating by a NRSRO; "A" or better long term debt issuer by a NRSRO; Issued by a domestic corporation organized and operating in the US with AUM > \$500million; 25% maximum; 5% max issuer; 270 days max maturity	Complies
Mutual Fund & Money Market Mutual Fund	Highest rating or "AAA" rated by two NRSROs; SEC registered adviser with AUM > \$500 million and experience greater than 5 years; 10% per one Mutual Fund; 20% max per issuer on Money Market Mutual Funds; 20% max of the District's surplus money	Complies
Repurchase Agreements	102% collateralization	Complies
Reverse Repurchase Agreements	5% maximum, 90 days max maturity	Complies
LAIF	Not used by investment adviser	Complies
OCIP	Not used by investment adviser	Complies
Prohibited	Municipal Securities	Complies
Prohibited	Mortgage Securities	Complies
Avg Duration	Not to exceed 180 days; Max duration of 1/2 year	Complies
Max Per Issuer	5% of portfolio (except Supranationals, U.S. Government, Agencies, Mutual Fund)	Complies
Maximum Maturity	1 year maximum maturity	Complies

OCSD Lehman Exposure

Assets managed by Chandler Asset Management are in full compliance with state law and with the investment policy

Category	Standard	Comment
Treasury Issues	5 years maximum maturity	<i>Complies</i>
Supranational	"AA" or better by 1 of 3 NRSROs; 30% maximum; 5% max; 5 years maturity; Includes only: IADB, IBRD, and IFC per CGC	<i>Complies</i>
U.S. Agencies	20% max issuer; 5 years maximum maturity	<i>Complies</i>
U.S. Corporate (MTNs)	"A" or better long term rating by 1 of 3 NRSROs; 30% maximum; 5% max issuer; 5 years max maturity	<i>Complies*</i>
Municipal Securities	"A" or higher by 1 of 3 NRSROs; 10% maximum; 5% max issuer; 5 years maximum maturity	<i>Complies</i>
Asset Backed/ CMOs/ Mortgage-backed	"AA" or better by 1 of 3 NRSROs; "A" or higher issuer rating by 1 of 3 NRSROs; 20% maximum; 5% max issuer (excluding MBS/govt agency); 5 years max maturity	<i>Complies</i>
Negotiable CDs	"A" or better on its long term debt by 1 of 3 NRSROs ; "A1/P1" or highest short term ratings by 1 of 3 NRSROs; 30% maximum; 5% max issuer; 5 years max maturity	<i>Complies</i>
CDs/ TDS	5% max issuer; 5 years max maturity	<i>Complies</i>
Banker's Acceptances	A-1, or equivalent highest short term rating by 1 of 3 NRSROs; 40% maximum; 5% max issuer; 180 days max maturity	<i>Complies</i>
Commercial Paper	A-1, or equivalent by 1 of 3 NRSROs; "A" or better by 1 of 3 NRSROs, if long term debt issued; 25% maximum; 5% max issuer; 270 days max maturity	<i>Complies</i>
Money Market Fund	Highest rating by 2 of 3 NRSROs; 20% maximum; 10% max issuer	<i>Complies</i>
Repurchase Agreements	102% collateralization	<i>Complies</i>
Reverse Repurchase Agreements	5% maximum, 90 days max maturity	<i>Complies</i>
LAIF	Not used by investment adviser	<i>Complies</i>
Avg Duration	Not to exceed 60 months - (80% to 120% of the benchmark)	<i>Complies</i>
Maximum Maturity	5 years maximum maturity	<i>Complies</i>

** Account holds \$2 million face value (cusip 525ESC0Y6) and \$600,000 face value (cusip 525ESC1B7) of defaulted Lehman Bros Holdings that were purchased by the previous manager. Complied at time of purchase.*

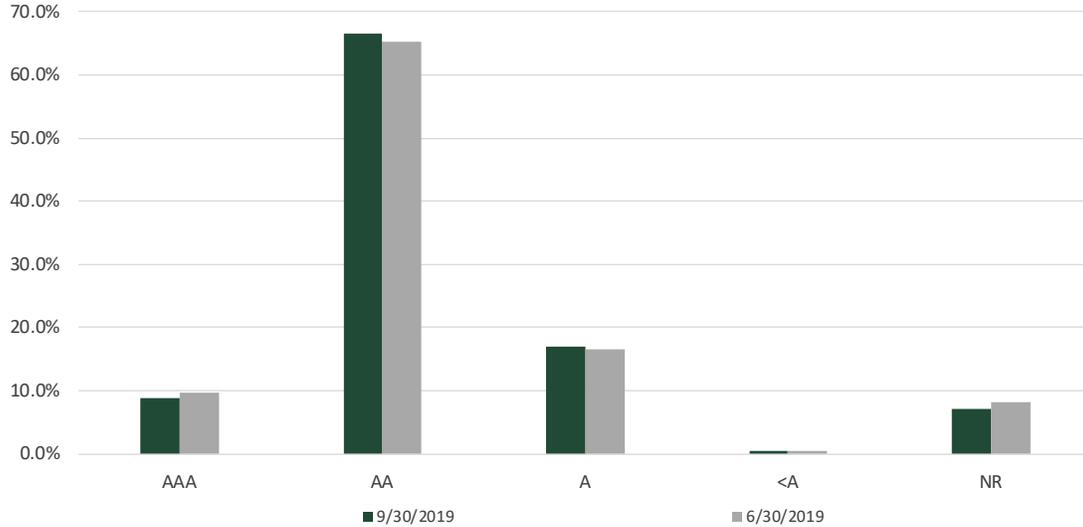
Defaulted Bonds

OCSD Lehman Exposure - Account #10284

CUSIP	Security Description	Par Value/Units	Purchase Date Book Yield	Cost Value Book Value	Mkt Price Mkt YTM	Market Value Accrued Int.	% of Port. Gain/Loss	Moody/S&P Fitch	Maturity Duration
Common Stock									
SLHOPNTA4	Lehman Brothers, Inc Open Position Long Exposure 0.000% Due 09/30/2019	60,641.49	11/21/2014 0.00%	57,842.64 57,842.64	0.42 0.00%	25,621.03 0.00	41.36% (32,221.61)	NR / NR NR	0.00 0.00
TOTAL Common Stock		60,641.49	0.00%	57,842.64	0.00%	25,621.03	41.36%	NR / NR	0.00
US Corporate									
525ESCIB7	Lehman Brothers Note-Defaulted 0.000% Due 01/24/2020	600,000.00	09/19/2008 0.00%	320,227.27 320,227.27	1.42 0.00%	8,520.00 0.00	13.76% (311,707.27)	NR / NR NR	0.32 0.00
525ESC0Y6	Lehman Brothers Note-Defaulted 0.000% Due 10/22/2049	2,000,000.00	09/18/2008 0.00%	1,031,998.65 1,031,998.65	1.39 0.00%	27,800.00 0.00	44.88% (1,004,198.65)	NR / NR NR	30.08 0.00
TOTAL US Corporate		2,600,000.00	0.00%	1,352,225.92	0.00%	36,320.00	58.64%	NR / NR	23.10
TOTAL PORTFOLIO		2,660,641.49	0.00%	1,410,068.56	0.00%	61,941.03	100.00%	NR / NR	13.55
TOTAL MARKET VALUE PLUS ACCRUALS						61,941.03			

Ratings

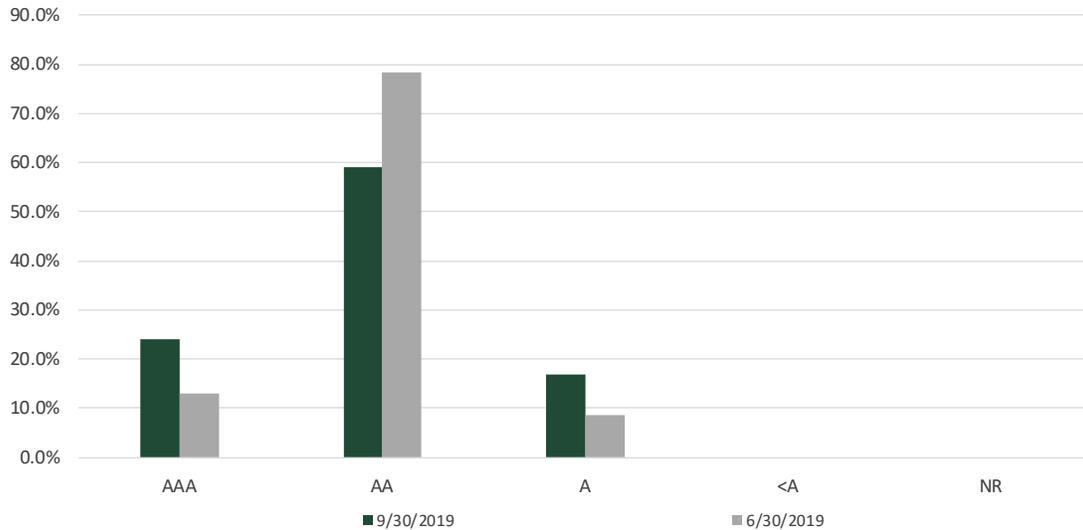
Orange County Sanitation District Long Term September 30, 2019 vs. June 30, 2019



	AAA	AA	A	<A	NR
09/30/19	8.9%	66.5%	16.9%	0.5%	7.2%
06/30/19	9.7%	65.2%	16.5%	0.5%	8.1%

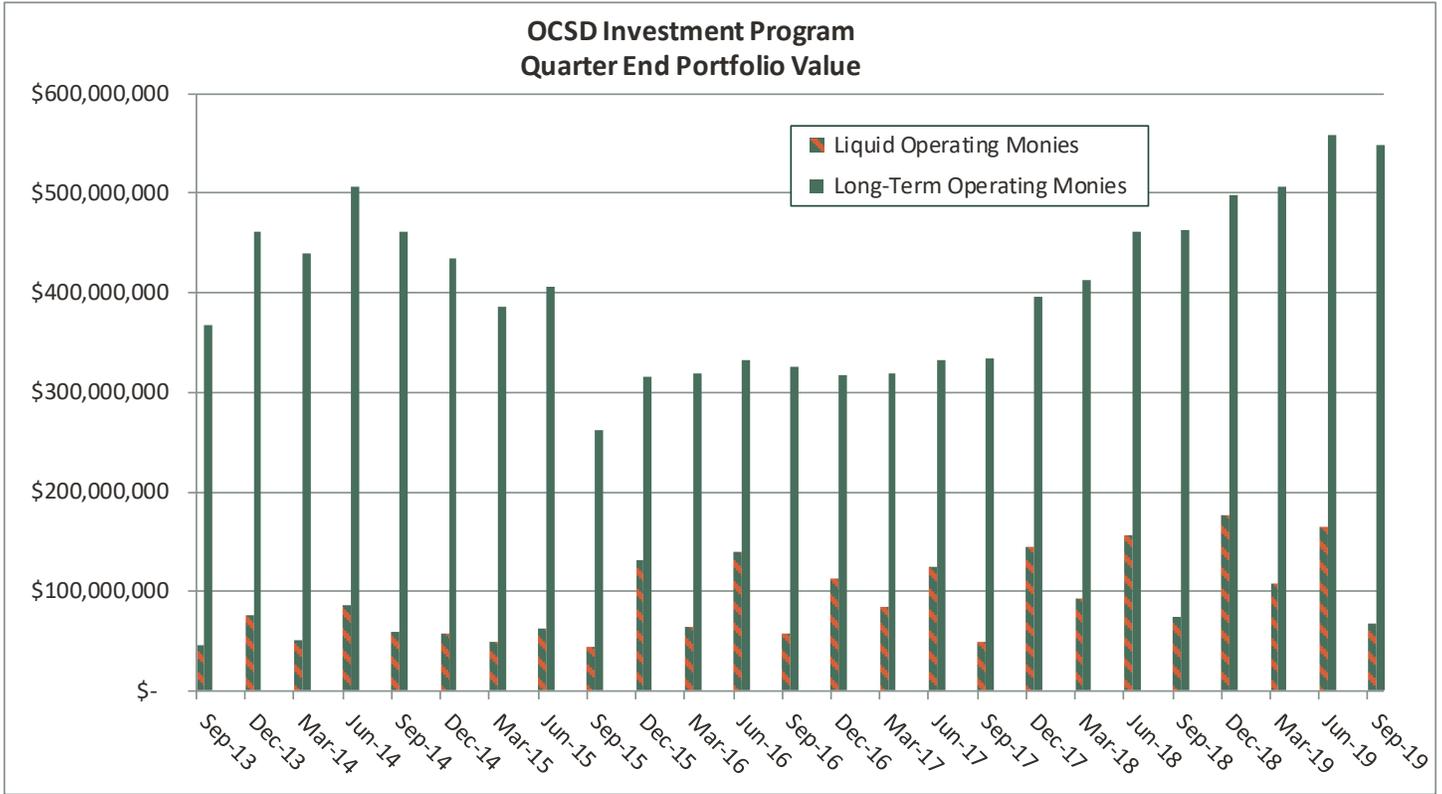
Source: S&P Ratings

Orange County Sanitation District Liquid September 30, 2019 vs. June 30, 2019

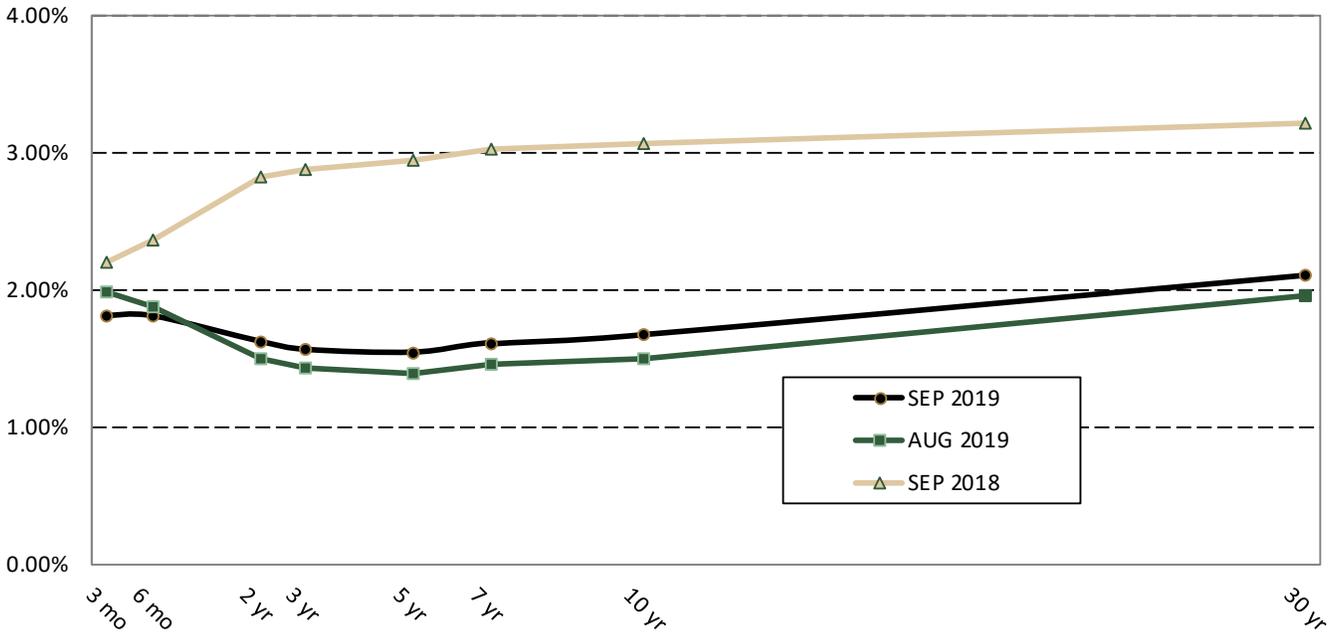


	AAA	AA	A	<A	NR
09/30/19	24.0%	59.0%	17.0%	0.0%	0.0%
06/30/19	13.0%	78.4%	8.6%	0.0%	0.0%

Source: S&P Ratings



HISTORICAL YIELD CURVE





PORTFOLIO CHARACTERISTICS

Average Modified Duration	0.30
Average Coupon	1.88%
Average Purchase YTM	2.26%
Average Market YTM	2.01%
Average S&P/Moody Rating	AA+/Aa1
Average Final Maturity	0.31 yrs
Average Life	0.25 yrs

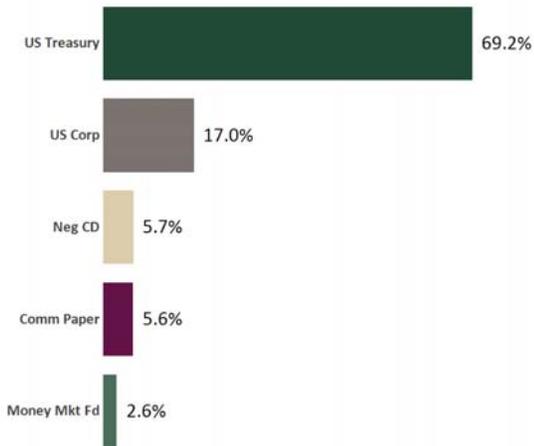
ACCOUNT SUMMARY

	Beg. Values as of 8/31/19	End Values as of 9/30/19
Market Value	92,692,564	67,964,485
Accrued Interest	360,101	254,745
Total Market Value	93,052,665	68,219,230
Income Earned	186,163	184,656
Cont/WD		-25,000,000
Par	92,775,197	68,050,213
Book Value	92,619,041	67,909,224
Cost Value	92,385,249	67,777,379

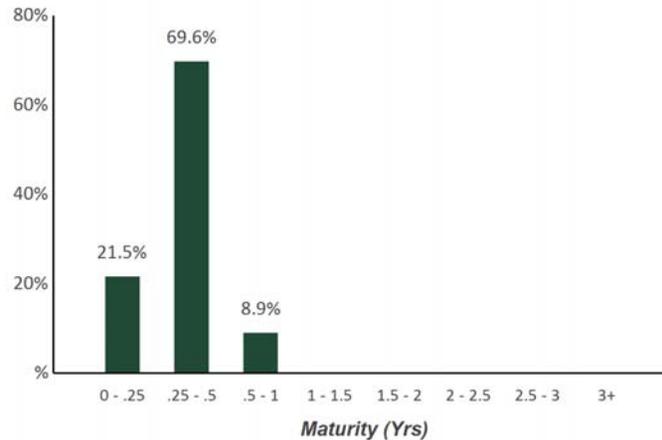
TOP ISSUERS

Government of United States	69.2%
HSBC Holdings PLC	3.7%
Bank of Nova Scotia Houston	3.4%
General Dynamics Corp	3.0%
Bank of America Corp	3.0%
Qualcomm Inc	3.0%
Toyota Motor Corp	2.9%
MUFG Bank Ltd/NY	2.7%
Total	90.8%

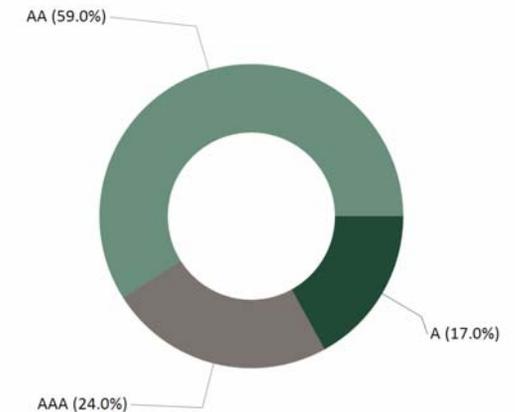
SECTOR ALLOCATION



MATURITY DISTRIBUTION



CREDIT QUALITY (S&P)



PERFORMANCE REVIEW

TOTAL RATE OF RETURN	1M	3M	YTD	1YR	Annualized				
					2YRS	3YRS	5YRS	10YRS	11/30/2014
Orange County Sanitation District Liquid	0.18%	0.59%	1.92%	2.50%	2.06%	1.61%	N/A	N/A	1.12%
ICE BAML 3-Month US Treasury Bill Index	0.17%	0.56%	1.81%	2.39%	1.99%	1.54%	N/A	N/A	1.02%



PORTFOLIO CHARACTERISTICS

Average Modified Duration	2.46
Average Coupon	2.29%
Average Purchase YTM	2.36%
Average Market YTM	1.79%
Average S&P/Moody Rating	AA/Aa1
Average Final Maturity	2.82 yrs
Average Life	2.58 yrs

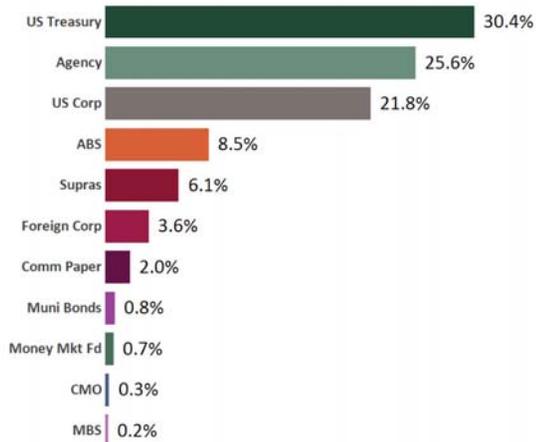
ACCOUNT SUMMARY

	Beg. Values as of 8/31/19	End Values as of 9/30/19
Market Value	561,436,498	545,604,957
Accrued Interest	2,598,094	2,507,363
Total Market Value	564,034,592	548,112,320
Income Earned	1,084,220	1,079,547
Cont/WD		-14,981,899
Par	550,933,428	536,717,789
Book Value	550,299,112	536,487,490
Cost Value	549,567,055	535,563,737

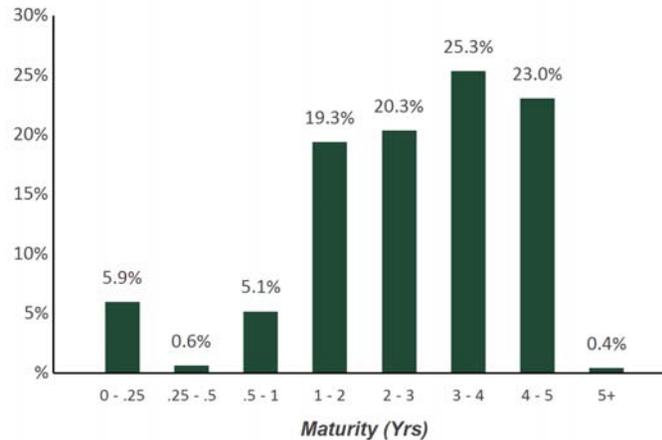
TOP ISSUERS

Government of United States	30.4%
Federal Home Loan Bank	10.2%
Federal National Mortgage Assoc	9.1%
Federal Home Loan Mortgage Corp	5.9%
Inter-American Dev Bank	3.2%
Honda ABS	3.0%
John Deere ABS	2.5%
MUFG Bank Ltd/NY	2.0%
Total	66.3%

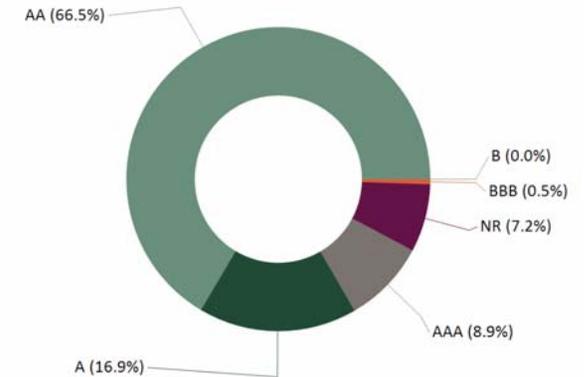
SECTOR ALLOCATION



MATURITY DISTRIBUTION



CREDIT QUALITY (S&P)



PERFORMANCE REVIEW

TOTAL RATE OF RETURN	Annualized								
	1M	3M	YTD	1YR	2YRS	3YRS	5YRS	10YRS	11/30/2014
Orange County Sanitation District Long Term	-0.17%	0.88%	4.14%	5.52%	2.69%	1.97%	N/A	N/A	1.84%
ICE BAML 1-5 Yr US Corp/Govt Rated AAA-A Index	-0.20%	0.82%	4.15%	5.79%	2.65%	1.85%	N/A	N/A	1.79%
ICE BAML US 1-5 Yr US Corp/Govt Rated AAA-BBB Indx	-0.16%	0.90%	4.52%	6.02%	2.80%	2.04%	N/A	N/A	1.95%

**Orange County Sanitation District
Investment Transactions and Balances in the
State of California Local Agency Investment Fund
September 30, 2019**

	<u>Par Value</u>	<u>Book Value</u>	<u>Market Value</u>	<u>Rate</u>	<u>Yield</u>
Balance					
September 1, 2019	\$45,865,396	\$45,865,396	\$45,865,396	2.28	2.28
Deposits:					
9/30/2019	39,900,000	39,900,000	39,900,000	2.28	2.28
Total Deposits	39,900,000	39,900,000	39,900,000	2.28	2.28
Quarterly Interest Distribution	-	-	-	2.28	2.28
Withdrawals:					
9/3/2019	(8,100,000)	(8,100,000)	(8,100,000)	2.28	2.28
9/9/2019	(2,300,000)	(2,300,000)	(2,300,000)	2.28	2.28
9/10/2019	(1,700,000)	(1,700,000)	(1,700,000)	2.28	2.28
9/13/2019	(500,000)	(500,000)	(500,000)	2.28	2.28
9/18/2019	(4,700,000)	(4,700,000)	(4,700,000)	2.28	2.28
9/24/2019	(3,600,000)	(3,600,000)	(3,600,000)	2.28	2.28
9/25/2019	(3,600,000)	(3,600,000)	(3,600,000)	2.28	2.28
Total Withdrawals	(24,500,000)	(24,500,000)	(24,500,000)	2.28	2.28
Balance					
September 30, 2019	\$61,265,396	\$61,265,396	\$61,265,396	2.28	2.28

U.S. Bank
Asset Summary - Liquid

As of 09/30/2019

Industry Name	Shares/Units	Cost Basis	Market Value	Percent of Total	Unrealized Gain/Loss
Cash Equivalents					
COMMERCIAL PAPER	3,860,000.0000	3,811,916.91	3,842,880.80	5.65	30,963.89
FIRST AMERICAN SHORT TERM FDS	1,740,212.5600	1,740,212.56	1,740,212.56	2.56	-
U. S. GOVERNMENT	11,150,000.0000	11,095,680.14	11,106,741.50	16.34	11,061.36
Cash Equivalents Total	16,750,212.5600	16,647,809.61	16,689,834.86	24.55	42,025.25
Fixed Income					
FINANCE	7,500,000.0000	7,484,210.00	7,505,520.00	11.04	21,310.00
INDUSTRIAL	2,000,000.0000	2,011,340.00	2,010,420.00	2.96	(920.00)
INFORMATION TECHNOLOGY	2,000,000.0000	2,002,700.00	2,000,840.00	2.94	(1,860.00)
SHORT TERM FUNDS	3,800,000.0000	3,803,917.20	3,803,274.00	5.60	(643.20)
U. S. GOVERNMENT	36,000,000.0000	35,827,402.35	35,963,370.00	52.91	135,967.65
Fixed Income Total	51,300,000.0000	51,129,569.55	51,283,424.00	75.45	153,854.45
Grand Total	68,050,212.5600	67,777,379.16	67,973,258.86	100.00	195,879.70

U.S. Bank
Asset Summary - Long-Term

As of 09/30/2019

Industry Name	Shares/Units	Cost Basis	Market Value	Percent of Total	Unrealized Gain/Loss
Cash Equivalents					
COMMERCIAL PAPER	11,255,000.0000	11,194,685.71	11,224,386.40	2.06	29,700.69
FIRST AMERICAN SHORT TERM FDS	3,794,924.7000	3,794,924.70	3,794,924.70	0.70	-
Cash Equivalents Total	15,049,924.7000	14,989,610.41	15,019,311.10	2.75	29,700.69
Fixed Income					
CONSUMER DISCRETIONARY	4,064,000.0000	4,055,701.78	4,236,379.07	0.78	180,677.29
CONSUMER STAPLES	3,880,000.0000	3,878,991.40	4,084,282.00	0.75	205,290.60
ENERGY	9,000,000.0000	8,942,542.40	9,174,330.00	1.68	231,787.60
FINANCE	66,494,000.0000	65,657,463.39	65,614,038.26	12.03	(43,425.13)
FOREIGN CORPORATE	19,000,000.0000	19,106,195.00	19,449,335.00	3.56	343,140.00
HEALTH CARE	2,000,000.0000	1,948,640.00	2,059,160.00	0.38	110,520.00
INDUSTRIAL	4,410,000.0000	4,388,275.50	4,547,081.60	0.83	158,806.10
INFORMATION TECHNOLOGY	28,715,000.0000	28,626,584.95	29,190,193.75	5.35	563,608.80
INVESTMENT GRADE-MUNI REVENUE	4,240,000.0000	4,307,633.89	4,302,946.00	0.79	(4,687.89)
MTG RELATED SECURITY	49,241,351.0500	49,185,445.13	49,626,842.36	9.10	441,397.23
SUPRANATIONAL	33,005,000.0000	32,742,600.25	33,126,886.15	6.07	384,285.90
U. S. GOVERNMENT	153,006,521.3900	151,173,978.03	154,654,079.46	28.35	3,480,101.43
U.S. GOVERNMENT TIPS	11,236,992.0000	11,092,272.09	11,222,945.76	2.06	130,673.67
US AGY - LONG TERM ISSUES	135,975,000.0000	136,788,232.45	139,283,961.25	25.53	2,495,728.80
Fixed Income Total	524,267,864.4400	521,894,556.26	530,572,460.66	97.25	8,677,904.40
Grand Total	539,317,789.1400	536,884,166.67	545,591,771.76	100.00	8,707,605.09



BNY MELLON

Statement Period 09/01/2019 Through 09/30/2019
 Account 300282 Base Currency = USD
 OCSD LIBERTY MUTUAL

Statement of Assets Held by Asset Classification

Shares/Par Value	Asset Description	Market Price	Market Value	Cost	Average Cost	Accrued Income	Estimated Income	Market Yield
CASH AND SHORT TERM								
3,681,000.000	UNITED STATES TREASURY BILL CUSIP: 912796SH3 MATURITY DATE: 03/26/2020 RATE: 0.000%	99.07000	3,646,766.70	3,599,335.48	97.78146	0.00	0.00	0.00%
	CASH BALANCE		2,595.51	2,595.51	0.00000	0.00	0.00	0.00%
Total CASH AND SHORT TERM			3,649,362.21	3,601,930.99		0.00	0.00	0.00%
ACCOUNT TOTALS			3,649,362.21	3,601,930.99		0.00	0.00	0.00%

Total Market Value Plus Total Accrued Income 3,649,362.21

Statement of Transactions by Transaction Date

Transaction Date	Transaction Description	Income	Principal	Cost	Realized Gains/Losses
------------------	-------------------------	--------	-----------	------	-----------------------

No Transactions This Period

Cumulative realized capital gain and loss position from 12/31/2018 for securities held in principal of account:

Short Term: 46,968.75 * Long Term: 0.00 *

* The above gain and loss position does not include transactions where tax cost information is incomplete or unavailable.

The Bank of New York Mellon may utilize subsidiaries and affiliates to provide services and certain products to the Account. Subsidiaries and affiliates may be compensated for their services and products.

The value of securities set forth on this Account Statement are determined by The Bank of New York Mellon for Corporate Trust on the basis of market prices and information obtained by The Bank of New York Mellon from unaffiliated third parties (including independent pricing vendors) ("third party pricing services"). The Bank of New York Mellon has not verified such market values or information and makes no assurances as to the accuracy or correctness of such market values or information or that the market values set forth on this Account Statement reflect the value of the securities that can be realized upon the sale of such securities. In addition, the market values for securities set forth in this Account Statement may differ from the market prices and information for the same securities used by other business units of The Bank of New York Mellon or its subsidiaries or affiliates based upon market prices and information received from other third party pricing services utilized by such other business units. Corporate Trust does not compare its market values with those used by, or reconcile different market values used by, other business units of The Bank of New York Mellon or its subsidiaries or its affiliates. The Bank of New York Mellon shall not be liable for any loss, damage or expense incurred as a result of or arising from or related to the market values or information provided by third party pricing services or the differences in market prices or information provided by other third party pricing services.

**U.S. Bank
Investment Listing - Yield**

As of 09/30/2019

Asset Category	CUSIP	Asset Short Name	Yield	Shares/Units	Moody's	S&P Rating	Price	Cost Basis	Market Value
Cash Equivalents	31846V567	FIRST AM GOVT OB FD CL Z	1.7005%	1,740,212.5600			1.00	1,740,212.56	1,740,212.56
Cash Equivalents	31846V567	FIRST AM GOVT OB FD CL Z	1.7005%	3,794,924.7000			1.00	3,794,924.70	3,794,924.70
Cash Equivalents	62479MYK3	MUFG BANK LTD NY BRAN C P 11/19/19	0.0000%	1,860,000.0000			99.73	1,850,032.47	1,854,940.80
Cash Equivalents	62479MYK3	MUFG BANK LTD NY BRAN C P 11/19/19	0.0000%	11,255,000.0000			99.73	11,194,685.71	11,224,386.40
Cash Equivalents	89233GAH9	TOYOTA MOTOR CREDIT CO C P 1/17/20	0.0000%	2,000,000.0000			99.40	1,961,884.44	1,987,940.00
Cash Equivalents	912796RY7	U S TREASURY BILL 1/30/20	1.7844%	7,000,000.0000	N/A	N/A	99.40	6,950,415.19	6,958,140.00
Cash Equivalents	912796SL4	U S TREASURY BILL 10/03/19	1.6251%	1,650,000.0000	N/A	N/A	99.99	1,646,687.63	1,649,851.50
Cash Equivalents	912796VY2	U S TREASURY BILL 10/08/19	1.7181%	1,250,000.0000	N/A	N/A	99.97	1,249,517.42	1,249,575.00
Cash Equivalents	912796VZ9	U S TREASURY BILL 10/15/19	1.7074%	1,250,000.0000	N/A	N/A	99.93	1,249,059.90	1,249,175.00
Fixed Income	00440EAP2	ACE INA HOLDINGS 2.700% 3/13/23	2.6422%	2,000,000.0000	A3	A	102.19	1,937,000.00	2,043,720.00
Fixed Income	00440EAU1	ACE INA HOLDINGS 2.875% 11/03/22	2.8048%	4,169,000.0000	A3	A	102.50	4,232,453.17	4,273,391.76
Fixed Income	02587AAJ3	AMERICAN EXPRESS 1.930% 9/15/22	1.9315%	6,270,000.0000	AAA	N/A	99.92	6,174,085.15	6,265,046.70
Fixed Income	02665WCZ2	AMERICAN HONDA MTN 2.400% 6/27/24	2.3744%	1,219,000.0000	A2	A	101.08	1,213,843.63	1,232,140.82
Fixed Income	02665WCJ8	AMERICAN HONDA MTN 3.450% 7/14/23	3.2893%	845,000.0000	A2	A	104.89	843,538.15	886,278.25
Fixed Income	02665WCQ	AMERICAN HONDA MTN 3.625% 10/10/23	3.4231%	2,000,000.0000	A2	A	105.90	1,998,320.00	2,117,960.00
Fixed Income	03215PFN4	AMRESKO 2.95841% 6/25/29	3.0451%	123,127.8500	N/A	A+	97.15	92,461.32	119,621.17
Fixed Income	037833BS8	APPLE INC 2.250% 2/23/21	2.2398%	4,000,000.0000	AA1	AA+	100.46	4,050,840.00	4,018,200.00
Fixed Income	037833CU2	APPLE INC 2.850% 5/11/24	2.7470%	3,000,000.0000	AA1	AA+	103.75	3,017,760.00	3,112,470.00
Fixed Income	06051GHF9	BANK OF AMERICA 3.550% 3/05/24	3.4159%	6,675,000.0000	A2	A-	103.93	6,770,625.75	6,937,060.50
Fixed Income	06051GFN4	BANK OF AMERICA MTN 2.250% 4/21/20	2.2476%	2,000,000.0000	A2	A-	100.11	2,001,960.00	2,002,140.00
Fixed Income	06417G5Q7	BANK OF NOVA C D 2.610% 12/23/19	2.6071%	2,300,000.0000			100.11	2,300,614.40	2,302,599.00
Fixed Income	06406HCZ0	BANK OF NY MELLO MTN 2.150% 2/24/20	2.1494%	1,500,000.0000	A1	A	100.03	1,493,925.00	1,500,390.00
Fixed Income	06406RAA5	BANK OF NY MTN 2.600% 2/07/22	2.5638%	2,500,000.0000	A1	A	101.41	2,504,475.00	2,535,250.00
Fixed Income	06406RAE7	BANK OF NY MTN 2.950% 1/29/23	2.8726%	2,500,000.0000	A1	A	102.70	2,489,555.00	2,567,400.00
Fixed Income	084670BR8	BERKSHIRE HATHAWAY 2.750% 3/15/23	2.6826%	2,500,000.0000	AA2	AA	102.51	2,440,950.00	2,562,825.00
Fixed Income	084664BT7	BERKSHIRE HATHAWAY 3.000% 5/15/22	2.9154%	4,000,000.0000	AA2	AA	102.90	4,131,120.00	4,116,040.00
Fixed Income	09247XAL5	BLACKROCK INC 3.500% 3/18/24	3.2777%	1,000,000.0000	AA3	AA-	106.78	1,036,330.00	1,067,820.00
Fixed Income	808513AT2	CHARLES SCHWAB CORP 2.650% 1/25/23	2.6031%	6,750,000.0000	A2	A	101.80	6,729,480.00	6,871,635.00
Fixed Income	166764BG4	CHEVRON CORP 2.100% 5/16/21	2.0919%	2,500,000.0000	AA2	AA	100.39	2,485,350.00	2,509,650.00
Fixed Income	166764AH3	CHEVRON CORP 3.191% 6/24/23	3.0607%	3,500,000.0000	AA2	AA	104.26	3,441,095.00	3,648,960.00
Fixed Income	30231GAV4	EXXON MOBIL 2.222% 3/01/21	2.2104%	3,000,000.0000	AAA	AA+	100.52	3,016,097.40	3,015,720.00
Fixed Income	3133EKWV4	F F C B DEB 1.850% 7/26/24	1.8304%	5,000,000.0000	AAA	AA+	101.07	5,048,280.00	5,053,600.00
Fixed Income	3130A1XJ2	F H L B 2.875% 6/14/24	2.7230%	11,110,000.0000	AAA	AA+	105.58	11,589,031.30	11,730,160.20
Fixed Income	3130A7CV5	F H L B DEB 1.375% 2/18/21	1.3822%	5,365,000.0000	AAA	AA+	99.48	5,343,325.40	5,336,941.05
Fixed Income	313383HU8	F H L B DEB 1.750% 6/12/20	1.7512%	5,000,000.0000	AAA	AA+	99.93	5,008,950.00	4,996,450.00
Fixed Income	313379RB7	F H L B DEB 1.875% 6/11/21	1.8708%	4,000,000.0000	AAA	AA+	100.22	4,030,160.00	4,008,880.00
Fixed Income	3130A2UW4	F H L B DEB 2.875% 9/13/24	2.7194%	2,500,000.0000	AAA	AA+	105.72	2,635,950.00	2,643,025.00

**U.S. Bank
Investment Listing - Yield**

As of 09/30/2019

Asset Category	CUSIP	Asset Short Name	Yield	Shares/Units	Moody's	S&P Rating	Price	Cost Basis	Market Value
Fixed Income	313383QR5	F H L B DEB 3.250% 6/09/23	3.0775%	5,000,000.0000	AAA	AA+	105.61	5,083,350.00	5,280,250.00
Fixed Income	313383YJ4	F H L B DEB 3.375% 9/08/23	3.1664%	10,000,000.0000	AAA	AA+	106.59	10,211,831.00	10,658,700.00
Fixed Income	3130A0F70	F H L B DEB 3.375% 12/08/23	3.1544%	10,000,000.0000	AAA	AA+	106.99	10,269,043.75	10,699,200.00
Fixed Income	3137EAEN5	F H L M C 2.750% 6/19/23	2.6431%	10,000,000.0000	AAA	AA+	104.04	9,956,500.00	10,404,300.00
Fixed Income	3137EADM8	F H L M C M T N 1.250% 10/02/19	1.2500%	7,500,000.0000	WR	N/R	100.00	7,399,650.00	7,499,775.00
Fixed Income	3137EAEK1	F H L M C M T N 1.875% 11/17/20	1.8731%	5,000,000.0000	AAA	AA+	100.10	4,986,225.00	5,005,150.00
Fixed Income	3137EAEL9	F H L M C M T N 2.375% 2/16/21	2.3559%	7,500,000.0000	AAA	AA+	100.81	7,484,475.00	7,560,675.00
Fixed Income	31348SWZ3	F H L M C #786064 4.678% 1/01/28	4.5658%	1,845.5200	N/A	N/A	102.46	1,800.58	1,890.88
Fixed Income	3133TCE95	F H L M C MLTCL MTG 4.016% 8/15/32	4.0007%	7,928.5000	N/A	N/A	100.38	7,936.80	7,958.79
Fixed Income	31398VJ98	F H L M C MLTCL MTG 4.251% 1/25/20	4.2441%	659,054.7400	N/A	N/A	100.16	696,435.51	660,129.00
Fixed Income	31394JY35	F H L M C MLTCL MTG 6.500% 9/25/43	5.7059%	686,785.6800	N/A	N/A	113.92	777,784.78	782,372.51
Fixed Income	3135G0F73	F N M A 1.500% 11/30/20	1.5053%	7,500,000.0000	AAA	AA+	99.65	7,370,726.00	7,473,450.00
Fixed Income	3135G0T45	F N M A 1.875% 4/05/22	1.8623%	5,000,000.0000	AAA	AA+	100.68	4,972,500.00	5,034,050.00
Fixed Income	3135G0S38	F N M A 2.000% 1/05/22	1.9858%	3,000,000.0000	AAA	AA+	100.72	2,994,570.00	3,021,480.00
Fixed Income	3135G0V34	F N M A 2.500% 2/05/24	2.4092%	5,000,000.0000	AAA	AA+	103.77	4,980,850.00	5,188,500.00
Fixed Income	3135G0U35	F N M A 2.750% 6/22/21	2.7021%	7,500,000.0000	AAA	AA+	101.77	7,515,225.00	7,632,975.00
Fixed Income	31371NUC7	F N M A #257179 4.500% 4/01/28	4.2658%	14,717.5300	N/A	N/A	105.49	15,565.23	15,525.38
Fixed Income	31376KT22	F N M A #357969 5.000% 9/01/35	4.5262%	98,885.2800	N/A	N/A	110.47	106,301.67	109,237.58
Fixed Income	31381PDA3	F N M A #466397 3.400% 11/01/20	3.3735%	337,358.0300	N/A	N/A	100.79	330,057.41	340,009.66
Fixed Income	31403DJZ3	F N M A #745580 5.000% 6/01/36	4.5274%	92,510.2700	N/A	N/A	110.44	99,448.54	102,166.49
Fixed Income	31403GXF4	F N M A #748678 5.000% 10/01/33	4.5758%	1,781.1400	N/A	N/A	109.27	1,914.73	1,946.25
Fixed Income	31406PQY8	F N M A #815971 5.000% 3/01/35	4.5317%	157,142.7900	N/A	N/A	110.34	168,928.51	173,383.50
Fixed Income	31406XWT5	F N M A #823358 4.722% 2/01/35	4.5121%	109,269.4000	N/A	N/A	104.65	108,415.73	114,353.71
Fixed Income	31407BXH7	F N M A #826080 5.000% 7/01/35	4.5270%	18,677.2900	N/A	N/A	110.45	20,078.08	20,628.69
Fixed Income	31410F4V4	F N M A #888336 5.000% 7/01/36	4.5284%	180,164.2100	N/A	N/A	110.42	193,676.52	198,928.31
Fixed Income	3138EG6F6	F N M A #AL0869 4.500% 6/01/29	4.2238%	10,044.9200	N/A	N/A	106.54	10,623.50	10,701.76
Fixed Income	31417YAY3	F N M A #MA0022 4.500% 4/01/29	4.2238%	16,436.7800	N/A	N/A	106.54	17,383.51	17,511.75
Fixed Income	3135G0J20	F N M A DEB 1.375% 2/26/21	1.3825%	10,000,000.0000	AAA	AA+	99.46	10,040,950.00	9,946,100.00
Fixed Income	3135G0D75	F N M A DEB 1.500% 6/22/20	1.5042%	5,000,000.0000	AAA	AA+	99.72	4,955,650.00	4,986,050.00
Fixed Income	3135G0T94	F N M A DEB 2.375% 1/19/23	2.3174%	5,000,000.0000	AAA	AA+	102.49	4,910,990.00	5,124,250.00
Fixed Income	31397QRE0	F N M A GTD REMIC 2.825% 2/25/41	2.6683%	186,495.6800	N/A	N/A	101.13	186,437.40	188,597.49
Fixed Income	36225CAZ9	G N M A I I #080023 4.125% 12/20/26	4.0045%	15,348.4000	N/A	N/A	103.01	15,601.96	15,810.08
Fixed Income	36225CC20	G N M A I I #080088 3.875% 6/20/27	3.8369%	15,097.0500	N/A	N/A	100.99	15,427.31	15,246.96
Fixed Income	36225CNM4	G N M A I I #080395 3.875% 4/20/30	3.7330%	6,521.3900	N/A	N/A	103.80	6,462.26	6,769.46
Fixed Income	36225CN28	G N M A I I #080408 3.875% 5/20/30	3.7329%	49,754.7600	N/A	N/A	103.81	49,249.44	51,648.92
Fixed Income	36225DCB8	G N M A I I #080965 3.750% 7/20/34	3.5940%	45,340.4700	N/A	N/A	104.34	45,312.14	47,308.70
Fixed Income	369550BA5	GENERAL DYNAMICS 2.875% 5/11/20	2.8601%	2,000,000.0000	A2	A+	100.52	2,011,340.00	2,010,420.00

**U.S. Bank
Investment Listing - Yield**

As of 09/30/2019

Asset Category	CUSIP	Asset Short Name	Yield	Shares/Units	Moody's	S&P Rating	Price	Cost Basis	Market Value
Fixed Income	369550BE7	GENERAL DYNAMICS 3.000% 5/11/21	2.9484%	3,160,000.0000	A2	A+	101.75	3,138,038.00	3,215,331.60
Fixed Income	43814RAC0	HONDA AUTO 1.210% 12/18/20	1.2123%	563,719.9400	N/A	AAA	99.81	557,532.23	562,648.87
Fixed Income	43814PAC4	HONDA AUTO 1.790% 9/20/21	1.7915%	2,115,225.6000	N/A	AAA	99.92	2,081,679.44	2,113,448.81
Fixed Income	43815NAB0	HONDA AUTO 1.900% 4/15/22	1.9019%	3,530,000.0000	AAA	AAA	99.90	3,529,752.90	3,526,540.60
Fixed Income	43814WAB1	HONDA AUTO 2.750% 9/20/21	2.7386%	4,395,000.0000	N/A	AAA	100.42	4,394,716.96	4,413,371.10
Fixed Income	43815HAC1	HONDA AUTO 2.950% 8/22/22	2.9163%	3,970,000.0000	AAA	N/A	101.16	3,969,455.32	4,015,893.20
Fixed Income	43814UAG4	HONDA AUTO 3.010% 5/18/22	2.9802%	1,710,000.0000	N/A	AAA	101.00	1,709,962.72	1,727,082.90
Fixed Income	404280BF5	HSBC HOLDINGS PLC 2.650% 1/05/22	2.6312%	4,500,000.0000	A2	A	100.72	4,429,980.00	4,532,175.00
Fixed Income	40428HPR7	HSBC USA INC MTN 2.350% 3/05/20	2.3469%	2,500,000.0000	A2	A	100.13	2,493,300.00	2,503,325.00
Fixed Income	40428HPR7	HSBC USA INC MTN 2.350% 3/05/20	2.3469%	2,500,000.0000	A2	A	100.13	2,472,287.50	2,503,325.00
Fixed Income	44932HAH6	IBM CREDIT CORP 3.000% 2/06/23	2.9163%	5,670,000.0000	A2	A	102.87	5,603,264.40	5,832,672.30
Fixed Income	458140BD1	INTEL CORP 2.875% 5/11/24	2.7665%	5,000,000.0000	A1	A+	103.92	5,025,900.00	5,196,050.00
Fixed Income	4581X0CS5	INTER AMER BK M T N 1.875% 3/15/21	1.8722%	5,000,000.0000	AAA	AAA	100.15	5,059,610.00	5,007,600.00
Fixed Income	4581X0CX4	INTER AMER DEV BK 1.625% 5/12/20	1.6281%	3,035,000.0000	AAA	AAA	99.81	3,027,807.05	3,029,142.45
Fixed Income	4581X0CZ9	INTER AMER DEV BK 1.750% 9/14/22	1.7449%	6,500,000.0000	AAA	AAA	100.30	6,249,655.00	6,519,175.00
Fixed Income	4581X0CW6	INTER AMER DEV BK 2.125% 1/18/22	2.1034%	3,000,000.0000	AAA	N/A	101.03	2,996,310.00	3,030,810.00
Fixed Income	459058FY4	INTL BK 2.000% 1/26/22	1.9843%	10,000,000.0000	AAA	N/A	100.79	10,006,350.00	10,078,900.00
Fixed Income	45950KCM0	INTL BK M T N 2.250% 1/25/21	2.2372%	2,970,000.0000	AAA	AAA	100.57	2,961,268.20	2,986,958.70
Fixed Income	45950KCJ7	INTL FINANCE CORP 1.125% 7/20/21	1.1367%	2,500,000.0000	AAA	AAA	98.97	2,441,600.00	2,474,300.00
Fixed Income	24422EUM9	JOHN DEERE MTN 3.650% 10/12/23	3.4259%	1,250,000.0000	A2	A	106.54	1,250,237.50	1,331,750.00
Fixed Income	47788NAD0	JOHN DEERE OWNER 1.490% 5/15/23	1.4904%	1,003,712.9300	AAA	N/A	99.97	987,088.93	1,003,451.96
Fixed Income	47788BAD6	JOHN DEERE OWNER 1.820% 10/15/21	1.8228%	441,393.7800	AAA	N/A	99.85	441,361.46	440,709.62
Fixed Income	477870AB5	JOHN DEERE OWNER 2.280% 5/16/22	2.2748%	2,800,000.0000	AAA	N/A	100.23	2,799,989.36	2,806,440.00
Fixed Income	47788CAB8	JOHN DEERE OWNER 2.420% 10/15/20	2.4198%	180,610.3100	AAA	N/A	100.01	180,243.45	180,622.95
Fixed Income	47788CAC6	JOHN DEERE OWNER 2.660% 4/18/22	2.6492%	1,340,000.0000	AAA	N/A	100.41	1,339,903.65	1,345,480.60
Fixed Income	47789JAB2	JOHN DEERE OWNER 2.850% 12/15/21	2.8369%	3,265,000.0000	AAA	N/A	100.46	3,264,851.12	3,280,051.65
Fixed Income	47788EAC2	JOHN DEERE OWNER 3.080% 11/15/22	3.0401%	4,630,000.0000	AAA	N/A	101.31	4,629,649.05	4,690,791.90
Fixed Income	46625HRL6	JP MORGAN CHASE CO 2.700% 5/18/23	2.6554%	5,000,000.0000	A2	A-	101.68	4,821,910.00	5,084,050.00
Fixed Income	46647PAU0	JPMORGAN CHASE CO 3.797% 7/23/24	3.6002%	2,500,000.0000	A2	A-	105.47	2,632,175.00	2,636,675.00
Fixed Income	525ESC0Y6	LEHMAN BRTH HLD ESC	0.0000%	2,000,000.0000			-	1,031,998.65	-
Fixed Income	525ESCIB7	LEHMAN BRTH MTN ES 0.00001% 1/24/13	0.0007%	600,000.0000	N/A	N/A	1.42	320,227.27	8,520.00
Fixed Income	58933YAF2	MERCK CO INC 2.800% 5/18/23	2.7196%	2,000,000.0000	A1	AA	102.96	1,948,640.00	2,059,160.00
Fixed Income	594918BP8	MICROSOFT CORP 1.550% 8/08/21	1.5565%	3,045,000.0000	AAA	AAA	99.58	3,041,385.15	3,032,241.45
Fixed Income	61747WAL3	MORGAN STANLEY 5.500% 7/28/21	5.1832%	2,800,000.0000	A3	BBB+	106.11	3,200,848.00	2,971,136.00
Fixed Income	64971M5E8	NEW YORK CITY NY 4.075% 11/01/20	3.9890%	1,400,000.0000	AA1	AAA	102.16	1,400,000.00	1,430,170.00
Fixed Income	65478VAD9	NISSAN AUTO 1.320% 1/15/21	1.3213%	252,050.0200	AAA	N/A	99.90	250,031.65	251,800.49
Fixed Income	65478GAD2	NISSAN AUTO 1.750% 10/15/21	1.7523%	2,063,703.3300	AAA	N/A	99.87	2,031,699.81	2,060,958.60

**U.S. Bank
Investment Listing - Yield**

As of 09/30/2019

Asset Category	CUSIP	Asset Short Name	Yield	Shares/Units	Moody's	S&P Rating	Price	Cost Basis	Market Value
Fixed Income	65479GAD1	NISSAN AUTO 3.060% 3/15/23	3.0164%	3,560,000.0000	AAA	AAA	101.45	3,559,884.66	3,611,477.60
Fixed Income	68389XBK0	ORACLE CORP 1.900% 9/15/21	1.9022%	3,000,000.0000	A1	A+	99.88	2,892,240.00	2,996,460.00
Fixed Income	69353RFL7	PNC BANK NA 3.500% 6/08/23	3.3335%	5,000,000.0000	A2	A	105.00	4,993,318.05	5,249,800.00
Fixed Income	69353RFB9	PNC BANK NA MTN 2.625% 2/17/22	2.5890%	1,000,000.0000	A2	A	101.39	974,940.00	1,013,890.00
Fixed Income	73358WAG9	PORT AUTH NY NJ 5.309% 12/01/19	5.2805%	2,440,000.0000	AA3	AA-	100.54	2,507,633.89	2,453,176.00
Fixed Income	747525AD5	QUALCOMM INC 2.250% 5/20/20	2.2491%	2,000,000.0000	A2	A-	100.04	2,002,700.00	2,000,840.00
Fixed Income	747525AD5	QUALCOMM INC 2.250% 5/20/20	2.2491%	5,000,000.0000	A2	A-	100.04	4,995,195.40	5,002,100.00
Fixed Income	78013XZU5	ROYAL BANK OF MTN 2.550% 7/16/24	2.5159%	6,500,000.0000	A2	A	101.35	6,581,445.00	6,588,010.00
Fixed Income	83162CLJ0	S B A GTD DEV PART 6.340% 3/01/21	6.2464%	11,184.5600	N/A	N/A	101.50	11,184.56	11,352.22
Fixed Income	78445JAA5	S L M A 3.8594% 4/25/23	3.8368%	13,344.8500	BAA3	B	100.59	13,290.71	13,423.58
Fixed Income	89114QCA4	TORONTO DOMINION MTN 2.650% 6/12/24	2.6010%	3,000,000.0000	AA3	A	101.89	3,000,570.00	3,056,550.00
Fixed Income	89114QC48	TORONTO MTN 3.500% 7/19/23	3.3190%	5,000,000.0000	AA1	AA-	105.45	5,094,200.00	5,272,600.00
Fixed Income	89238BAB8	TOYOTA AUTO 2.100% 10/15/20	2.1001%	683,639.4400	AAA	AAA	100.00	683,569.57	683,618.93
Fixed Income	89239AAB9	TOYOTA AUTO 2.830% 10/15/21	2.8201%	3,615,000.0000	AAA	AAA	100.35	3,614,671.76	3,627,652.50
Fixed Income	912828WU0	U S TREASURY I P S 0.125% 7/15/24	0.1252%	11,236,992.0000	AAA	N/A	99.88	11,092,272.09	11,222,945.76
Fixed Income	912828T34	U S TREASURY NT 1.125% 9/30/21	1.1366%	7,000,000.0000	AAA	N/A	98.98	6,757,914.08	6,928,390.00
Fixed Income	912828H52	U S TREASURY NT 1.250% 1/31/20	1.2528%	13,500,000.0000	AAA	N/A	99.78	13,396,542.97	13,469,895.00
Fixed Income	912828T67	U S TREASURY NT 1.250% 10/31/21	1.2602%	6,000,000.0000	AAA	N/A	99.19	5,813,691.98	5,951,280.00
Fixed Income	912828UL2	U S TREASURY NT 1.375% 1/31/20	1.3776%	5,000,000.0000	AAA	N/A	99.81	4,988,671.88	4,990,650.00
Fixed Income	912828N89	U S TREASURY NT 1.375% 1/31/21	1.3822%	6,000,000.0000	AAA	N/A	99.48	5,895,840.41	5,968,620.00
Fixed Income	912828L99	U S TREASURY NT 1.375% 10/31/20	1.3814%	10,000,000.0000	AAA	N/A	99.54	9,850,311.40	9,953,900.00
Fixed Income	912828XE5	U S TREASURY NT 1.500% 5/31/20	1.5037%	5,000,000.0000	AAA	N/A	99.75	4,966,423.00	4,987,700.00
Fixed Income	912828F62	U S TREASURY NT 1.500% 10/31/19	1.5007%	2,500,000.0000	AAA	N/A	99.95	2,486,718.75	2,498,775.00
Fixed Income	912828G61	U S TREASURY NT 1.500% 11/30/19	1.5014%	7,500,000.0000	AAA	N/A	99.91	7,449,634.50	7,493,100.00
Fixed Income	912828R69	U S TREASURY NT 1.625% 5/31/23	1.6218%	5,000,000.0000	AAA	N/A	100.20	4,757,226.56	5,009,750.00
Fixed Income	912828J76	U S TREASURY NT 1.750% 3/31/22	1.7433%	5,000,000.0000	AAA	N/A	100.38	4,976,383.94	5,019,150.00
Fixed Income	912828XW5	U S TREASURY NT 1.750% 6/30/22	1.7424%	5,000,000.0000	AAA	N/A	100.44	4,973,454.25	5,021,900.00
Fixed Income	912828L57	U S TREASURY NT 1.750% 9/30/22	1.7414%	13,000,000.0000	AAA	N/A	100.50	12,763,554.69	13,064,480.00
Fixed Income	912828U65	U S TREASURY NT 1.750% 11/30/21	1.7461%	7,000,000.0000	AAA	N/A	100.22	6,900,492.20	7,015,610.00
Fixed Income	912828V72	U S TREASURY NT 1.875% 1/31/22	1.8647%	3,000,000.0000	AAA	N/A	100.56	3,004,814.74	3,016,650.00
Fixed Income	912828L24	U S TREASURY NT 1.875% 8/31/22	1.8594%	6,000,000.0000	AAA	N/A	100.84	5,987,832.60	6,050,400.00
Fixed Income	912828S7	U S TREASURY NT 2.000% 1/31/20	1.9995%	15,000,000.0000	AAA	N/A	100.03	14,955,468.75	15,004,050.00
Fixed Income	912828XX3	U S TREASURY NT 2.000% 6/30/24	1.9619%	5,000,000.0000	AAA	N/A	101.94	5,028,710.94	5,097,050.00
Fixed Income	912828M80	U S TREASURY NT 2.000% 11/30/22	1.9752%	8,000,000.0000	AAA	N/A	101.26	7,907,500.00	8,100,640.00
Fixed Income	912828W48	U S TREASURY NT 2.125% 2/29/24	2.0757%	10,000,000.0000	AAA	N/A	102.38	9,911,718.75	10,237,500.00
Fixed Income	912828U57	U S TREASURY NT 2.125% 11/30/23	2.0792%	15,000,000.0000	AAA	N/A	102.20	14,723,632.81	15,330,450.00
Fixed Income	912828N30	U S TREASURY NT 2.125% 12/31/22	2.0893%	5,000,000.0000	AAA	N/A	101.71	4,926,562.50	5,085,350.00

**U.S. Bank
Investment Listing - Yield**

As of 09/30/2019

Asset Category	CUSIP	Asset Short Name	Yield	Shares/Units	Moody's	S&P Rating	Price	Cost Basis	Market Value
Fixed Income	912828V80	U S TREASURY NT 2.250% 1/31/24	2.1879%	7,500,000.0000	AAA		102.84	7,491,503.91	7,712,700.00
Fixed Income	9128284D9	U S TREASURY NT 2.500% 3/31/23	2.4238%	10,000,000.0000	AAA	N/A	103.15	9,887,265.63	10,314,500.00
Fixed Income	912828WJ5	U S TREASURY NT 2.500% 5/15/24	2.4011%	7,000,000.0000	AAA	N/A	104.12	7,193,046.88	7,288,190.00
Fixed Income	913366EJ5	UNIV OF CALIFORNIA 5.035% 5/15/21	4.7998%	400,000.0000	AA3	AA-	104.90	400,000.00	419,600.00
Fixed Income	90331HNL3	US BANK NA MTN 2.850% 1/23/23	2.7861%	5,000,000.0000	A1	AA-	102.29	4,981,600.00	5,114,600.00
Fixed Income	931142EK5	WALMART INC 3.400% 6/26/23	3.2299%	3,880,000.0000	AA2	AA	105.27	3,878,991.40	4,084,282.00
Fixed Income	94974BGM6	WELLS FARGO CO MTN 2.600% 7/22/20	2.5878%	5,000,000.0000	A2	A-	100.47	5,001,650.00	5,023,600.00
Fixed Income	94974BGF1	WELLS FARGO MTN 2.150% 1/30/20	2.1506%	1,000,000.0000	A2	A-	99.97	996,600.00	999,700.00
Fixed Income	94988J5G8	WELLS FARGO MTN 2.150% 12/06/19	2.1502%	500,000.0000	AA2	A+	99.99	498,425.00	499,965.00
Fixed Income	95000U2B8	WELLS FARGO MTN 2.625% 7/22/22	2.5962%	3,000,000.0000	A2	A-	101.11	2,954,520.00	3,033,300.00
Fixed Income	96130AAK4	WESTPAC BKING C D 2.970% 10/18/19	2.9687%	1,500,000.0000			100.05	1,503,302.80	1,500,675.00
Total Consolidated									613,565,030.62

U.S. Bank
Asset Detail - Consolidated
As of 09/30/2019

CUSIP	Asset Short Name	Price	Shares/Units	Cost Basis	Market Value	Percent of Total	Unrealized Gain/Loss
Cash Equivalents Total							
31846V567	FIRST AM GOVT OB FD CL Z	1.00	1,740,212.5600	1,740,212.56	1,740,212.56	0.28	-
31846V567	FIRST AM GOVT OB FD CL Z	1.00	3,794,924.7000	3,794,924.70	3,794,924.70	0.62	-
62479MYK3	MUFG BANK LTD NY BRAN C P 11/19/19	99.73	1,860,000.0000	1,850,032.47	1,854,940.80	0.30	4,908.33
62479MYK3	MUFG BANK LTD NY BRAN C P 11/19/19	99.73	11,255,000.0000	11,194,685.71	11,224,386.40	1.83	29,700.69
89233GAH9	TOYOTA MOTOR CREDIT CO C P 1/17/20	99.40	2,000,000.0000	1,961,884.44	1,987,940.00	0.32	26,055.56
912796RY7	U S TREASURY BILL 1/30/20	99.40	7,000,000.0000	6,950,415.19	6,958,140.00	1.13	7,724.81
912796SL4	U S TREASURY BILL 10/03/19	99.99	1,650,000.0000	1,646,687.63	1,649,851.50	0.27	3,163.87
912796VY2	U S TREASURY BILL 10/08/19	99.97	1,250,000.0000	1,249,517.42	1,249,575.00	0.20	57.58
912796VZ9	U S TREASURY BILL 10/15/19	99.93	1,250,000.0000	1,249,059.90	1,249,175.00	0.20	115.10
Cash Equivalents Total			31,800,137.2600	31,637,420.02	31,709,145.96	5.17	71,725.94
Fixed Income							
00440EAP2	ACE INA HOLDINGS 2.700% 3/13/23	102.19	2,000,000.0000	1,937,000.00	2,043,720.00	0.33	106,720.00
00440EAU1	ACE INA HOLDINGS 2.875% 11/03/22	102.50	4,169,000.0000	4,232,453.17	4,273,391.76	0.70	40,938.59
02587AAJ3	AMERICAN EXPRESS 1.930% 9/15/22	99.92	6,270,000.0000	6,174,085.15	6,265,046.70	1.02	90,961.55
02665WCZ2	AMERICAN HONDA MTN 2.400% 6/27/24	101.08	1,219,000.0000	1,213,843.63	1,232,140.82	0.20	18,297.19
02665WCJ8	AMERICAN HONDA MTN 3.450% 7/14/23	104.89	845,000.0000	843,538.15	886,278.25	0.14	42,740.10
02665WCQ2	AMERICAN HONDA MTN 3.625% 10/10/23	105.90	2,000,000.0000	1,998,320.00	2,117,960.00	0.35	119,640.00
03215PFN4	AMRESCO 2.95841% 6/25/29	97.15	123,127.8500	92,461.32	119,621.17	0.02	27,159.85
037833BS8	APPLE INC 2.250% 2/23/21	100.46	4,000,000.0000	4,050,840.00	4,018,200.00	0.65	(32,640.00)
037833CU2	APPLE INC 2.850% 5/11/24	103.75	3,000,000.0000	3,017,760.00	3,112,470.00	0.51	94,710.00
06051GHF9	BANK OF AMERICA 3.550% 3/05/24	103.93	6,675,000.0000	6,770,625.75	6,937,060.50	1.13	166,434.75
06051GFN4	BANK OF AMERICA MTN 2.250% 4/21/20	100.11	2,000,000.0000	2,001,960.00	2,002,140.00	0.33	180.00
06417G5Q7	BANK OF NOVA C D 2.610% 12/23/19	100.11	2,300,000.0000	2,300,614.40	2,302,599.00	0.38	1,984.60
06406HCZ0	BANK OF NY MELLO MTN 2.150% 2/24/20	100.03	1,500,000.0000	1,493,925.00	1,500,390.00	0.24	6,465.00
06406RAA5	BANK OF NY MTN 2.600% 2/07/22	101.41	2,500,000.0000	2,504,475.00	2,535,250.00	0.41	30,775.00
06406RAE7	BANK OF NY MTN 2.950% 1/29/23	102.70	2,500,000.0000	2,489,555.00	2,567,400.00	0.42	77,845.00
084670BR8	BERKSHIRE HATHAWAY 2.750% 3/15/23	102.51	2,500,000.0000	2,440,950.00	2,562,825.00	0.42	121,875.00
084664BT7	BERKSHIRE HATHAWAY 3.000% 5/15/22	102.90	4,000,000.0000	4,131,120.00	4,116,040.00	0.67	(15,080.00)
09247XAL5	BLACKROCK INC 3.500% 3/18/24	106.78	1,000,000.0000	1,036,330.00	1,067,820.00	0.17	31,490.00
808513AT2	CHARLES SCHWAB CORP 2.650% 1/25/23	101.80	6,750,000.0000	6,729,480.00	6,871,635.00	1.12	142,155.00
166764BG4	CHEVRON CORP 2.100% 5/16/21	100.39	2,500,000.0000	2,485,350.00	2,509,650.00	0.41	24,300.00
166764AH3	CHEVRON CORP 3.191% 6/24/23	104.26	3,500,000.0000	3,441,095.00	3,648,960.00	0.59	207,865.00
30231GAV4	EXXON MOBIL 2.222% 3/01/21	100.52	3,000,000.0000	3,016,097.40	3,015,720.00	0.49	(377.40)
3133EKWV4	F F C B DEB 1.850% 7/26/24	101.07	5,000,000.0000	5,048,280.00	5,053,600.00	0.82	5,320.00
3130A1XJ2	F H L B 2.875% 6/14/24	105.58	11,110,000.0000	11,589,031.30	11,730,160.20	1.91	141,128.90
3130A7CV5	F H L B DEB 1.375% 2/18/21	99.48	5,365,000.0000	5,343,325.40	5,336,941.05	0.87	(6,384.35)
313383HU8	F H L B DEB 1.750% 6/12/20	99.93	5,000,000.0000	5,008,950.00	4,996,450.00	0.81	(12,500.00)
313379RB7	F H L B DEB 1.875% 6/11/21	100.22	4,000,000.0000	4,030,160.00	4,008,880.00	0.65	(21,280.00)
3130A2UW4	F H L B DEB 2.875% 9/13/24	105.72	2,500,000.0000	2,635,950.00	2,643,025.00	0.43	7,075.00
313383QR5	F H L B DEB 3.250% 6/09/23	105.61	5,000,000.0000	5,083,350.00	5,280,250.00	0.86	196,900.00

U.S. Bank
Asset Detail - Consolidated
As of 09/30/2019

CUSIP	Asset Short Name	Price	Shares/Units	Cost Basis	Market Value	Percent of Total	Unrealized Gain/Loss
313383YJ4	F H L B DEB 3.375% 9/08/23	106.59	10,000,000.0000	10,211,831.00	10,658,700.00	1.74	446,869.00
3130A0F70	F H L B DEB 3.375% 12/08/23	106.99	10,000,000.0000	10,269,043.75	10,699,200.00	1.74	430,156.25
3137EAEN5	F H L M C 2.750% 6/19/23	104.04	10,000,000.0000	9,956,500.00	10,404,300.00	1.70	447,800.00
3137EADM8	F H L M C M T N 1.250% 10/02/19	100.00	7,500,000.0000	7,399,650.00	7,499,775.00	1.22	100,125.00
3137EAEK1	F H L M C M T N 1.875% 11/17/20	100.10	5,000,000.0000	4,986,225.00	5,005,150.00	0.82	18,925.00
3137EAEI9	F H L M C M T N 2.375% 2/16/21	100.81	7,500,000.0000	7,484,475.00	7,560,675.00	1.23	76,200.00
31348SWZ3	F H L M C #786064 4.678% 1/01/28	102.46	1,845.5200	1,800.58	1,890.88	0.00	90.30
3133TCE95	F H L M C MLTCL MTG 4.016% 8/15/32	100.38	7,928.5000	7,936.80	7,958.79	0.00	21.99
31398VJ98	F H L M C MLTCL MTG 4.251% 1/25/20	100.16	659,054.7400	696,435.51	660,129.00	0.11	(36,306.51)
31394JY35	F H L M C MLTCL MTG 6.500% 9/25/43	113.92	686,785.6800	777,784.78	782,372.51	0.13	4,587.73
3135G0F73	F N M A 1.500% 11/30/20	99.65	7,500,000.0000	7,370,726.00	7,473,450.00	1.22	102,724.00
3135G0T45	F N M A 1.875% 4/05/22	100.68	5,000,000.0000	4,972,500.00	5,034,050.00	0.82	61,550.00
3135G0S38	F N M A 2.000% 1/05/22	100.72	3,000,000.0000	2,994,570.00	3,021,480.00	0.49	26,910.00
3135G0V34	F N M A 2.500% 2/05/24	103.77	5,000,000.0000	4,980,850.00	5,188,500.00	0.85	207,650.00
3135G0U35	F N M A 2.750% 6/22/21	101.77	7,500,000.0000	7,515,225.00	7,632,975.00	1.24	117,750.00
31371NUC7	F N M A #257179 4.500% 4/01/28	105.49	14,717.5300	15,565.23	15,525.38	0.00	(39.85)
31376KT22	F N M A #357969 5.000% 9/01/35	110.47	98,885.2800	106,301.67	109,237.58	0.02	2,935.91
31381PDA3	F N M A #466397 3.400% 11/01/20	100.79	337,358.0300	330,057.41	340,009.66	0.06	9,952.25
31403DJZ3	F N M A #745580 5.000% 6/01/36	110.44	92,510.2700	99,448.54	102,166.49	0.02	2,717.95
31403GXF4	F N M A #748678 5.000% 10/01/33	109.27	1,781.1400	1,914.73	1,946.25	0.00	31.52
31406PQY8	F N M A #815971 5.000% 3/01/35	110.34	157,142.7900	168,928.51	173,383.50	0.03	4,454.99
31406XWT5	F N M A #823358 4.722% 2/01/35	104.65	109,269.4000	108,415.73	114,353.71	0.02	5,937.98
31407BXH7	F N M A #826080 5.000% 7/01/35	110.45	18,677.2900	20,078.08	20,628.69	0.00	550.61
31410F4V4	F N M A #888336 5.000% 7/01/36	110.42	180,164.2100	193,676.52	198,928.31	0.03	5,251.79
3138EG6F6	F N M A #AL0869 4.500% 6/01/29	106.54	10,044.9200	10,623.50	10,701.76	0.00	78.26
31417YAY3	F N M A #MA0022 4.500% 4/01/29	106.54	16,436.7800	17,383.51	17,511.75	0.00	128.24
3135G0J20	F N M A DEB 1.375% 2/26/21	99.46	10,000,000.0000	10,040,950.00	9,946,100.00	1.62	(94,850.00)
3135G0D75	F N M A DEB 1.500% 6/22/20	99.72	5,000,000.0000	4,955,650.00	4,986,050.00	0.81	30,400.00
3135G0T94	F N M A DEB 2.375% 1/19/23	102.49	5,000,000.0000	4,910,990.00	5,124,250.00	0.84	213,260.00
31397QRE0	F N M A GTD REMIC 2.825% 2/25/41	101.13	186,495.6800	186,437.40	188,597.49	0.03	2,160.09
36225CAZ9	G N M A I I #080023 4.125% 12/20/26	103.01	15,348.4000	15,601.96	15,810.08	0.00	208.12
36225CC20	G N M A I I #080088 3.875% 6/20/27	100.99	15,097.0500	15,427.31	15,246.96	0.00	(180.35)
36225CNM4	G N M A I I #080395 3.875% 4/20/30	103.80	6,521.3900	6,462.26	6,769.46	0.00	307.20
36225CN28	G N M A I I #080408 3.875% 5/20/30	103.81	49,754.7600	49,249.44	51,648.92	0.01	2,399.48
36225DCB8	G N M A I I #080965 3.750% 7/20/34	104.34	45,340.4700	45,312.14	47,308.70	0.01	1,996.56
369550BA5	GENERAL DYNAMICS 2.875% 5/11/20	100.52	2,000,000.0000	2,011,340.00	2,010,420.00	0.33	(920.00)
369550BE7	GENERAL DYNAMICS 3.000% 5/11/21	101.75	3,160,000.0000	3,138,038.00	3,215,331.60	0.52	77,293.60
43814RAC0	HONDA AUTO 1.210% 12/18/20	99.81	563,719.9400	557,532.23	562,648.87	0.09	5,116.64
43814PAC4	HONDA AUTO 1.790% 9/20/21	99.92	2,115,225.6000	2,081,679.44	2,113,448.81	0.34	31,769.37
43815NAB0	HONDA AUTO 1.900% 4/15/22	99.90	3,530,000.0000	3,529,752.90	3,526,540.60	0.57	(3,212.30)
43814WAB1	HONDA AUTO 2.750% 9/20/21	100.42	4,395,000.0000	4,394,716.96	4,413,371.10	0.72	18,654.14
43815HAC1	HONDA AUTO 2.950% 8/22/22	101.16	3,970,000.0000	3,969,455.32	4,015,893.20	0.65	46,437.88

U.S. Bank
Asset Detail - Consolidated
As of 09/30/2019

CUSIP	Asset Short Name	Price	Shares/Units	Cost Basis	Market Value	Percent of Total	Unrealized Gain/Loss
43814UAG4	HONDA AUTO 3.010% 5/18/22	101.00	1,710,000.0000	1,709,962.72	1,727,082.90	0.28	17,120.18
404280BF5	HSBC HOLDINGS PLC 2.650% 1/05/22	100.72	4,500,000.0000	4,429,980.00	4,532,175.00	0.74	102,195.00
40428HPR7	HSBC USA INC MTN 2.350% 3/05/20	100.13	2,500,000.0000	2,493,300.00	2,503,325.00	0.41	10,025.00
40428HPR7	HSBC USA INC MTN 2.350% 3/05/20	100.13	2,500,000.0000	2,472,287.50	2,503,325.00	0.41	31,037.50
44932HAH6	IBM CREDIT CORP 3.000% 2/06/23	102.87	5,670,000.0000	5,603,264.40	5,832,672.30	0.95	229,407.90
458140BD1	INTEL CORP 2.875% 5/11/24	103.92	5,000,000.0000	5,025,900.00	5,196,050.00	0.85	170,150.00
4581X0CS5	INTER AMER BK M T N 1.875% 3/15/21	100.15	5,000,000.0000	5,059,610.00	5,007,600.00	0.82	(52,010.00)
4581X0CX4	INTER AMER DEV BK 1.625% 5/12/20	99.81	3,035,000.0000	3,027,807.05	3,029,142.45	0.49	1,335.40
4581X0CZ9	INTER AMER DEV BK 1.750% 9/14/22	100.30	6,500,000.0000	6,249,655.00	6,519,175.00	1.06	269,520.00
4581X0CW6	INTER AMER DEV BK 2.125% 1/18/22	101.03	3,000,000.0000	2,996,310.00	3,030,810.00	0.49	34,500.00
459058FY4	INTL BK 2.000% 1/26/22	100.79	10,000,000.0000	10,006,350.00	10,078,900.00	1.64	72,550.00
45950KCM0	INTL BK M T N 2.250% 1/25/21	100.57	2,970,000.0000	2,961,268.20	2,986,958.70	0.49	25,690.50
45950KCJ7	INTL FINANCE CORP 1.125% 7/20/21	98.97	2,500,000.0000	2,441,600.00	2,474,300.00	0.40	32,700.00
24422EUM9	JOHN DEERE MTN 3.650% 10/12/23	106.54	1,250,000.0000	1,250,237.50	1,331,750.00	0.22	81,512.50
47788NAD0	JOHN DEERE OWNER 1.490% 5/15/23	99.97	1,003,712.9300	987,088.93	1,003,451.96	0.16	16,363.03
47788BAD6	JOHN DEERE OWNER 1.820% 10/15/21	99.85	441,393.7800	441,361.46	440,709.62	0.07	(651.84)
477870AB5	JOHN DEERE OWNER 2.280% 5/16/22	100.23	2,800,000.0000	2,799,989.36	2,806,440.00	0.46	6,450.64
47788CAB8	JOHN DEERE OWNER 2.420% 10/15/20	100.01	180,610.3100	180,243.45	180,622.95	0.03	379.50
47788CAC6	JOHN DEERE OWNER 2.660% 4/18/22	100.41	1,340,000.0000	1,339,903.65	1,345,480.60	0.22	5,576.95
47789JAB2	JOHN DEERE OWNER 2.850% 12/15/21	100.46	3,265,000.0000	3,264,851.12	3,280,051.65	0.53	15,200.53
47788EAC2	JOHN DEERE OWNER 3.080% 11/15/22	101.31	4,630,000.0000	4,629,649.05	4,690,791.90	0.76	61,142.85
46625HRL6	JP MORGAN CHASE CO 2.700% 5/18/23	101.68	5,000,000.0000	4,821,910.00	5,084,050.00	0.83	262,140.00
46647PAU0	JPMORGAN CHASE CO 3.797% 7/23/24	105.47	2,500,000.0000	2,632,175.00	2,636,675.00	0.43	4,500.00
525ESC0Y6	LEHMAN BRTH HLD ESC	-	2,000,000.0000	1,031,998.65	-	-	(1,031,998.65)
525ESCIB7	LEHMAN BRTH MTN ES 0.00001% 1/24/13	1.42	600,000.0000	320,227.27	8,520.00	0.00	(311,707.27)
58933YAF2	MERCK CO INC 2.800% 5/18/23	102.96	2,000,000.0000	1,948,640.00	2,059,160.00	0.34	110,520.00
594918BP8	MICROSOFT CORP 1.550% 8/08/21	99.58	3,045,000.0000	3,041,385.15	3,032,241.45	0.49	(9,143.70)
61747WAL3	MORGAN STANLEY 5.500% 7/28/21	106.11	2,800,000.0000	3,200,848.00	2,971,136.00	0.48	(229,712.00)
64971M5E8	NEW YORK CITY NY 4.075% 11/01/20	102.16	1,400,000.0000	1,400,000.00	1,430,170.00	0.23	30,170.00
65478VAD9	NISSAN AUTO 1.320% 1/15/21	99.90	252,050.0200	250,031.65	251,800.49	0.04	1,768.84
65478GAD2	NISSAN AUTO 1.750% 10/15/21	99.87	2,063,703.3300	2,031,699.81	2,060,958.60	0.34	29,258.79
65479GAD1	NISSAN AUTO 3.060% 3/15/23	101.45	3,560,000.0000	3,559,884.66	3,611,477.60	0.59	51,592.94
68389XBK0	ORACLE CORP 1.900% 9/15/21	99.88	3,000,000.0000	2,892,240.00	2,996,460.00	0.49	104,220.00
69353RFL7	PNC BANK NA 3.500% 6/08/23	105.00	5,000,000.0000	4,993,318.05	5,249,800.00	0.86	256,481.95
69353RFB9	PNC BANK NA MTN 2.625% 2/17/22	101.39	1,000,000.0000	974,940.00	1,013,890.00	0.17	38,950.00
73358WAG9	PORT AUTH NY NJ 5.309% 12/01/19	100.54	2,440,000.0000	2,507,633.89	2,453,176.00	0.40	(54,457.89)
747525AD5	QUALCOMM INC 2.250% 5/20/20	100.04	2,000,000.0000	2,002,700.00	2,000,840.00	0.33	(1,860.00)
747525AD5	QUALCOMM INC 2.250% 5/20/20	100.04	5,000,000.0000	4,995,195.40	5,002,100.00	0.82	6,904.60
78013XZU5	ROYAL BANK OF MTN 2.550% 7/16/24	101.35	6,500,000.0000	6,581,445.00	6,588,010.00	1.07	6,565.00
83162CLJ0	S B A GTD DEV PART 6.340% 3/01/21	101.50	11,184.5600	11,184.56	11,352.22	0.00	167.66
78445JAA5	S L M A 3.8594% 4/25/23	100.59	13,344.8500	13,290.71	13,423.58	0.00	132.87
89114QCA4	TORONTO DOMINION MTN 2.650% 6/12/24	101.89	3,000,000.0000	3,000,570.00	3,056,550.00	0.50	55,980.00

U.S. Bank
Asset Detail - Consolidated
As of 09/30/2019

CUSIP	Asset Short Name	Price	Shares/Units	Cost Basis	Market Value	Percent of Total	Unrealized Gain/Loss
89114QC48	TORONTO MTN 3.500% 7/19/23	105.45	5,000,000.0000	5,094,200.00	5,272,600.00	0.86	178,400.00
89238BAB8	TOYOTA AUTO 2.100% 10/15/20	100.00	683,639.4400	683,569.57	683,618.93	0.11	49.36
89239AAB9	TOYOTA AUTO 2.830% 10/15/21	100.35	3,615,000.0000	3,614,671.76	3,627,652.50	0.59	12,980.74
912828WU0	U S TREASURY I P S 0.125% 7/15/24	99.88	11,236,992.0000	11,092,272.09	11,222,945.76	1.83	130,673.67
912828T34	U S TREASURY NT 1.125% 9/30/21	98.98	7,000,000.0000	6,757,914.08	6,928,390.00	1.13	170,475.92
912828H52	U S TREASURY NT 1.250% 1/31/20	99.78	13,500,000.0000	13,396,542.97	13,469,895.00	2.20	73,352.03
912828T67	U S TREASURY NT 1.250% 10/31/21	99.19	6,000,000.0000	5,813,691.98	5,951,280.00	0.97	137,588.02
912828UL2	U S TREASURY NT 1.375% 1/31/20	99.81	5,000,000.0000	4,988,671.88	4,990,650.00	0.81	1,978.12
912828N89	U S TREASURY NT 1.375% 1/31/21	99.48	6,000,000.0000	5,895,840.41	5,968,620.00	0.97	72,779.59
912828L99	U S TREASURY NT 1.375% 10/31/20	99.54	10,000,000.0000	9,850,311.40	9,953,900.00	1.62	103,588.60
912828XE5	U S TREASURY NT 1.500% 5/31/20	99.75	5,000,000.0000	4,966,423.00	4,987,700.00	0.81	21,277.00
912828F62	U S TREASURY NT 1.500% 10/31/19	99.95	2,500,000.0000	2,486,718.75	2,498,775.00	0.41	12,056.25
912828G61	U S TREASURY NT 1.500% 11/30/19	99.91	7,500,000.0000	7,449,634.50	7,493,100.00	1.22	43,465.50
912828R69	U S TREASURY NT 1.625% 5/31/23	100.20	5,000,000.0000	4,757,226.56	5,009,750.00	0.82	252,523.44
912828J76	U S TREASURY NT 1.750% 3/31/22	100.38	5,000,000.0000	4,976,383.94	5,019,150.00	0.82	42,766.06
912828XW5	U S TREASURY NT 1.750% 6/30/22	100.44	5,000,000.0000	4,973,454.25	5,021,900.00	0.82	48,445.75
912828L57	U S TREASURY NT 1.750% 9/30/22	100.50	13,000,000.0000	12,763,554.69	13,064,480.00	2.13	300,925.31
912828U65	U S TREASURY NT 1.750% 11/30/21	100.22	7,000,000.0000	6,900,492.20	7,015,610.00	1.14	115,117.80
912828V72	U S TREASURY NT 1.875% 1/31/22	100.56	3,000,000.0000	3,004,814.74	3,016,650.00	0.49	11,835.26
912828L24	U S TREASURY NT 1.875% 8/31/22	100.84	6,000,000.0000	5,987,832.60	6,050,400.00	0.99	62,567.40
9128283S7	U S TREASURY NT 2.000% 1/31/20	100.03	15,000,000.0000	14,955,468.75	15,004,050.00	2.45	48,581.25
912828XX3	U S TREASURY NT 2.000% 6/30/24	101.94	5,000,000.0000	5,028,710.94	5,097,050.00	0.83	68,339.06
912828M80	U S TREASURY NT 2.000% 11/30/22	101.26	8,000,000.0000	7,907,500.00	8,100,640.00	1.32	193,140.00
912828W48	U S TREASURY NT 2.125% 2/29/24	102.38	10,000,000.0000	9,911,718.75	10,237,500.00	1.67	325,781.25
912828U57	U S TREASURY NT 2.125% 11/30/23	102.20	15,000,000.0000	14,723,632.81	15,330,450.00	2.50	606,817.19
912828N30	U S TREASURY NT 2.125% 12/31/22	101.71	5,000,000.0000	4,926,562.50	5,085,350.00	0.83	158,787.50
912828V80	U S TREASURY NT 2.250% 1/31/24	102.84	7,500,000.0000	7,491,503.91	7,712,700.00	1.26	221,196.09
9128284D9	U S TREASURY NT 2.500% 3/31/23	103.15	10,000,000.0000	9,887,265.63	10,314,500.00	1.68	427,234.37
912828WJ5	U S TREASURY NT 2.500% 5/15/24	104.12	7,000,000.0000	7,193,046.88	7,288,190.00	1.19	95,143.12
913366EJ5	UNIV OF CALIFORNIA 5.035% 5/15/21	104.90	400,000.0000	400,000.00	419,600.00	0.07	19,600.00
90331HNL3	US BANK NA MTN 2.850% 1/23/23	102.29	5,000,000.0000	4,981,600.00	5,114,600.00	0.83	133,000.00
931142EK5	WALMART INC 3.400% 6/26/23	105.27	3,880,000.0000	3,878,991.40	4,084,282.00	0.67	205,290.60
94974BGM6	WELLS FARGO CO MTN 2.600% 7/22/20	100.47	5,000,000.0000	5,001,650.00	5,023,600.00	0.82	21,950.00
94974BGF1	WELLS FARGO MTN 2.150% 1/30/20	99.97	1,000,000.0000	996,600.00	999,700.00	0.16	3,100.00
94988J5G8	WELLS FARGO MTN 2.150% 12/06/19	99.99	500,000.0000	498,425.00	499,965.00	0.08	1,540.00
95000U2B8	WELLS FARGO MTN 2.625% 7/22/22	101.11	3,000,000.0000	2,954,520.00	3,033,300.00	0.49	78,780.00
96130AAK4	WESTPAC BKING C D 2.970% 10/18/19	100.05	1,500,000.0000	1,503,302.80	1,500,675.00	0.24	(2,627.80)
Fixed Income Total			575,567,864.4400	573,024,125.81	581,855,884.66	94.83	8,831,758.85
Grand Total			607,368,001.7000	604,661,545.83	613,565,030.62	100.00	8,903,484.79

U.S. Bank
Transaction History
07/01/2019 Thru 09/30/2019

Entry Date	CUSIP Id	Explanation	Units	Price	Net Cash Amt	Cost	Gain/Loss
ACQUISITIONS							
07/01/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	2,113,125.0000	1.000000	-2,113,125.00	2,113,125.00	0.00
07/02/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	12,397.2400	1.000000	-12,397.24	12,397.24	0.00
07/02/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	34,814.0700	1.000000	-34,814.07	34,814.07	0.00
07/05/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	89,625.0000	1.000000	-89,625.00	89,625.00	0.00
07/08/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	53,087.7200	1.000000	-53,087.72	53,087.72	0.00
07/12/2019	02665WCZ2	PURCHASED PAR VALUE OF AMERICAN HONDA MTN 2.400% 6/27/24 /J.P. MORGAN SECURITIES LLC/1,219,000 PAR VALUE AT 99.577 %	1,219,000.0000	0.995770	-1,213,843.63	1,213,843.63	0.00
07/12/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	1,130,000.0000	1.000000	-1,130,000.00	1,130,000.00	0.00
07/12/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	4,943.7500	1.000000	-4,943.75	4,943.75	0.00
07/12/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	298,478.6200	1.000000	-298,478.62	298,478.62	0.00
07/15/2019	912828XX3	PURCHASED PAR VALUE OF U S TREASURY NT 2.000% 6/30/24 /J.P. MORGAN SECURITIES LLC/5,000,000 PAR VALUE AT 100.5742188 %	5,000,000.0000	1.005742	-5,028,710.94	5,028,710.94	0.00
07/15/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	14,083.3600	1.000000	-14,083.36	14,083.36	0.00
07/16/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	217,968.1200	1.000000	-217,968.12	217,968.12	0.00
07/18/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	7,473.6200	1.000000	-7,473.62	7,473.62	0.00
07/18/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	368,080.0400	1.000000	-368,080.04	368,080.04	0.00
07/19/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	146,875.0000	1.000000	-146,875.00	146,875.00	0.00
07/22/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	133,436.4600	1.000000	-133,436.46	133,436.46	0.00
07/23/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	16,875.0000	1.000000	-16,875.00	16,875.00	0.00
07/23/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	93,750.0000	1.000000	-93,750.00	93,750.00	0.00
07/24/2019	477870AB5	PURCHASED PAR VALUE OF JOHN DEERE OWNER 2.280% 5/16/22 /RBC CAPITAL MARKETS, LLC/2,800,000 PAR VALUE AT 99.99962 %	2,800,000.0000	0.999996	-2,799,989.36	2,799,989.36	0.00
07/25/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	100,248.5000	1.000000	-100,248.50	100,248.50	0.00
07/25/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	144,986.2600	1.000000	-144,986.26	144,986.26	0.00
07/26/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	100,000.0000	1.000000	-100,000.00	100,000.00	0.00
07/29/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	13,702.5000	1.000000	-13,702.50	13,702.50	0.00
07/29/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	1,890,000.0000	1.000000	-1,890,000.00	1,890,000.00	0.00
07/29/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	113,875.0000	1.000000	-113,875.00	113,875.00	0.00
07/30/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	10,750.0000	1.000000	-10,750.00	10,750.00	0.00
07/31/2019	313384MD8	PURCHASED PAR VALUE OF F H L B DISC NTS 9/25/19 /WELLS FARGO SECURITIES, LLC/2,500,000 PAR VALUE AT 99.6702224 %	2,500,000.0000	0.996702	-2,491,755.56	2,491,755.56	0.00
07/31/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	76,203,125.0000	1.000000	-76,203,125.00	76,203,125.00	0.00
07/31/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	5,194,375.0000	1.000000	-5,194,375.00	5,194,375.00	0.00
08/02/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	13,196.2900	1.000000	-13,196.29	13,196.29	0.00

U.S. Bank
Transaction History
07/01/2019 Thru 09/30/2019

Entry Date	CUSIP Id	Explanation	Units	Price	Net Cash Amt	Cost	Gain/Loss
08/02/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	29,177.6400	1.000000	-29,177.64	29,177.64	0.00
08/05/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	61,458.3400	1.000000	-61,458.34	61,458.34	0.00
08/06/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	85,050.0000	1.000000	-85,050.00	85,050.00	0.00
08/07/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	32,500.0000	1.000000	-32,500.00	32,500.00	0.00
08/08/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	23,598.7500	1.000000	-23,598.75	23,598.75	0.00
08/09/2019	06051GFN4	PURCHASED PAR VALUE OF BANK OF AMERICA MTN 2.250% 4/21/20 /MORGAN STANLEY & CO. LLC/2,000,000 PAR VALUE AT 100.098 %	2,000,000.0000	1.000980	-2,001,960.00	2,001,960.00	0.00
08/09/2019	747525AD5	PURCHASED PAR VALUE OF QUALCOMM INC 2.250% 5/20/20 /BARCLAYS CAPITAL INC. FIXED IN/2,000,000 PAR VALUE AT 100.135 %	2,000,000.0000	1.001350	-2,002,700.00	2,002,700.00	0.00
08/12/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	1,083,000.0000	1.000000	-1,083,000.00	1,083,000.00	0.00
08/12/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	6,498.0000	1.000000	-6,498.00	6,498.00	0.00
08/14/2019	3133EKWV4	PURCHASED PAR VALUE OF F F C B DEB 1.850% 7/26/24 /J.P. MORGAN SECURITIES LLC/5,000,000 PAR VALUE AT 100.9656 %	5,000,000.0000	1.009656	-5,048,280.00	5,048,280.00	0.00
08/15/2019	369550BA5	PURCHASED PAR VALUE OF GENERAL DYNAMICS 2.875% 5/11/20 /PERSHING LLC/2,000,000 PAR VALUE AT 100.567 %	2,000,000.0000	1.005670	-2,011,340.00	2,011,340.00	0.00
08/15/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	22,241.2500	1.000000	-22,241.25	22,241.25	0.00
08/15/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	28,481.4000	1.000000	-28,481.40	28,481.40	0.00
08/15/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	3,462,512.3700	1.000000	-3,462,512.37	3,462,512.37	0.00
08/16/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	89,062.5000	1.000000	-89,062.50	89,062.50	0.00
08/19/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	3,290,000.0000	1.000000	-3,290,000.00	3,290,000.00	0.00
08/19/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	11,522,306.1200	1.000000	-11,522,306.12	11,522,306.12	0.00
08/20/2019	62479MYK3	PURCHASED PAR VALUE OF MUFG BANK LTD NY BRAN C P 11/19/19 /MUFG UNION BK NA/MMI/PIMS/IPA/1,860,000 PAR VALUE AT 99.46411129 %	1,860,000.0000	0.994641	-1,850,032.47	1,850,032.47	0.00
08/20/2019	62479MYK3	PURCHASED PAR VALUE OF MUFG BANK LTD NY BRAN C P 11/19/19 /MUFG UNION BK NA/MMI/PIMS/IPA/11,255,000 PAR VALUE AT 99.46411115 %	11,255,000.0000	0.994641	-11,194,685.71	11,194,685.71	0.00
08/20/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	1,974.5400	1.000000	-1,974.54	1,974.54	0.00
08/21/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	9,759.5800	1.000000	-9,759.58	9,759.58	0.00
08/23/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	45,000.0000	1.000000	-45,000.00	45,000.00	0.00
08/26/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	16,125.0000	1.000000	-16,125.00	16,125.00	0.00
08/26/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	139,881.5700	1.000000	-139,881.57	139,881.57	0.00
08/27/2019	43815NAB0	PURCHASED PAR VALUE OF HONDA AUTO 1.900% 4/15/22 /SG AMERICAS SECURITIES, LLC/3,530,000 PAR VALUE AT 99.993 %	3,530,000.0000	0.999930	-3,529,752.90	3,529,752.90	0.00
08/27/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	1,504,012.5000	1.000000	-1,504,012.50	1,504,012.50	0.00
08/27/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	2,005,350.0000	1.000000	-2,005,350.00	2,005,350.00	0.00
08/28/2019	912796VW6	PURCHASED PAR VALUE OF U S TREASURY BILL 9/24/19 /NOMURA SECURITIES INTERNATIONA/1,650,000 PAR VALUE AT 99.84681273 %	1,650,000.0000	0.998468	-1,647,472.41	1,647,472.41	0.00

U.S. Bank
Transaction History
07/01/2019 Thru 09/30/2019

Entry Date	CUSIP Id	Explanation	Units	Price	Net Cash Amt	Cost	Gain/Loss
08/28/2019	912796SL4	PURCHASED PAR VALUE OF U S TREASURY BILL 10/03/19 /NOMURA SECURITIES INTERNA/1,650,000 PAR VALUE AT 99.7992503 %	1,650,000.0000	0.997993	-1,646,687.63	1,646,687.63	0.00
08/28/2019	912828UL2	PURCHASED PAR VALUE OF U S TREASURY NT 1.375% 1/31/20 /GOLDMAN SACHS & CO. LLC/5,000,000 PAR VALUE AT 99.7734376 %	5,000,000.0000	0.997734	-4,988,671.88	4,988,671.88	0.00
09/03/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	199,797.0500	1.000000	-199,797.05	199,797.05	0.00
09/04/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	14,244.3100	1.000000	-14,244.31	14,244.31	0.00
09/04/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	29,015.3700	1.000000	-29,015.37	29,015.37	0.00
09/05/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	29,375.0000	1.000000	-29,375.00	29,375.00	0.00
09/05/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	147,856.2500	1.000000	-147,856.25	147,856.25	0.00
09/09/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	168,750.0000	1.000000	-168,750.00	168,750.00	0.00
09/11/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	2,120,000.0000	1.000000	-2,120,000.00	2,120,000.00	0.00
09/11/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	24,380.0000	1.000000	-24,380.00	24,380.00	0.00
09/12/2019	78013XZU5	PURCHASED PAR VALUE OF ROYAL BANK OF MTN 2.550% 7/16/24 /RBC CAPITAL MARKETS, LLC/6,500,000 PAR VALUE AT 101.253 %	6,500,000.0000	1.012530	-6,581,445.00	6,581,445.00	0.00
09/13/2019	3130A2UW4	PURCHASED PAR VALUE OF F H L B DEB 2.875% 9/13/24 /MORGAN STANLEY & CO. LLC/2,500,000 PAR VALUE AT 105.438 %	2,500,000.0000	1.054380	-2,635,950.00	2,635,950.00	0.00
09/13/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	3,500,000.0000	1.000000	-3,500,000.00	3,500,000.00	0.00
09/13/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	33,783.7500	1.000000	-33,783.75	33,783.75	0.00
09/16/2019	46647PAU0	PURCHASED PAR VALUE OF JPMORGAN CHASE CO 3.797% 7/23/24 /RBC CAPITAL MARKETS, LLC/2,500,000 PAR VALUE AT 105.287 %	2,500,000.0000	1.052870	-2,632,175.00	2,632,175.00	0.00
09/16/2019	912796RY7	PURCHASED PAR VALUE OF U S TREASURY BILL 1/30/20 /NOMURA SECURITIES INTERNA/4,000,000 PAR VALUE AT 99.292611 %	4,000,000.0000	0.992926	-3,971,704.44	3,971,704.44	0.00
09/16/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	61,307.6100	1.000000	-61,307.61	61,307.61	0.00
09/16/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	3,460,497.0400	1.000000	-3,460,497.04	3,460,497.04	0.00
09/18/2019	912796RY7	PURCHASED PAR VALUE OF U S TREASURY BILL 1/30/20 /CITIGROUP GLOBAL MARKETS INC./3,000,000 PAR VALUE AT 99.29035833 %	3,000,000.0000	0.992904	-2,978,710.75	2,978,710.75	0.00
09/18/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	881,289.2500	1.000000	-881,289.25	881,289.25	0.00
09/18/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	17,500.0000	1.000000	-17,500.00	17,500.00	0.00
09/18/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	335,432.6300	1.000000	-335,432.63	335,432.63	0.00
09/20/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	2,714.6400	1.000000	-2,714.64	2,714.64	0.00
09/23/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	9,759.5800	1.000000	-9,759.58	9,759.58	0.00
09/24/2019	912828TR1	PURCHASED PAR VALUE OF U S TREASURY NT 1.000% 9/30/19 /NOMURA SECURITIES INTERNA/1,650,000 PAR VALUE AT 99.98437515 %	1,650,000.0000	0.999844	-1,649,742.19	1,649,742.19	0.00
09/25/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	2,500,000.0000	1.000000	-2,500,000.00	2,500,000.00	0.00
09/25/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	4,617.5700	1.000000	-4,617.57	4,617.57	0.00
09/25/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	84,359.7400	1.000000	-84,359.74	84,359.74	0.00

U.S. Bank
Transaction History
07/01/2019 Thru 09/30/2019

Entry Date	CUSIP Id	Explanation	Units	Price	Net Cash Amt	Cost	Gain/Loss
09/26/2019	912828F39	PURCHASED PAR VALUE OF U S TREASURY NT 1.750% 9/30/19 /CITIGROUP GLOBAL MARKETS INC./1,350,000 PAR VALUE AT 99.99609407 %	1,350,000.0000	0.999961	-1,349,947.27	1,349,947.27	0.00
09/30/2019	912796VY2	PURCHASED PAR VALUE OF U S TREASURY BILL 10/08/19 /WELLS FARGO SECURITIES, LLC/1,250,000 PAR VALUE AT 99.9613936 %	1,250,000.0000	0.999614	-1,249,517.42	1,249,517.42	0.00
09/30/2019	912796VZ9	PURCHASED PAR VALUE OF U S TREASURY BILL 10/15/19 /NOMURA SECURITIES INTERNATIONAL/1,250,000 PAR VALUE AT 99.924792 %	1,250,000.0000	0.999248	-1,249,059.90	1,249,059.90	0.00
09/30/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	22,640,235.1800	1.000000	-22,640,235.18	22,640,235.18	0.00
09/30/2019	31846V567	PURCHASED UNITS OF FIRST AM GOVT OB FD CL Z	6,172,625.0000	1.000000	-6,172,625.00	6,172,625.00	0.00
TOTAL ACQUISITIONS			225,878,801.0800		-226,168,935.54	226,168,935.54	0.00

DISPOSITIONS

07/01/2019	912828WS5	MATURED PAR VALUE OF U S TREASURY NT 1.625% 6/30/19 2,000,000 PAR VALUE AT 100 %	-2,000,000.0000	1.000000	2,000,000.00	-1,996,861.44	3,138.56
07/08/2019	31398VJ98	PAID DOWN PAR VALUE OF F H L M C MLTCL MTG 4.251% 1/25/20	-54,896.1900	0.003221	54,896.19	-58,009.83	-3,113.64
07/08/2019	31398VJ98	PAID DOWN-RV PAR VALUE OF F H L M C MLTCL MTG 4.251% 1/25/20 RATE CHANGE 6/25/19	1,808.4700	0.000000	-1,808.47	1,911.04	102.57
07/12/2019	02665WAH4	SOLD PAR VALUE OF AMERICAN HONDA MTN 2.250% 8/15/19 /PERSHING LLC/1,500,000 PAR VALUE AT 99.984 %	-1,500,000.0000	0.999840	1,499,760.00	-1,514,655.00	-14,895.00
07/12/2019	25468PDL7	MATURED PAR VALUE OF WALT DISNEY MTN 0.875% 7/12/19 1,130,000 PAR VALUE AT 100 %	-1,130,000.0000	1.000000	1,130,000.00	-1,114,812.80	15,187.20
07/15/2019	3133TCE95	PAID DOWN PAR VALUE OF F H L M C MLTCL MTG 4.016% 8/15/32	-532.8500	0.000000	532.85	-533.41	-0.56
07/15/2019	31348SWZ3	PAID DOWN PAR VALUE OF F H L M C #786064 4.677% 1/01/28 JUNE FHLMC DUE 7/15/19	-24.6700	0.000000	24.67	-24.07	0.60
07/15/2019	31846V567	SOLD UNITS OF FIRST AM GOVT OB FD CL Z	-4,213,772.7800	1.000000	4,213,772.78	-4,213,772.78	0.00
07/15/2019	43814QAC2	PAID DOWN PAR VALUE OF HONDA AUTO 1.390% 4/15/20 CMO FINAL PAYDOWN	-6,808.6400	0.000000	6,808.64	-6,808.51	0.13
07/15/2019	47788BAD6	PAID DOWN PAR VALUE OF JOHN DEERE OWNER 1.820% 10/15/21	-31,420.2200	12.419054	31,420.22	-31,417.92	2.30
07/15/2019	47788CAB8	PAID DOWN PAR VALUE OF JOHN DEERE OWNER 2.420% 10/15/20	-124,097.1500	3.144387	124,097.15	-123,845.08	252.07
07/15/2019	65477UAD2	PAID DOWN PAR VALUE OF NISSAN AUTO 1.500% 9/15/21 CMO FINAL PAYDOWN	-217,968.1200	0.000000	217,968.12	-216,605.82	1,362.30
07/15/2019	65478GAD2	PAID DOWN PAR VALUE OF NISSAN AUTO 1.750% 10/15/21	-173,517.4600	2.248819	173,517.46	-170,826.58	2,690.88
07/15/2019	65478VAD9	PAID DOWN PAR VALUE OF NISSAN AUTO 1.320% 1/15/21	-80,576.8400	4.842699	80,576.84	-79,931.60	645.24
07/15/2019	89238BAB8	PAID DOWN PAR VALUE OF TOYOTA AUTO 2.100% 10/15/20	-333,070.3700	1.171552	333,070.37	-333,036.33	34.04
07/18/2019	43814PAC4	PAID DOWN PAR VALUE OF HONDA AUTO 1.790% 9/20/21	-188,638.4700	0.000000	188,638.47	-185,646.78	2,991.69
07/18/2019	43814RAC0	PAID DOWN PAR VALUE OF HONDA AUTO 1.210% 12/18/20	-128,232.7900	0.000000	128,232.79	-126,825.23	1,407.56
07/22/2019	36225CAZ9	PAID DOWN PAR VALUE OF G N M A I I #080023 4.125% 12/20/26 JUNE GNMA DUE 7/20/19	-1,074.9000	0.000000	1,074.90	-1,092.66	-17.76

U.S. Bank
Transaction History
07/01/2019 Thru 09/30/2019

Entry Date	CUSIP Id	Explanation	Units	Price	Net Cash Amt	Cost	Gain/Loss
07/22/2019	36225CC20	PAID DOWN PAR VALUE OF G N M A I I #080088 3.625% 6/20/27 JUNE 7/20/19	GNMA DUE	-1,306.6000	0.000000	1,306.60	-1,335.18 -28.58
07/22/2019	36225CN28	PAID DOWN PAR VALUE OF G N M A I I #080408 3.625% 5/20/30 JUNE 7/20/19	GNMA DUE	-1,152.2200	0.000000	1,152.22	-1,140.52 11.70
07/22/2019	36225CNM4	PAID DOWN PAR VALUE OF G N M A I I #080395 3.625% 4/20/30 JUNE 7/20/19	GNMA DUE	-158.0800	0.000000	158.08	-156.65 1.43
07/22/2019	36225DCB8	PAID DOWN PAR VALUE OF G N M A I I #080965 3.750% 7/20/34 JUNE 7/20/19	GNMA DUE	-1,098.2400	0.000000	1,098.24	-1,097.55 0.69
07/24/2019	31846V567	SOLD UNITS OF FIRST AM GOVT OB FD CL Z		-2,799,989.3600	1.000000	2,799,989.36	-2,799,989.36 0.00
07/25/2019	03215PFN4	PAID DOWN PAR VALUE OF AMRESKO 3.14513% 6/25/29		-4,442.3000	0.000000	4,442.30	-3,335.89 1,106.41
07/25/2019	31371NUC7	PAID DOWN PAR VALUE OF F N M A #257179 4.500% 4/01/28 JUNE 7/25/19	FNMA DUE	-150.7800	0.000000	150.78	-159.46 -8.68
07/25/2019	31376KT22	PAID DOWN PAR VALUE OF F N M A #357969 5.000% 9/01/35 JUNE 7/25/19	FNMA DUE	-1,239.7900	0.000000	1,239.79	-1,332.77 -92.98
07/25/2019	31381PDA3	PAID DOWN PAR VALUE OF F N M A #466397 3.400% 11/01/20 JUNE 7/25/19	FNMA DUE	-739.8600	0.000000	739.86	-723.85 16.01
07/25/2019	3138EG6F6	PAID DOWN PAR VALUE OF F N M A #AL0869 4.500% 6/01/29 JUNE 7/25/19	FNMA DUE	-201.7200	0.000000	201.72	-213.34 -11.62
07/25/2019	31394JY35	PAID DOWN PAR VALUE OF F H L M C MLTCL MTG 6.500% 9/25/43		-8,120.9900	0.000000	8,120.99	-9,197.02 -1,076.03
07/25/2019	31397QRE0	PAID DOWN PAR VALUE OF F N M A GTD REMIC 1.113% 2/25/41		-2,626.6000	0.000000	2,626.60	-2,625.78 0.82
07/25/2019	31398VJ98	PAID DOWN PAR VALUE OF F H L M C MLTCL MTG 4.251% 1/25/20		-85,346.9400	0.000000	85,346.94	-90,187.71 -4,840.77
07/25/2019	31403DJZ3	PAID DOWN PAR VALUE OF F N M A #745580 5.000% 6/01/36 JUNE 7/25/19	FNMA DUE	-1,195.7000	0.000000	1,195.70	-1,285.38 -89.68
07/25/2019	31403GXF4	PAID DOWN PAR VALUE OF F N M A #748678 5.000% 10/01/33 JUNE 7/25/19	FNMA DUE	-8.8600	0.000000	8.86	-9.52 -0.66
07/25/2019	31406PQY8	PAID DOWN PAR VALUE OF F N M A #815971 5.000% 3/01/35 JUNE 7/25/19	FNMA DUE	-2,095.9000	0.000000	2,095.90	-2,253.09 -157.19
07/25/2019	31406XWT5	PAID DOWN PAR VALUE OF F N M A #823358 4.722% 2/01/35 JUNE 7/25/19	FNMA DUE	-437.8000	0.000000	437.80	-434.38 3.42
07/25/2019	31407BXH7	PAID DOWN PAR VALUE OF F N M A #826080 5.000% 7/01/35 JUNE 7/25/19	FNMA DUE	-86.3000	0.000000	86.30	-92.77 -6.47
07/25/2019	31410F4V4	PAID DOWN PAR VALUE OF F N M A #888336 5.000% 7/01/36 JUNE 7/25/19	FNMA DUE	-3,239.4100	0.000000	3,239.41	-3,482.37 -242.96
07/25/2019	31417YAY3	PAID DOWN PAR VALUE OF F N M A #MA0022 4.500% 4/01/29 JUNE 7/25/19	FNMA DUE	-385.7000	0.000000	385.70	-407.92 -22.22
07/25/2019	78445JAA5	PAID DOWN PAR VALUE OF S L M A 4.12559% 4/25/23		-669.6900	0.000000	669.69	-666.97 2.72
07/29/2019	69353REX2	MATURED PAR VALUE OF PNC BANK MTN 1.450% 7/29/19 1,890,000 PAR VALUE AT 100 %		-1,890,000.0000	1.000000	1,890,000.00	-1,872,668.70 17,331.30

U.S. Bank
Transaction History
07/01/2019 Thru 09/30/2019

Entry Date	CUSIP Id	Explanation	Units	Price	Net Cash Amt	Cost	Gain/Loss
07/31/2019	313384JV2	MATURED PAR VALUE OF F H L B DISC NTS 100 %	7/31/19 5,500,000 PAR VALUE AT	-5,500,000.0000	1.000000	5,461,946.11	-5,461,946.11 0.00
07/31/2019	31846V567	SOLD UNITS OF FIRST AM GOVT OB FD CL Z		-74,491,755.5600	1.000000	74,491,755.56	-74,491,755.56 0.00
07/31/2019	9128282K5	MATURED PAR VALUE OF U S TREASURY NT VALUE AT 100 %	1.375% 7/31/19 35,000,000 PAR	-35,000,000.0000	1.000000	35,000,000.00	-34,810,156.26 189,843.74
07/31/2019	912828TH3	MATURED PAR VALUE OF U S TREASURY NT VALUE AT 100 %	0.875% 7/31/19 15,000,000 PAR	-15,000,000.0000	1.000000	15,000,000.00	-14,874,023.44 125,976.56
07/31/2019	912828WW6	MATURED PAR VALUE OF U S TREASURY NT VALUE AT 100 %	1.625% 7/31/19 20,000,000 PAR	-20,000,000.0000	1.000000	20,000,000.00	-19,923,437.51 76,562.49
07/31/2019	912828WW6	MATURED PAR VALUE OF U S TREASURY NT VALUE AT 100 %	1.625% 7/31/19 5,000,000 PAR	-5,000,000.0000	1.000000	5,000,000.00	-5,012,388.70 -12,388.70
08/09/2019	31846V567	SOLD UNITS OF FIRST AM GOVT OB FD CL Z		-4,028,035.0000	1.000000	4,028,035.00	-4,028,035.00 0.00
08/12/2019	69371RN36	MATURED PAR VALUE OF PACCAR FINANCIAL MTN VALUE AT 100 %	1.200% 8/12/19 1,083,000 PAR	-1,083,000.0000	1.000000	1,083,000.00	-1,069,484.16 13,515.84
08/14/2019	31846V567	SOLD UNITS OF FIRST AM GOVT OB FD CL Z		-5,052,905.0000	1.000000	5,052,905.00	-5,052,905.00 0.00
08/15/2019	02665WAH4	MATURED PAR VALUE OF AMERICAN HONDA MTN VALUE AT 100 %	2.250% 8/15/19 1,977,000 PAR	-1,977,000.0000	1.000000	1,977,000.00	-1,972,709.91 4,290.09
08/15/2019	02665WAH4	MATURED PAR VALUE OF AMERICAN HONDA MTN VALUE AT 100 %	2.250% 8/15/19 2,500,000 PAR	-2,500,000.0000	1.000000	2,500,000.00	-2,531,985.00 -31,985.00
08/15/2019	3133TCE95	PAID DOWN PAR VALUE OF F H L M C MLTCL MTG	4.016% 8/15/32	-327.6500	0.000000	327.65	-327.99 -0.34
08/15/2019	31348SWZ3	PAID DOWN PAR VALUE OF F H L M C #786064 DUE 8/15/19	4.677% 1/01/28 JULY FHLMC	-17.5100	0.000000	17.51	-17.08 0.43
08/15/2019	31846V567	SOLD UNITS OF FIRST AM GOVT OB FD CL Z		-49,353.8900	1.000000	49,353.89	-49,353.89 0.00
08/15/2019	47788BAD6	PAID DOWN PAR VALUE OF JOHN DEERE OWNER	1.820% 10/15/21	-41,039.5800	10.101764	41,039.58	-41,036.58 3.00
08/15/2019	47788CAB8	PAID DOWN PAR VALUE OF JOHN DEERE OWNER	2.420% 10/15/20	-158,985.8800	2.607604	158,985.88	-158,662.94 322.94
08/15/2019	47788NAD0	PAID DOWN PAR VALUE OF JOHN DEERE OWNER	1.490% 5/15/23	-42,667.9300	9.716248	42,667.93	-41,961.24 706.69
08/15/2019	65478GAD2	PAID DOWN PAR VALUE OF NISSAN AUTO	1.750% 10/15/21	-202,815.7200	2.044083	202,815.72	-199,670.49 3,145.23
08/15/2019	65478VAD9	PAID DOWN PAR VALUE OF NISSAN AUTO	1.320% 1/15/21	-87,902.0400	4.716297	87,902.04	-87,198.14 703.90
08/15/2019	89238BAB8	PAID DOWN PAR VALUE OF TOYOTA AUTO	2.100% 10/15/20	-369,146.5800	1.123056	369,146.58	-369,108.85 37.73
08/19/2019	43814PAC4	PAID DOWN PAR VALUE OF HONDA AUTO	1.790% 9/20/21	-196,780.7500	0.000000	196,780.75	-193,659.93 3,120.82
08/19/2019	43814RAC0	PAID DOWN PAR VALUE OF HONDA AUTO	1.210% 12/18/20	-131,592.8900	0.000000	131,592.89	-130,148.45 1,444.44
08/19/2019	62479MVK6	MATURED PAR VALUE OF MUFG BANK LTD NY BRAN C P VALUE AT 100 %	8/19/19 11,125,000 PAR	-11,125,000.0000	1.000000	11,081,427.08	-11,081,427.08 0.00
08/19/2019	62479MVK6	MATURED PAR VALUE OF MUFG BANK LTD NY BRAN C P VALUE AT 100 %	8/19/19 3,290,000 PAR	-3,290,000.0000	1.000000	3,277,114.17	-3,277,114.17 0.00
08/20/2019	31846V567	SOLD UNITS OF FIRST AM GOVT OB FD CL Z		-1,850,032.4700	1.000000	1,850,032.47	-1,850,032.47 0.00
08/20/2019	31846V567	SOLD UNITS OF FIRST AM GOVT OB FD CL Z		-11,194,685.7100	1.000000	11,194,685.71	-11,194,685.71 0.00

U.S. Bank
Transaction History
07/01/2019 Thru 09/30/2019

Entry Date	CUSIP Id	Explanation	Units	Price	Net Cash Amt	Cost	Gain/Loss
08/20/2019	36225CAZ9	PAID DOWN PAR VALUE OF G N M A I I #080023 4.125% 12/20/26 JULY 8/20/19	GNMA DUE	-159.4000	0.000000	159.40	-162.03 -2.63
08/20/2019	36225CC20	PAID DOWN PAR VALUE OF G N M A I I #080088 3.875% 6/20/27 JULY 8/20/19	GNMA DUE	-175.0500	0.000000	175.05	-178.88 -3.83
08/20/2019	36225CN28	PAID DOWN PAR VALUE OF G N M A I I #080408 3.875% 5/20/30 JULY 8/20/19	GNMA DUE	-935.2900	0.000000	935.29	-925.79 9.50
08/20/2019	36225CNM4	PAID DOWN PAR VALUE OF G N M A I I #080395 3.875% 4/20/30 JULY 8/20/19	GNMA DUE	-41.7300	0.000000	41.73	-41.35 0.38
08/20/2019	36225DCB8	PAID DOWN PAR VALUE OF G N M A I I #080965 3.750% 7/20/34 JULY 8/20/19	GNMA DUE	-225.8200	0.000000	225.82	-225.68 0.14
08/26/2019	03215PFN4	PAID DOWN PAR VALUE OF AMRESKO 6.88883% 6/25/29		-5,170.7400	0.000000	5,170.74	-3,882.90 1,287.84
08/26/2019	31371NUC7	PAID DOWN PAR VALUE OF F N M A #257179 4.500% 4/01/28 JULY 8/25/19	FNMA DUE	-133.6400	0.000000	133.64	-141.34 -7.70
08/26/2019	31376KT22	PAID DOWN PAR VALUE OF F N M A #357969 5.000% 9/01/35 JULY 8/25/19	FNMA DUE	-2,305.8700	0.000000	2,305.87	-2,478.81 -172.94
08/26/2019	31381PDA3	PAID DOWN PAR VALUE OF F N M A #466397 3.400% 11/01/20 JULY 8/25/19	FNMA DUE	-697.4800	0.000000	697.48	-682.39 15.09
08/26/2019	3138EG6F6	PAID DOWN PAR VALUE OF F N M A #AL0869 4.500% 6/01/29 JULY 8/25/19	FNMA DUE	-237.8800	0.000000	237.88	-251.58 -13.70
08/26/2019	31394JY35	PAID DOWN PAR VALUE OF F H L M C MLTCL MTG 6.500% 9/25/43		-2,847.9200	0.000000	2,847.92	-3,225.27 -377.35
08/26/2019	31397QRE0	PAID DOWN PAR VALUE OF F N M A GTD REMIC 1.113% 2/25/41		-4,128.0900	0.000000	4,128.09	-4,126.80 1.29
08/26/2019	31398VJ98	PAID DOWN PAR VALUE OF F H L M C MLTCL MTG 4.251% 1/25/20		-34,844.9200	0.000000	34,844.92	-36,821.28 -1,976.36
08/26/2019	31403DJZ3	PAID DOWN PAR VALUE OF F N M A #745580 5.000% 6/01/36 JULY 8/25/19	FNMA DUE	-1,200.6000	0.000000	1,200.60	-1,290.64 -90.04
08/26/2019	31403GXF4	PAID DOWN PAR VALUE OF F N M A #748678 5.000% 10/01/33 JULY 8/25/19	FNMA DUE	-8.9000	0.000000	8.90	-9.57 -0.67
08/26/2019	31406PQY8	PAID DOWN PAR VALUE OF F N M A #815971 5.000% 3/01/35 JULY 8/25/19	FNMA DUE	-3,829.3500	0.000000	3,829.35	-4,116.55 -287.20
08/26/2019	31406XWT5	PAID DOWN PAR VALUE OF F N M A #823358 4.722% 2/01/35 JULY 8/25/19	FNMA DUE	-443.0000	0.000000	443.00	-439.54 3.46
08/26/2019	31407BXH7	PAID DOWN PAR VALUE OF F N M A #826080 5.000% 7/01/35 JULY 8/25/19	FNMA DUE	-589.9700	0.000000	589.97	-634.22 -44.25
08/26/2019	31410F4V4	PAID DOWN PAR VALUE OF F N M A #888336 5.000% 7/01/36 JULY 8/25/19	FNMA DUE	-2,768.1900	0.000000	2,768.19	-2,975.80 -207.61
08/26/2019	31417YAY3	PAID DOWN PAR VALUE OF F N M A #MA0022 4.500% 4/01/29 JULY 8/25/19	FNMA DUE	-313.7600	0.000000	313.76	-331.83 -18.07
08/27/2019	31846V567	SOLD UNITS OF FIRST AM GOVT OB FD CL Z		-3,529,752.9000	1.000000	3,529,752.90	-3,529,752.90 0.00

U.S. Bank
Transaction History
07/01/2019 Thru 09/30/2019

Entry Date	CUSIP Id	Explanation	Units	Price	Net Cash Amt	Cost	Gain/Loss
08/27/2019	46625HKA7	PURCHASE OFFER PAR VALUE OF JPMORGAN CHASE CO 2.250% 1/23/20 /TENDER/PURCHASE OFFER/TENDER OFFER PAID AT \$1000.55 PER \$1000	-1,500,000.0000	1.000550	1,500,825.00	-1,490,940.00	9,885.00
08/27/2019	46625HKA7	PURCHASE OFFER PAR VALUE OF JPMORGAN CHASE CO 2.250% 1/23/20 /TENDER/PURCHASE OFFER/TENDER OFFER PAID AT \$1000.55 PER \$1000	-2,000,000.0000	1.000550	2,001,100.00	-1,994,880.00	6,220.00
08/28/2019	31846V567	SOLD UNITS OF FIRST AM GOV'T OB FD CL Z	-8,288,062.9000	1.000000	8,288,062.90	-8,288,062.90	0.00
09/03/2019	83162CLJ0	PAID DOWN PAR VALUE OF S B A GTD DEV PART 6.340% 3/01/21	-3,501.5000	0.000000	3,501.50	-3,501.50	0.00
09/11/2019	06406HCW7	MATURED PAR VALUE OF BANK OF NY MTN 2.300% 9/11/19 2,120,000 PAR VALUE AT 100 %	-2,120,000.0000	1.000000	2,120,000.00	-2,142,175.20	-22,175.20
09/12/2019	31846V567	SOLD UNITS OF FIRST AM GOV'T OB FD CL Z	-6,607,228.3300	1.000000	6,607,228.33	-6,607,228.33	0.00
09/13/2019	21687BWD9	MATURED PAR VALUE OF COOPERATIEVE CENTRAL C P 9/13/19 2,000,000 PAR VALUE AT 100 %	-2,000,000.0000	1.000000	1,957,864.44	-1,957,864.44	0.00
09/13/2019	31846V567	SOLD UNITS OF FIRST AM GOV'T OB FD CL Z	-2,608,950.0000	1.000000	2,608,950.00	-2,608,950.00	0.00
09/13/2019	96130ABJ6	MATURED PAR VALUE OF WESTPAC BKING C D 2.970% 9/13/19 1,500,000 PAR VALUE AT 100 %	-1,500,000.0000	1.000000	1,500,000.00	-1,500,000.00	0.00
09/16/2019	24422ESS9	MATURED PAR VALUE OF JOHN DEERE CAP MTN 2.300% 9/16/19 5,000,000 PAR VALUE AT 100 %	-5,000,000.0000	1.000000	5,000,000.00	-5,046,984.00	-46,984.00
09/16/2019	3133TCE95	PAID DOWN PAR VALUE OF F H L M C MLTCL MTG 4.016% 8/15/32	-426.1500	0.000000	426.15	-426.60	-0.45
09/16/2019	31348SWZ3	PAID DOWN PAR VALUE OF F H L M C #786064 4.677% 1/01/28 AUGUST FHLMC DUE 9/15/19	-10.2600	0.000000	10.26	-10.01	0.25
09/16/2019	31846V567	SOLD UNITS OF FIRST AM GOV'T OB FD CL Z	-3,971,704.4400	1.000000	3,971,704.44	-3,971,704.44	0.00
09/16/2019	47788BAD6	PAID DOWN PAR VALUE OF JOHN DEERE OWNER 1.820% 10/15/21	-33,250.3900	0.193666	33,250.39	-33,247.96	2.43
09/16/2019	47788CAB8	PAID DOWN PAR VALUE OF JOHN DEERE OWNER 2.420% 10/15/20	-132,838.5800	0.048476	132,838.58	-132,568.75	269.83
09/16/2019	47788NAD0	PAID DOWN PAR VALUE OF JOHN DEERE OWNER 1.490% 5/15/23	-104,619.1400	0.061551	104,619.14	-102,886.39	1,732.75
09/16/2019	65478GAD2	PAID DOWN PAR VALUE OF NISSAN AUTO 1.750% 10/15/21	-184,963.4900	0.034815	184,963.49	-182,095.11	2,868.38
09/16/2019	65478VAD9	PAID DOWN PAR VALUE OF NISSAN AUTO 1.320% 1/15/21	-78,512.8800	0.082018	78,512.88	-77,884.16	628.72
09/16/2019	89238BAB8	PAID DOWN PAR VALUE OF TOYOTA AUTO 2.100% 10/15/20	-338,320.6100	0.019034	338,320.61	-338,286.03	34.58
09/18/2019	313384LW7	MATURED PAR VALUE OF F H L B DISC NTS 9/18/19 2,850,000 PAR VALUE AT 100 %	-2,850,000.0000	1.000000	2,835,718.33	-2,835,718.33	0.00
09/18/2019	43814PAC4	PAID DOWN PAR VALUE OF HONDA AUTO 1.790% 9/20/21	-191,465.2700	0.000000	191,465.27	-188,428.75	3,036.52
09/18/2019	43814RAC0	PAID DOWN PAR VALUE OF HONDA AUTO 1.210% 12/18/20	-125,470.4900	0.000000	125,470.49	-124,093.26	1,377.23
09/18/2019	69353RDZ8	FULL CALL PAR VALUE OF PNC BANK NA MTN 2.400% 10/18/19 /CALLS/	-1,000,000.0000	1.000000	1,000,000.00	-999,000.00	1,000.00
09/20/2019	36225CAZ9	PAID DOWN PAR VALUE OF G N M A I I #080023 4.125% 12/20/26 AUGUST DUE 9/20/19	-168.0000	0.000000	168.00	-170.78	-2.78
09/20/2019	36225CC20	PAID DOWN PAR VALUE OF G N M A I I #080088 3.875% 6/20/27 AUGUST DUE 9/20/19	-172.1100	0.000000	172.11	-175.88	-3.77
09/20/2019	36225CN28	PAID DOWN PAR VALUE OF G N M A I I #080408 3.875% 5/20/30 AUGUST DUE 9/20/19	-1,313.3300	0.000000	1,313.33	-1,299.99	13.34

U.S. Bank
Transaction History
07/01/2019 Thru 09/30/2019

Entry Date	CUSIP Id	Explanation	Units	Price	Net Cash Amt	Cost	Gain/Loss
09/20/2019	36225CNM4	PAID DOWN PAR VALUE OF G N M A I I #080395 3.875% 4/20/30 AUGUST DUE 9/20/19	GNMA	-107.5000	0.000000	107.50	-106.53 0.97
09/20/2019	36225DCB8	PAID DOWN PAR VALUE OF G N M A I I #080965 3.750% 7/20/34 AUGUST DUE 9/20/19	GNMA	-521.4100	0.000000	521.41	-521.08 0.33
09/24/2019	31846V567	SOLD UNITS OF FIRST AM GOV'T OB FD CL Z		-7,721.7000	1.000000	7,721.70	-7,721.70 0.00
09/24/2019	912796VW6	MATURED PAR VALUE OF U S TREASURY BILL 9/24/19 1,650,000 PAR VALUE AT 100 %		-1,650,000.0000	1.000000	1,647,472.41	-1,647,472.41 0.00
09/25/2019	03215PFN4	PAID DOWN PAR VALUE OF AMRESKO 3.08529% 6/25/29		-1,002.4000	0.000000	1,002.40	-752.74 249.66
09/25/2019	313384MD8	MATURED PAR VALUE OF F H L B DISC NTS 9/25/19 2,500,000 PAR VALUE AT 100 %		-2,500,000.0000	1.000000	2,491,755.56	-2,491,755.56 0.00
09/25/2019	31371NUC7	PAID DOWN PAR VALUE OF F N M A #257179 4.500% 4/01/28 AUGUST DUE 9/25/19	FNMA	-152.2000	0.000000	152.20	-160.97 -8.77
09/25/2019	31376KT22	PAID DOWN PAR VALUE OF F N M A #357969 5.000% 9/01/35 AUGUST DUE 9/25/19	FNMA	-1,514.2800	0.000000	1,514.28	-1,627.85 -113.57
09/25/2019	31381PDA3	PAID DOWN PAR VALUE OF F N M A #466397 3.400% 11/01/20 AUGUST DUE 9/25/19	FNMA	-700.3700	0.000000	700.37	-685.21 15.16
09/25/2019	3138EG6F6	PAID DOWN PAR VALUE OF F N M A #AL0869 4.500% 6/01/29 AUGUST DUE 9/25/19	FNMA	-166.2300	0.000000	166.23	-175.80 -9.57
09/25/2019	31394JY35	PAID DOWN PAR VALUE OF F H L M C MLTCL MTG 6.500% 9/25/43		-11,750.1900	0.000000	11,750.19	-13,307.09 -1,556.90
09/25/2019	31397QRE0	PAID DOWN PAR VALUE OF F N M A GTD REMIC 2.825% 2/25/41		-4,168.6800	1,910.816505	4,168.68	-4,167.38 1.30
09/25/2019	31398VJ98	PAID DOWN PAR VALUE OF F H L M C MLTCL MTG 4.251% 1/25/20		-49,947.5300	0.000000	49,947.53	-52,780.49 -2,832.96
09/25/2019	31403DJZ3	PAID DOWN PAR VALUE OF F N M A #745580 5.000% 6/01/36 AUGUST DUE 9/25/19	FNMA	-1,592.2000	0.000000	1,592.20	-1,711.62 -119.42
09/25/2019	31403GXF4	PAID DOWN PAR VALUE OF F N M A #748678 5.000% 10/01/33 AUGUST DUE 9/25/19	FNMA	-8.9400	0.000000	8.94	-9.61 -0.67
09/25/2019	31406PQY8	PAID DOWN PAR VALUE OF F N M A #815971 5.000% 3/01/35 AUGUST DUE 9/25/19	FNMA	-2,093.3300	0.000000	2,093.33	-2,250.33 -157.00
09/25/2019	31406XWT5	PAID DOWN PAR VALUE OF F N M A #823358 4.722% 2/01/35 AUGUST DUE 9/25/19	FNMA	-438.9600	0.000000	438.96	-435.53 3.43
09/25/2019	31407BXH7	PAID DOWN PAR VALUE OF F N M A #826080 5.000% 7/01/35 AUGUST DUE 9/25/19	FNMA	-300.8600	0.000000	300.86	-323.42 -22.56
09/25/2019	31410F4V4	PAID DOWN PAR VALUE OF F N M A #888336 5.000% 7/01/36 AUGUST DUE 9/25/19	FNMA	-3,923.7200	0.000000	3,923.72	-4,218.00 -294.28
09/25/2019	31417YAY3	PAID DOWN PAR VALUE OF F N M A #MA0022 4.500% 4/01/29 AUGUST DUE 9/25/19	FNMA	-248.4500	0.000000	248.45	-262.76 -14.31
09/26/2019	31846V567	SOLD UNITS OF FIRST AM GOV'T OB FD CL Z		-1,361,501.5700	1.000000	1,361,501.57	-1,361,501.57 0.00
09/30/2019	31846V567	SOLD UNITS OF FIRST AM GOV'T OB FD CL Z		-24,982,984.4400	1.000000	24,982,984.44	-24,982,984.44 0.00
09/30/2019	31846V567	SOLD UNITS OF FIRST AM GOV'T OB FD CL Z		-15,000,000.0000	1.000000	15,000,000.00	-15,000,000.00 0.00

U.S. Bank
Transaction History
07/01/2019 Thru 09/30/2019

Entry Date	CUSIP Id	Explanation		Units	Price	Net Cash Amt	Cost	Gain/Loss	
09/30/2019	89114MM20	MATURED PAR VALUE OF TORONTO DOMINION C D 2.470% 9/30/19 2,000,000 PAR VALUE AT 100 %		-2,000,000.0000	1.000000	2,000,000.00	-2,000,066.62	-66.62	
09/30/2019	9128282X7	MATURED PAR VALUE OF U S TREASURY NT 1.375% 9/30/19 10,000,000 PAR VALUE AT 100 %		-10,000,000.0000	1.000000	10,000,000.00	-9,962,500.00	37,500.00	
09/30/2019	912828F39	MATURED PAR VALUE OF U S TREASURY NT 1.750% 9/30/19 1,350,000 PAR VALUE AT 100 %		-1,350,000.0000	1.000000	1,350,000.00	-1,349,947.27	52.73	
09/30/2019	912828F39	MATURED PAR VALUE OF U S TREASURY NT 1.750% 9/30/19 5,800,000 PAR VALUE AT 100 %		-5,800,000.0000	1.000000	5,800,000.00	-5,873,186.87	-73,186.87	
09/30/2019	912828TR1	MATURED PAR VALUE OF U S TREASURY NT 1.000% 9/30/19 1,650,000 PAR VALUE AT 100 %		-1,650,000.0000	1.000000	1,650,000.00	-1,649,742.19	257.81	
09/30/2019	912828TR1	MATURED PAR VALUE OF U S TREASURY NT 1.000% 9/30/19 10,000,000 PAR VALUE AT 100 %		-10,000,000.0000	1.000000	10,000,000.00	-9,937,500.00	62,500.00	
TOTAL DISPOSITIONS				-333,973,193.3100		333,813,176.41	-333,437,975.64	375,200.77	
OTHER TRANSACTIONS									
07/01/2019	31846V567	INTEREST EARNED ON FIRST AM GOVT OB FD CL Z UNIT ON 0.0000 SHARES DUE 6/30/2019 INTEREST FROM 6/1/19 TO 6/30/19		0.0000	0.000000	12,397.24	0.00	0.00	
07/01/2019	31846V567	INTEREST EARNED ON FIRST AM GOVT OB FD CL Z UNIT ON 0.0000 SHARES DUE 6/30/2019 INTEREST FROM 6/1/19 TO 6/30/19		0.0000	0.000000	34,814.07	0.00	0.00	
07/01/2019	912828N30	INTEREST EARNED ON U S TREASURY NT 2.125% 12/31/22 \$1 PV ON 5000000.0000 SHARES DUE 6/30/2019		0.0000	0.000000	53,125.00	0.00	0.00	
07/01/2019	912828WS5	INTEREST EARNED ON U S TREASURY NT 1.625% 6/30/19 \$1 PV ON 2000000.0000 SHARES DUE 6/30/2019		0.0000	0.000000	16,250.00	0.00	0.00	
07/01/2019	912828XW5	INTEREST EARNED ON U S TREASURY NT 1.750% 6/30/22 \$1 PV ON 5000000.0000 SHARES DUE 6/30/2019		0.0000	0.000000	43,750.00	0.00	0.00	
07/05/2019	3135G0S38	INTEREST EARNED ON F N M A 2.000% 1/05/22 \$1 PV ON 3000000.0000 SHARES DUE 7/5/2019		0.0000	0.000000	30,000.00	0.00	0.00	
07/05/2019	404280BF5	INTEREST EARNED ON HSBC HOLDINGS PLC 2.650% 1/05/22 \$1 PV ON 4500000.0000 SHARES DUE 7/5/2019		0.0000	0.000000	59,625.00	0.00	0.00	
07/08/2019	31398VJ98	INTEREST EARNED ON F H L M C MLTCL MTG 4.251% 1/25/20 \$1 PV ON 3131.8900 SHARES DUE 6/25/2019 \$0.00354/PV ON 884,090.32 PV DUE 6/25/19		0.0000	0.000000	3,131.89	0.00	0.00	
07/08/2019	31398VJ98	INTEREST EARNED ON F H L M C MLTCL MTG 4.251% 1/25/20 \$1 PV ON 3131.8900 SHARES DUE 6/25/2019 RATE CHANGE 6/25/19		0.0000	0.000000	-3,131.89	0.00	0.00	
07/11/2019	912828WU0	BOOK VALUE OF U S TREASURY I P S 0.125% 7/15/24 ADJUSTED BY 12688.00 UNITS INCREASE TO ADJUST FOR CHANGE IN CPI		0.0000	0.000000	0.00	0.00	0.00	
07/11/2019	912828WU0	FED BASIS OF U S TREASURY I P S 0.125% 7/15/24 ADJUSTED BY 12688.00 UNITS INCREASE TO ADJUST FOR CHANGE IN CPI		0.0000	0.000000	0.00	12,688.00	0.00	
07/11/2019	912828WU0	PAR VALUE OF U S TREASURY I P S 0.125% 7/15/24 ADJUSTED BY 12688.0000 UNITS INCREASE TO ADJUST FOR CHANGE IN CPI		12,688.0000	0.000000	0.00	0.00	0.00	

U.S. Bank
Transaction History
07/01/2019 Thru 09/30/2019

Entry Date	CUSIP Id	Explanation	Units	Price	Net Cash Amt	Cost	Gain/Loss
07/11/2019	912828WU0	STATE COST OF U S TREASURY I P S 0.125% 7/15/24 ADJUSTED BY 12688.00 UNITS INCREASE TO ADJUST FOR CHANGE IN CPI	0.0000	0.000000	0.00	0.00	0.00
07/12/2019	02665WAH4	RECEIVED ACCRUED INTEREST ON SALE OF AMERICAN HONDA MTN 2.250% 8/15/19	0.0000	0.000000	13,781.25	0.00	0.00
07/12/2019	02665WCZ2	PAID ACCRUED INTEREST ON PURCHASE OF AMERICAN HONDA MTN 2.400% 6/27/24	0.0000	0.000000	-1,219.00	0.00	0.00
07/12/2019	25468PDL7	INTEREST EARNED ON WALT DISNEY MTN 0.875% 7/12/19 \$1 PV ON 1130000.0000 SHARES DUE 7/12/2019 INTEREST ON 7/12/19 MATURITY	0.0000	0.000000	4,943.75	0.00	0.00
07/15/2019	02587AAJ3	INTEREST EARNED ON AMERICAN EXPRESS 1.930% 9/15/22 \$1 PV ON 10084.2400 SHARES DUE 7/15/2019 \$0.00161/PV ON 6,270,000.00 PV DUE 7/15/19	0.0000	0.000000	10,084.24	0.00	0.00
07/15/2019	02665WCJ8	INTEREST EARNED ON AMERICAN HONDA MTN 3.450% 7/14/23 \$1 PV ON 845000.0000 SHARES DUE 7/14/2019	0.0000	0.000000	14,576.25	0.00	0.00
07/15/2019	3133TCE95	INTEREST EARNED ON F H L M C MLTCL MTG 4.016% 8/15/32 \$1 PV ON 30.8400 SHARES DUE 7/15/2019 \$0.00335/PV ON 9,215.15 PV DUE 7/15/19	0.0000	0.000000	30.84	0.00	0.00
07/15/2019	31348SWZ3	INTEREST EARNED ON F H L M C #786064 4.677% 1/01/28 \$1 PV ON 7.4000 SHARES DUE 7/15/2019 MAY FHLMC DUE 7/15/19	0.0000	0.000000	7.40	0.00	0.00
07/15/2019	43814QAC2	INTEREST EARNED ON HONDA AUTO 1.390% 4/15/20 \$1 PV ON 7.8900 SHARES DUE 7/15/2019 \$0.00116/PV ON 6,808.64 PV DUE 7/15/19	0.0000	0.000000	7.89	0.00	0.00
07/15/2019	47788BAD6	INTEREST EARNED ON JOHN DEERE OWNER 1.820% 10/15/21 \$1 PV ON 829.7700 SHARES DUE 7/15/2019 \$0.00152/PV ON 547,103.97 PV DUE 7/15/19	0.0000	0.000000	829.77	0.00	0.00
07/15/2019	47788CAB8	INTEREST EARNED ON JOHN DEERE OWNER 2.420% 10/15/20 \$1 PV ON 1203.0100 SHARES DUE 7/15/2019 \$0.00202/PV ON 596,531.92 PV DUE 7/15/19	0.0000	0.000000	1,203.01	0.00	0.00
07/15/2019	47788CAC6	INTEREST EARNED ON JOHN DEERE OWNER 2.660% 4/18/22 \$1 PV ON 2970.3300 SHARES DUE 7/15/2019 \$0.00222/PV ON 1,340,000.00 PV DUE 7/15/19	0.0000	0.000000	2,970.33	0.00	0.00
07/15/2019	47788EAC2	INTEREST EARNED ON JOHN DEERE OWNER 3.080% 11/15/22 \$1 PV ON 11883.6700 SHARES DUE 7/15/2019 \$0.00257/PV ON 4,630,000.00 PV DUE 7/15/19	0.0000	0.000000	11,883.67	0.00	0.00
07/15/2019	47788NAD0	INTEREST EARNED ON JOHN DEERE OWNER 1.490% 5/15/23 \$1 PV ON 1429.1600 SHARES DUE 7/15/2019 \$0.00124/PV ON 1,151,000.00 PV DUE 7/15/19	0.0000	0.000000	1,429.16	0.00	0.00
07/15/2019	47789JAB2	INTEREST EARNED ON JOHN DEERE OWNER 2.850% 12/15/21 \$1 PV ON 7754.3800 SHARES DUE 7/15/2019 \$0.00238/PV ON 3,265,000.00 PV DUE 7/15/19	0.0000	0.000000	7,754.38	0.00	0.00
07/15/2019	65477UAD2	INTEREST EARNED ON NISSAN AUTO 1.500% 9/15/21 \$1 PV ON 272.4600 SHARES DUE 7/15/2019 \$0.00125/PV ON 217,968.12 PV DUE 7/15/19	0.0000	0.000000	272.46	0.00	0.00
07/15/2019	65478GAD2	INTEREST EARNED ON NISSAN AUTO 1.750% 10/15/21 \$1 PV ON 3828.1200 SHARES DUE 7/15/2019 \$0.00146/PV ON 2,625,000.00 PV DUE 7/15/19	0.0000	0.000000	3,828.12	0.00	0.00
07/15/2019	65478VAD9	INTEREST EARNED ON NISSAN AUTO 1.320% 1/15/21 \$1 PV ON 548.9500 SHARES DUE 7/15/2019 \$0.00110/PV ON 499,041.78 PV DUE 7/15/19	0.0000	0.000000	548.95	0.00	0.00
07/15/2019	65479GAD1	INTEREST EARNED ON NISSAN AUTO 3.060% 3/15/23 \$1 PV ON 9078.0000 SHARES DUE 7/15/2019 \$0.00255/PV ON 3,560,000.00 PV DUE 7/15/19	0.0000	0.000000	9,078.00	0.00	0.00

U.S. Bank
Transaction History
07/01/2019 Thru 09/30/2019

Entry Date	CUSIP Id	Explanation	Units	Price	Net Cash Amt	Cost	Gain/Loss
07/15/2019	89238BAB8	INTEREST EARNED ON TOYOTA AUTO 2.100% 10/15/20 \$1 PV ON 3017.3100 SHARES DUE 7/15/2019 \$0.00175/PV ON 1,724,177.00 PV DUE 7/15/19	0.0000	0.000000	3,017.31	0.00	0.00
07/15/2019	89239AAB9	INTEREST EARNED ON TOYOTA AUTO 2.830% 10/15/21 \$1 PV ON 8525.3700 SHARES DUE 7/15/2019 \$0.00236/PV ON 3,615,000.00 PV DUE 7/15/19	0.0000	0.000000	8,525.37	0.00	0.00
07/15/2019	912828WU0	INTEREST EARNED ON U S TREASURY I P S 0.125% 7/15/24 \$1 PV ON 11203608.0000 SHARES DUE 7/15/2019	0.0000	0.000000	7,002.26	0.00	0.00
07/15/2019	912828XX3	PAID ACCRUED INTEREST ON PURCHASE OF U S TREASURY NT 2.000% 6/30/24	0.0000	0.000000	-4,076.09	0.00	0.00
07/18/2019	43814PAC4	INTEREST EARNED ON HONDA AUTO 1.790% 9/20/21 \$1 PV ON 4015.7300 SHARES DUE 7/18/2019 \$0.00149/PV ON 2,692,110.09 PV DUE 7/18/19	0.0000	0.000000	4,015.73	0.00	0.00
07/18/2019	43814RAC0	INTEREST EARNED ON HONDA AUTO 1.210% 12/18/20 \$1 PV ON 956.9200 SHARES DUE 7/18/2019 \$0.00101/PV ON 949,016.11 PV DUE 7/18/19	0.0000	0.000000	956.92	0.00	0.00
07/18/2019	43814UAG4	INTEREST EARNED ON HONDA AUTO 3.010% 5/18/22 \$1 PV ON 4289.2500 SHARES DUE 7/18/2019 \$0.00251/PV ON 1,710,000.00 PV DUE 7/18/19	0.0000	0.000000	4,289.25	0.00	0.00
07/18/2019	43814WAB1	INTEREST EARNED ON HONDA AUTO 2.750% 9/20/21 \$1 PV ON 10071.8800 SHARES DUE 7/18/2019 \$0.00229/PV ON 4,395,000.00 PV DUE 7/18/19	0.0000	0.000000	10,071.88	0.00	0.00
07/18/2019	4581X0CW6	INTEREST EARNED ON INTER AMER DEV BK 2.125% 1/18/22 \$1 PV ON 3000000.0000 SHARES DUE 7/18/2019	0.0000	0.000000	31,875.00	0.00	0.00
07/18/2019	525ESC0Y6	Unknown LEHMAN BRTH HLD ESC PARTIAL LIQUIDATING DISTRIBUTION PAID @ 2.87/SHARE	0.0000	0.000000	5,744.23	-5,744.23	0.00
07/18/2019	525ESCIB7	Unknown LEHMAN BRTH MTN ES 0.00001% 1/24/13 PARTIAL LIQUIDATING DISTRIBUTION PAID @ 2.88/SHARE	0.0000	0.000000	1,729.39	-1,729.39	0.00
07/19/2019	3135G0T94	INTEREST EARNED ON F N M A DEB 2.375% 1/19/23 \$1 PV ON 5000000.0000 SHARES DUE 7/19/2019	0.0000	0.000000	59,375.00	0.00	0.00
07/19/2019	89114QC48	INTEREST EARNED ON TORONTO MTN 3.500% 7/19/23 \$1 PV ON 5000000.0000 SHARES DUE 7/19/2019	0.0000	0.000000	87,500.00	0.00	0.00
07/22/2019	36225CAZ9	INTEREST EARNED ON G N M A I I #080023 4.125% 12/20/26 \$1 PV ON 57.5800 SHARES DUE 7/20/2019 JUNE GNMA DUE 7/20/19	0.0000	0.000000	57.58	0.00	0.00
07/22/2019	36225CC20	INTEREST EARNED ON G N M A I I #080088 3.625% 6/20/27 \$1 PV ON 50.6000 SHARES DUE 7/20/2019 JUNE GNMA DUE 7/20/19	0.0000	0.000000	50.60	0.00	0.00
07/22/2019	36225CN28	INTEREST EARNED ON G N M A I I #080408 3.625% 5/20/30 \$1 PV ON 160.5700 SHARES DUE 7/20/2019 JUNE GNMA DUE 7/20/19	0.0000	0.000000	160.57	0.00	0.00
07/22/2019	36225CNM4	INTEREST EARNED ON G N M A I I #080395 3.625% 4/20/30 \$1 PV ON 20.6300 SHARES DUE 7/20/2019 JUNE GNMA DUE 7/20/19	0.0000	0.000000	20.63	0.00	0.00
07/22/2019	36225DCB8	INTEREST EARNED ON G N M A I I #080965 3.750% 7/20/34 \$1 PV ON 147.4600 SHARES DUE 7/20/2019 JUNE GNMA DUE 7/20/19	0.0000	0.000000	147.46	0.00	0.00
07/22/2019	43815HAC1	INTEREST EARNED ON HONDA AUTO 2.950% 8/22/22 \$1 PV ON 9759.5800 SHARES DUE 7/21/2019 \$0.00246/PV ON 3,970,000.00 PV DUE 7/21/19	0.0000	0.000000	9,759.58	0.00	0.00
07/22/2019	45950KCJ7	INTEREST EARNED ON INTL FINANCE CORP 1.125% 7/20/21 \$1 PV ON 2500000.0000 SHARES DUE 7/20/2019	0.0000	0.000000	14,075.00	0.00	0.00

U.S. Bank
Transaction History
07/01/2019 Thru 09/30/2019

Entry Date	CUSIP Id	Explanation	Units	Price	Net Cash Amt	Cost	Gain/Loss
07/22/2019	94974BGM6	INTEREST EARNED ON WELLS FARGO CO MTN 2.600% 7/22/20 \$1 PV ON 5000000.0000 SHARES DUE 7/22/2019	0.0000	0.000000	65,000.00	0.00	0.00
07/22/2019	95000U2B8	INTEREST EARNED ON WELLS FARGO MTN 2.625% 7/22/22 \$1 PV ON 3000000.0000 SHARES DUE 7/22/2019	0.0000	0.000000	39,375.00	0.00	0.00
07/23/2019	46625HKA7	INTEREST EARNED ON JPMORGAN CHASE CO 2.250% 1/23/20 \$1 PV ON 1500000.0000 SHARES DUE 7/23/2019	0.0000	0.000000	16,875.00	0.00	0.00
07/23/2019	46625HKA7	INTEREST EARNED ON JPMORGAN CHASE CO 2.250% 1/23/20 \$1 PV ON 2000000.0000 SHARES DUE 7/23/2019	0.0000	0.000000	22,500.00	0.00	0.00
07/23/2019	90331HNL3	INTEREST EARNED ON US BANK NA MTN 2.850% 1/23/23 \$1 PV ON 5000000.0000 SHARES DUE 7/23/2019	0.0000	0.000000	71,250.00	0.00	0.00
07/25/2019	31371NUC7	INTEREST EARNED ON F N M A #257179 4.500% 4/01/28 \$1 PV ON 56.8300 SHARES DUE 7/25/2019 JUNE FNMA DUE 7/25/19	0.0000	0.000000	56.83	0.00	0.00
07/25/2019	31376KT22	INTEREST EARNED ON F N M A #357969 5.000% 9/01/35 \$1 PV ON 433.1100 SHARES DUE 7/25/2019 JUNE FNMA DUE 7/25/19	0.0000	0.000000	433.11	0.00	0.00
07/25/2019	31381PDA3	INTEREST EARNED ON F N M A #466397 3.400% 11/01/20 \$1 PV ON 961.9000 SHARES DUE 7/25/2019 JUNE FNMA DUE 7/25/19	0.0000	0.000000	961.90	0.00	0.00
07/25/2019	3138EG6F6	INTEREST EARNED ON F N M A #AL0869 4.500% 6/01/29 \$1 PV ON 39.9400 SHARES DUE 7/25/2019 JUNE FNMA DUE 7/25/19	0.0000	0.000000	39.94	0.00	0.00
07/25/2019	31394JY35	INTEREST EARNED ON F H L M C MLTCL MTG 6.500% 9/25/43 \$1 PV ON 3843.1500 SHARES DUE 7/25/2019 \$0.00542/PV ON 709,504.78 PV DUE 7/25/19	0.0000	0.000000	3,843.15	0.00	0.00
07/25/2019	31397QRE0	INTEREST EARNED ON F N M A GTD REMIC 1.113% 2/25/41 \$1 PV ON 507.4300 SHARES DUE 7/25/2019 \$0.00257/PV ON 197,419.05 PV DUE 7/25/19	0.0000	0.000000	507.43	0.00	0.00
07/25/2019	31398VJ98	INTEREST EARNED ON F H L M C MLTCL MTG 4.251% 1/25/20 \$1 PV ON 2937.4200 SHARES DUE 7/25/2019 \$0.00354/PV ON 829,194.13 PV DUE 7/25/19	0.0000	0.000000	2,937.42	0.00	0.00
07/25/2019	31403DJZ3	INTEREST EARNED ON F N M A #745580 5.000% 6/01/36 \$1 PV ON 402.0800 SHARES DUE 7/25/2019 JUNE FNMA DUE 7/25/19	0.0000	0.000000	402.08	0.00	0.00
07/25/2019	31403GXF4	INTEREST EARNED ON F N M A #748678 5.000% 10/01/33 \$1 PV ON 7.5300 SHARES DUE 7/25/2019 JUNE FNMA DUE 7/25/19	0.0000	0.000000	7.53	0.00	0.00
07/25/2019	31406PQY8	INTEREST EARNED ON F N M A #815971 5.000% 3/01/35 \$1 PV ON 688.1700 SHARES DUE 7/25/2019 JUNE FNMA DUE 7/25/19	0.0000	0.000000	688.17	0.00	0.00
07/25/2019	31406XWT5	INTEREST EARNED ON F N M A #823358 4.722% 2/01/35 \$1 PV ON 435.1700 SHARES DUE 7/25/2019 JUNE FNMA DUE 7/25/19	0.0000	0.000000	435.17	0.00	0.00
07/25/2019	31407BXH7	INTEREST EARNED ON F N M A #826080 5.000% 7/01/35 \$1 PV ON 81.8900 SHARES DUE 7/25/2019 JUNE FNMA DUE 7/25/19	0.0000	0.000000	81.89	0.00	0.00
07/25/2019	31410F4V4	INTEREST EARNED ON F N M A #888336 5.000% 7/01/36 \$1 PV ON 792.0600 SHARES DUE 7/25/2019 JUNE FNMA DUE 7/25/19	0.0000	0.000000	792.06	0.00	0.00
07/25/2019	31417YAY3	INTEREST EARNED ON F N M A #MA0022 4.500% 4/01/29 \$1 PV ON 65.1900 SHARES DUE 7/25/2019 JUNE FNMA DUE 7/25/19	0.0000	0.000000	65.19	0.00	0.00

U.S. Bank
Transaction History
07/01/2019 Thru 09/30/2019

Entry Date	CUSIP Id	Explanation	Units	Price	Net Cash Amt	Cost	Gain/Loss
07/25/2019	45950KCM0	INTEREST EARNED ON INTL BK M T N 2.250% 1/25/21 \$1 PV ON 2970000.0000 SHARES DUE 7/25/2019	0.0000	0.000000	33,412.50	0.00	0.00
07/25/2019	78445JAA5	INTEREST EARNED ON S L M A 4.12559% 4/25/23 \$1 PV ON 144.5500 SHARES DUE 7/25/2019 \$0.01031/PV ON 14,014.54 PV DUE 7/25/19	0.0000	0.000000	144.55	0.00	0.00
07/25/2019	808513AT2	INTEREST EARNED ON CHARLES SCHWAB CORP 2.650% 1/25/23 \$1 PV ON 6750000.0000 SHARES DUE 7/25/2019	0.0000	0.000000	89,437.50	0.00	0.00
07/26/2019	459058FY4	INTEREST EARNED ON INTL BK 2.000% 1/26/22 \$1 PV ON 10000000.0000 SHARES DUE 7/26/2019	0.0000	0.000000	100,000.00	0.00	0.00
07/29/2019	06406RAE7	INTEREST EARNED ON BANK OF NY MTN 2.950% 1/29/23 \$1 PV ON 2500000.0000 SHARES DUE 7/29/2019	0.0000	0.000000	36,875.00	0.00	0.00
07/29/2019	61747WAL3	INTEREST EARNED ON MORGAN STANLEY 5.500% 7/28/21 \$1 PV ON 2800000.0000 SHARES DUE 7/28/2019	0.0000	0.000000	77,000.00	0.00	0.00
07/29/2019	69353REX2	INTEREST EARNED ON PNC BANK MTN 1.450% 7/29/19 \$1 PV ON 1890000.0000 SHARES DUE 7/29/2019 INTEREST ON 7/29/19 MATURITY	0.0000	0.000000	13,702.50	0.00	0.00
07/29/2019	912828WU0	BOOK VALUE OF U S TREASURY I P S 0.125% 7/15/24 ADJUSTED BY 12272.00 UNITS INCREASE TO ADJUST FOR CHANGE IN CPI	0.0000	0.000000	0.00	0.00	0.00
07/29/2019	912828WU0	FED BASIS OF U S TREASURY I P S 0.125% 7/15/24 ADJUSTED BY 12272.00 UNITS INCREASE TO ADJUST FOR CHANGE IN CPI	0.0000	0.000000	0.00	12,272.00	0.00
07/29/2019	912828WU0	PAR VALUE OF U S TREASURY I P S 0.125% 7/15/24 ADJUSTED BY 12272.0000 UNITS INCREASE TO ADJUST FOR CHANGE IN CPI	12,272.0000	0.000000	0.00	0.00	0.00
07/29/2019	912828WU0	STATE COST OF U S TREASURY I P S 0.125% 7/15/24 ADJUSTED BY 12272.00 UNITS INCREASE TO ADJUST FOR CHANGE IN CPI	0.0000	0.000000	0.00	0.00	0.00
07/30/2019	94974BGF1	INTEREST EARNED ON WELLS FARGO MTN 2.150% 1/30/20 \$1 PV ON 1000000.0000 SHARES DUE 7/30/2019	0.0000	0.000000	10,750.00	0.00	0.00
07/31/2019	313384JV2	INTEREST EARNED ON F H L B DISC NTS 7/31/19 \$1 PV ON 5500000.0000 SHARES DUE 7/31/2019 5,500,000 PAR VALUE AT 100 %	0.0000	0.000000	38,053.89	0.00	0.00
07/31/2019	9128282K5	INTEREST EARNED ON U S TREASURY NT 1.375% 7/31/19 \$1 PV ON 35000000.0000 SHARES DUE 7/31/2019	0.0000	0.000000	240,625.00	0.00	0.00
07/31/2019	9128283S7	INTEREST EARNED ON U S TREASURY NT 2.000% 1/31/20 \$1 PV ON 15000000.0000 SHARES DUE 7/31/2019	0.0000	0.000000	150,000.00	0.00	0.00
07/31/2019	912828H52	INTEREST EARNED ON U S TREASURY NT 1.250% 1/31/20 \$1 PV ON 13500000.0000 SHARES DUE 7/31/2019	0.0000	0.000000	84,375.00	0.00	0.00
07/31/2019	912828N89	INTEREST EARNED ON U S TREASURY NT 1.375% 1/31/21 \$1 PV ON 6000000.0000 SHARES DUE 7/31/2019	0.0000	0.000000	41,250.00	0.00	0.00
07/31/2019	912828TH3	INTEREST EARNED ON U S TREASURY NT 0.875% 7/31/19 \$1 PV ON 15000000.0000 SHARES DUE 7/31/2019	0.0000	0.000000	65,625.00	0.00	0.00
07/31/2019	912828V72	INTEREST EARNED ON U S TREASURY NT 1.875% 1/31/22 \$1 PV ON 3000000.0000 SHARES DUE 7/31/2019	0.0000	0.000000	28,125.00	0.00	0.00

U.S. Bank
Transaction History
07/01/2019 Thru 09/30/2019

Entry Date	CUSIP Id	Explanation	Units	Price	Net Cash Amt	Cost	Gain/Loss
07/31/2019	912828V80	INTEREST EARNED ON U S TREASURY NT 2.250% 1/31/24 \$1 PV ON 7500000.0000 SHARES DUE 7/31/2019	0.0000	0.000000	84,375.00	0.00	0.00
07/31/2019	912828WW6	INTEREST EARNED ON U S TREASURY NT 1.625% 7/31/19 \$1 PV ON 20000000.0000 SHARES DUE 7/31/2019	0.0000	0.000000	162,500.00	0.00	0.00
07/31/2019	912828WW6	INTEREST EARNED ON U S TREASURY NT 1.625% 7/31/19 \$1 PV ON 5000000.0000 SHARES DUE 7/31/2019	0.0000	0.000000	40,625.00	0.00	0.00
07/31/2019		CASH DISBURSEMENT PAID TO BANC OF CALIFORNIA OUTGOING DOMESTIC WIRE PER DIR DTD 7/30/19	0.0000	0.000000	-72,000,000.00	0.00	0.00
08/01/2019	31846V567	INTEREST EARNED ON FIRST AM GOVT OB FD CL Z UNIT ON 0.0000 SHARES DUE 7/31/2019 INTEREST FROM 7/1/19 TO 7/31/19	0.0000	0.000000	13,196.29	0.00	0.00
08/01/2019	31846V567	INTEREST EARNED ON FIRST AM GOVT OB FD CL Z UNIT ON 0.0000 SHARES DUE 7/31/2019 INTEREST FROM 7/1/19 TO 7/31/19	0.0000	0.000000	29,177.64	0.00	0.00
08/05/2019	3135G0V34	INTEREST EARNED ON F N M A 2.500% 2/05/24 \$1 PV ON 5000000.0000 SHARES DUE 8/5/2019	0.0000	0.000000	61,458.34	0.00	0.00
08/06/2019	44932HAH6	INTEREST EARNED ON IBM CREDIT CORP 3.000% 2/06/23 \$1 PV ON 5670000.0000 SHARES DUE 8/6/2019	0.0000	0.000000	85,050.00	0.00	0.00
08/07/2019	06406RAA5	INTEREST EARNED ON BANK OF NY MTN 2.600% 2/07/22 \$1 PV ON 2500000.0000 SHARES DUE 8/7/2019	0.0000	0.000000	32,500.00	0.00	0.00
08/08/2019	594918BP8	INTEREST EARNED ON MICROSOFT CORP 1.550% 8/08/21 \$1 PV ON 3045000.0000 SHARES DUE 8/8/2019	0.0000	0.000000	23,598.75	0.00	0.00
08/09/2019	06051GFN4	PAID ACCRUED INTEREST ON PURCHASE OF BANK OF AMERICA MTN 2.250% 4/21/20	0.0000	0.000000	-13,500.00	0.00	0.00
08/09/2019	747525AD5	PAID ACCRUED INTEREST ON PURCHASE OF QUALCOMM INC 2.250% 5/20/20	0.0000	0.000000	-9,875.00	0.00	0.00
08/12/2019	69371RN36	INTEREST EARNED ON PACCAR FINANCIAL MTN 1.200% 8/12/19 \$1 PV ON 1083000.0000 SHARES DUE 8/12/2019 INTEREST ON 8/12/19 MATURITY	0.0000	0.000000	6,498.00	0.00	0.00
08/13/2019	912828WU0	BOOK VALUE OF U S TREASURY I P S 0.125% 7/15/24 ADJUSTED BY 1768.00 UNITS INCREASE TO ADJUST FOR CHANGE IN CPI	0.0000	0.000000	0.00	0.00	0.00
08/13/2019	912828WU0	FED BASIS OF U S TREASURY I P S 0.125% 7/15/24 ADJUSTED BY 1768.00 UNITS INCREASE TO ADJUST FOR CHANGE IN CPI	0.0000	0.000000	0.00	1,768.00	0.00
08/13/2019	912828WU0	PAR VALUE OF U S TREASURY I P S 0.125% 7/15/24 ADJUSTED BY 1768.0000 UNITS INCREASE TO ADJUST FOR CHANGE IN CPI	1,768.0000	0.000000	0.00	0.00	0.00
08/13/2019	912828WU0	STATE COST OF U S TREASURY I P S 0.125% 7/15/24 ADJUSTED BY 1768.00 UNITS INCREASE TO ADJUST FOR CHANGE IN CPI	0.0000	0.000000	0.00	0.00	0.00
08/14/2019	3133EKWV4	PAID ACCRUED INTEREST ON PURCHASE OF F F C B DEB 1.850% 7/26/24	0.0000	0.000000	-4,625.00	0.00	0.00
08/15/2019	02587AAJ3	INTEREST EARNED ON AMERICAN EXPRESS 1.930% 9/15/22 \$1 PV ON 10084.2400 SHARES DUE 8/15/2019 \$0.00161/PV ON 6,270,000.00 PV DUE 8/15/19	0.0000	0.000000	10,084.24	0.00	0.00
08/15/2019	02665WAH4	INTEREST EARNED ON AMERICAN HONDA MTN 2.250% 8/15/19 \$1 PV ON 1977000.0000 SHARES DUE 8/15/2019 INTEREST ON 8/15/19 MATURITY	0.0000	0.000000	22,241.25	0.00	0.00

U.S. Bank
Transaction History
07/01/2019 Thru 09/30/2019

Entry Date	CUSIP Id	Explanation	Units	Price	Net Cash Amt	Cost	Gain/Loss
08/15/2019	02665WAH4	INTEREST EARNED ON AMERICAN HONDA MTN 2.250% 8/15/19 \$1 PV ON 2500000.0000 SHARES DUE 8/15/2019 INTEREST ON 8/15/19 MATURITY	0.0000	0.000000	28,125.00	0.00	0.00
08/15/2019	3133TCE95	INTEREST EARNED ON F H L M C MLTCL MTG 4.016% 8/15/32 \$1 PV ON 28.7500 SHARES DUE 8/15/2019 \$0.00335/PV ON 8,682.30 PV DUE 8/15/19	0.0000	0.000000	28.75	0.00	0.00
08/15/2019	31348SWZ3	INTEREST EARNED ON F H L M C #786064 4.677% 1/01/28 \$1 PV ON 7.3000 SHARES DUE 8/15/2019 JUNE FHLMC DUE 8/15/19	0.0000	0.000000	7.30	0.00	0.00
08/15/2019	369550BA5	PAID ACCRUED INTEREST ON PURCHASE OF GENERAL DYNAMICS 2.875% 5/11/20	0.0000	0.000000	-15,013.89	0.00	0.00
08/15/2019	47788BAD6	INTEREST EARNED ON JOHN DEERE OWNER 1.820% 10/15/21 \$1 PV ON 782.1200 SHARES DUE 8/15/2019 \$0.00152/PV ON 515,683.75 PV DUE 8/15/19	0.0000	0.000000	782.12	0.00	0.00
08/15/2019	47788CAB8	INTEREST EARNED ON JOHN DEERE OWNER 2.420% 10/15/20 \$1 PV ON 952.7400 SHARES DUE 8/15/2019 \$0.00202/PV ON 472,434.77 PV DUE 8/15/19	0.0000	0.000000	952.74	0.00	0.00
08/15/2019	47788CAC6	INTEREST EARNED ON JOHN DEERE OWNER 2.660% 4/18/22 \$1 PV ON 2970.3300 SHARES DUE 8/15/2019 \$0.00222/PV ON 1,340,000.00 PV DUE 8/15/19	0.0000	0.000000	2,970.33	0.00	0.00
08/15/2019	47788EAC2	INTEREST EARNED ON JOHN DEERE OWNER 3.080% 11/15/22 \$1 PV ON 11883.6700 SHARES DUE 8/15/2019 \$0.00257/PV ON 4,630,000.00 PV DUE 8/15/19	0.0000	0.000000	11,883.67	0.00	0.00
08/15/2019	47788NAD0	INTEREST EARNED ON JOHN DEERE OWNER 1.490% 5/15/23 \$1 PV ON 1429.1600 SHARES DUE 8/15/2019 \$0.00124/PV ON 1,151,000.00 PV DUE 8/15/19	0.0000	0.000000	1,429.16	0.00	0.00
08/15/2019	47789JAB2	INTEREST EARNED ON JOHN DEERE OWNER 2.850% 12/15/21 \$1 PV ON 7754.3800 SHARES DUE 8/15/2019 \$0.00238/PV ON 3,265,000.00 PV DUE 8/15/19	0.0000	0.000000	7,754.38	0.00	0.00
08/15/2019	65478GAD2	INTEREST EARNED ON NISSAN AUTO 1.750% 10/15/21 \$1 PV ON 3575.0800 SHARES DUE 8/15/2019 \$0.00146/PV ON 2,451,482.54 PV DUE 8/15/19	0.0000	0.000000	3,575.08	0.00	0.00
08/15/2019	65478VAD9	INTEREST EARNED ON NISSAN AUTO 1.320% 1/15/21 \$1 PV ON 460.3100 SHARES DUE 8/15/2019 \$0.00110/PV ON 418,464.94 PV DUE 8/15/19	0.0000	0.000000	460.31	0.00	0.00
08/15/2019	65479GAD1	INTEREST EARNED ON NISSAN AUTO 3.060% 3/15/23 \$1 PV ON 9078.0000 SHARES DUE 8/15/2019 \$0.00255/PV ON 3,560,000.00 PV DUE 8/15/19	0.0000	0.000000	9,078.00	0.00	0.00
08/15/2019	89238BAB8	INTEREST EARNED ON TOYOTA AUTO 2.100% 10/15/20 \$1 PV ON 2434.4300 SHARES DUE 8/15/2019 \$0.00175/PV ON 1,391,106.63 PV DUE 8/15/19	0.0000	0.000000	2,434.43	0.00	0.00
08/15/2019	89239AAB9	INTEREST EARNED ON TOYOTA AUTO 2.830% 10/15/21 \$1 PV ON 8525.3700 SHARES DUE 8/15/2019 \$0.00236/PV ON 3,615,000.00 PV DUE 8/15/19	0.0000	0.000000	8,525.37	0.00	0.00
08/16/2019	3137EAEL9	INTEREST EARNED ON F H L M C M T N 2.375% 2/16/21 \$1 PV ON 7500000.0000 SHARES DUE 8/16/2019	0.0000	0.000000	89,062.50	0.00	0.00
08/19/2019	3130A7CV5	INTEREST EARNED ON F H L B DEB 1.375% 2/18/21 \$1 PV ON 5365000.0000 SHARES DUE 8/18/2019	0.0000	0.000000	36,884.38	0.00	0.00
08/19/2019	43814PAC4	INTEREST EARNED ON HONDA AUTO 1.790% 9/20/21 \$1 PV ON 3734.3500 SHARES DUE 8/18/2019 \$0.00149/PV ON 2,503,471.62 PV DUE 8/18/19	0.0000	0.000000	3,734.35	0.00	0.00
08/19/2019	43814RAC0	INTEREST EARNED ON HONDA AUTO 1.210% 12/18/20 \$1 PV ON 827.6200 SHARES DUE 8/18/2019 \$0.00101/PV ON 820,783.32 PV DUE 8/18/19	0.0000	0.000000	827.62	0.00	0.00

U.S. Bank
Transaction History
07/01/2019 Thru 09/30/2019

Entry Date	CUSIP Id	Explanation	Units	Price	Net Cash Amt	Cost	Gain/Loss
08/19/2019	43814UAG4	INTEREST EARNED ON HONDA AUTO 3.010% 5/18/22 \$1 PV ON 4289.2500 SHARES DUE 8/18/2019 \$0.00251/PV ON 1,710,000.00 PV DUE 8/18/19	0.0000	0.000000	4,289.25	0.00	0.00
08/19/2019	43814WAB1	INTEREST EARNED ON HONDA AUTO 2.750% 9/20/21 \$1 PV ON 10071.8800 SHARES DUE 8/18/2019 \$0.00229/PV ON 4,395,000.00 PV DUE 8/18/19	0.0000	0.000000	10,071.88	0.00	0.00
08/19/2019	62479MVK6	INTEREST EARNED ON MUFG BANK LTD NY BRAN C P 8/19/19 \$1 PV ON 11125000.0000 SHARES DUE 8/19/2019 11,125,000 PAR VALUE AT 100 %	0.0000	0.000000	43,572.92	0.00	0.00
08/19/2019	62479MVK6	INTEREST EARNED ON MUFG BANK LTD NY BRAN C P 8/19/19 \$1 PV ON 3290000.0000 SHARES DUE 8/19/2019 3,290,000 PAR VALUE AT 100 %	0.0000	0.000000	12,885.83	0.00	0.00
08/19/2019	69353RFB9	INTEREST EARNED ON PNC BANK NA MTN 2.625% 2/17/22 \$1 PV ON 1000000.0000 SHARES DUE 8/17/2019	0.0000	0.000000	13,125.00	0.00	0.00
08/20/2019	36225CAZ9	INTEREST EARNED ON G N M A I I #080023 4.125% 12/20/26 \$1 PV ON 53.8900 SHARES DUE 8/20/2019 JULY GNMA DUE 8/20/19	0.0000	0.000000	53.89	0.00	0.00
08/20/2019	36225CC20	INTEREST EARNED ON G N M A I I #080088 3.875% 6/20/27 \$1 PV ON 49.8700 SHARES DUE 8/20/2019 JULY GNMA DUE 8/20/19	0.0000	0.000000	49.87	0.00	0.00
08/20/2019	36225CN28	INTEREST EARNED ON G N M A I I #080408 3.875% 5/20/30 \$1 PV ON 167.9300 SHARES DUE 8/20/2019 JULY GNMA DUE 8/20/19	0.0000	0.000000	167.93	0.00	0.00
08/20/2019	36225CNM4	INTEREST EARNED ON G N M A I I #080395 3.875% 4/20/30 \$1 PV ON 21.5400 SHARES DUE 8/20/2019 JULY GNMA DUE 8/20/19	0.0000	0.000000	21.54	0.00	0.00
08/20/2019	36225DCB8	INTEREST EARNED ON G N M A I I #080965 3.750% 7/20/34 \$1 PV ON 144.0200 SHARES DUE 8/20/2019 JULY GNMA DUE 8/20/19	0.0000	0.000000	144.02	0.00	0.00
08/21/2019	43815HAC1	INTEREST EARNED ON HONDA AUTO 2.950% 8/22/22 \$1 PV ON 3970000.0000 SHARES DUE 8/21/2019	0.0000	0.000000	9,759.58	0.00	0.00
08/23/2019	037833BS8	INTEREST EARNED ON APPLE INC 2.250% 2/23/21 \$1 PV ON 4000000.0000 SHARES DUE 8/23/2019	0.0000	0.000000	45,000.00	0.00	0.00
08/26/2019	03215PFN4	INTEREST EARNED ON AMRESCO 6.88883% 6/25/29 \$1 PV ON 742.2800 SHARES DUE 8/25/2019 \$0.00574/PV ON 129,300.99 PV DUE 8/25/19	0.0000	0.000000	742.28	0.00	0.00
08/26/2019	06406HCZ0	INTEREST EARNED ON BANK OF NY MELLO MTN 2.150% 2/24/20 \$1 PV ON 1500000.0000 SHARES DUE 8/24/2019	0.0000	0.000000	16,125.00	0.00	0.00
08/26/2019	3135G0J20	INTEREST EARNED ON F N M A DEB 1.375% 2/26/21 \$1 PV ON 10000000.0000 SHARES DUE 8/26/2019	0.0000	0.000000	68,750.00	0.00	0.00
08/26/2019	31371NUC7	INTEREST EARNED ON F N M A #257179 4.500% 4/01/28 \$1 PV ON 56.2600 SHARES DUE 8/25/2019 JULY FNMA DUE 8/25/19	0.0000	0.000000	56.26	0.00	0.00
08/26/2019	31376KT22	INTEREST EARNED ON F N M A #357969 5.000% 9/01/35 \$1 PV ON 427.9400 SHARES DUE 8/25/2019 JULY FNMA DUE 8/25/19	0.0000	0.000000	427.94	0.00	0.00
08/26/2019	31381PDA3	INTEREST EARNED ON F N M A #466397 3.400% 11/01/20 \$1 PV ON 991.8000 SHARES DUE 8/25/2019 JULY FNMA DUE 8/25/19	0.0000	0.000000	991.80	0.00	0.00
08/26/2019	3138EG6F6	INTEREST EARNED ON F N M A #AL0869 4.500% 6/01/29 \$1 PV ON 39.1800 SHARES DUE 8/25/2019 JULY FNMA DUE 8/25/19	0.0000	0.000000	39.18	0.00	0.00

U.S. Bank
Transaction History
07/01/2019 Thru 09/30/2019

Entry Date	CUSIP Id	Explanation	Units	Price	Net Cash Amt	Cost	Gain/Loss
08/26/2019	31394JY35	INTEREST EARNED ON F H L M C MLTCL MTG 6.500% 9/25/43 \$1 PV ON 3799.1600 SHARES DUE 8/25/2019 \$0.00542/PV ON 701,383.79 PV DUE 8/25/19	0.0000	0.000000	3,799.16	0.00	0.00
08/26/2019	31397QRE0	INTEREST EARNED ON F N M A GTD REMIC 1.113% 2/25/41 \$1 PV ON 478.2200 SHARES DUE 8/25/2019 \$0.00246/PV ON 194,792.45 PV DUE 8/25/19	0.0000	0.000000	478.22	0.00	0.00
08/26/2019	31398VJ98	INTEREST EARNED ON F H L M C MLTCL MTG 4.251% 1/25/20 \$1 PV ON 2635.0800 SHARES DUE 8/25/2019 \$0.00354/PV ON 743,847.19 PV DUE 8/25/19	0.0000	0.000000	2,635.08	0.00	0.00
08/26/2019	31403DJZ3	INTEREST EARNED ON F N M A #745580 5.000% 6/01/36 \$1 PV ON 397.1000 SHARES DUE 8/25/2019 JULY FNMA DUE 8/25/19	0.0000	0.000000	397.10	0.00	0.00
08/26/2019	31403GXF4	INTEREST EARNED ON F N M A #748678 5.000% 10/01/33 \$1 PV ON 7.5000 SHARES DUE 8/25/2019 JULY FNMA DUE 8/25/19	0.0000	0.000000	7.50	0.00	0.00
08/26/2019	31406PQY8	INTEREST EARNED ON F N M A #815971 5.000% 3/01/35 \$1 PV ON 679.4400 SHARES DUE 8/25/2019 JULY FNMA DUE 8/25/19	0.0000	0.000000	679.44	0.00	0.00
08/26/2019	31406XWT5	INTEREST EARNED ON F N M A #823358 4.722% 2/01/35 \$1 PV ON 433.4500 SHARES DUE 8/25/2019 JULY FNMA DUE 8/25/19	0.0000	0.000000	433.45	0.00	0.00
08/26/2019	31407BXH7	INTEREST EARNED ON F N M A #826080 5.000% 7/01/35 \$1 PV ON 81.5300 SHARES DUE 8/25/2019 JULY FNMA DUE 8/25/19	0.0000	0.000000	81.53	0.00	0.00
08/26/2019	31410F4V4	INTEREST EARNED ON F N M A #888336 5.000% 7/01/36 \$1 PV ON 778.5700 SHARES DUE 8/25/2019 JULY FNMA DUE 8/25/19	0.0000	0.000000	778.57	0.00	0.00
08/26/2019	31417YAY3	INTEREST EARNED ON F N M A #MA0022 4.500% 4/01/29 \$1 PV ON 63.7500 SHARES DUE 8/25/2019 JULY FNMA DUE 8/25/19	0.0000	0.000000	63.75	0.00	0.00
08/27/2019	46625HKA7	INTEREST EARNED ON JPMORGAN CHASE CO 2.250% 1/23/20 \$1 PV ON 1500000.0000 SHARES DUE 8/26/2019 \$2.125 PER \$1000 ACCD INT (34 DAYS)	0.0000	0.000000	3,187.50	0.00	0.00
08/27/2019	46625HKA7	INTEREST EARNED ON JPMORGAN CHASE CO 2.250% 1/23/20 \$1 PV ON 2000000.0000 SHARES DUE 8/26/2019 \$2.125 PER \$1000 ACCD INT (34 DAYS)	0.0000	0.000000	4,250.00	0.00	0.00
08/28/2019	912828UL2	PAID ACCRUED INTEREST ON PURCHASE OF U S TREASURY NT 1.375% 1/31/20	0.0000	0.000000	-5,230.98	0.00	0.00
08/28/2019	912828WU0	BOOK VALUE OF U S TREASURY I P S 0.125% 7/15/24 ADJUSTED BY 1248.00 UNITS INCREASE TO ADJUST FOR CHANGE IN CPI	0.0000	0.000000	0.00	0.00	0.00
08/28/2019	912828WU0	FED BASIS OF U S TREASURY I P S 0.125% 7/15/24 ADJUSTED BY 1248.00 UNITS INCREASE TO ADJUST FOR CHANGE IN CPI	0.0000	0.000000	0.00	1,248.00	0.00
08/28/2019	912828WU0	PAR VALUE OF U S TREASURY I P S 0.125% 7/15/24 ADJUSTED BY 1248.0000 UNITS INCREASE TO ADJUST FOR CHANGE IN CPI	1,248.0000	0.000000	0.00	0.00	0.00
08/28/2019	912828WU0	STATE COST OF U S TREASURY I P S 0.125% 7/15/24 ADJUSTED BY 1248.00 UNITS INCREASE TO ADJUST FOR CHANGE IN CPI	0.0000	0.000000	0.00	0.00	0.00
09/03/2019	30231GAV4	INTEREST EARNED ON EXXON MOBIL 2.222% 3/01/21 \$1 PV ON 3000000.0000 SHARES DUE 9/1/2019	0.0000	0.000000	33,330.00	0.00	0.00
09/03/2019	31846V567	INTEREST EARNED ON FIRST AM GOVT OB FD CL Z UNIT ON 0.0000 SHARES DUE 8/31/2019 INTEREST FROM 8/1/19 TO 8/31/19	0.0000	0.000000	14,244.31	0.00	0.00
09/03/2019	31846V567	INTEREST EARNED ON FIRST AM GOVT OB FD CL Z UNIT ON 0.0000 SHARES DUE 8/31/2019 INTEREST FROM 8/1/19 TO 8/31/19	0.0000	0.000000	29,015.37	0.00	0.00

U.S. Bank
Transaction History
07/01/2019 Thru 09/30/2019

Entry Date	CUSIP Id	Explanation	Units	Price	Net Cash Amt	Cost	Gain/Loss
09/03/2019	83162CLJ0	INTEREST EARNED ON S B A GTD DEV PART 6.340% 3/01/21 \$1 PV ON 465.5500 SHARES DUE 9/1/2019 \$0.03170/PV ON 14,686.06 PV DUE 9/ 1/19	0.0000	0.000000	465.55	0.00	0.00
09/03/2019	912828L24	INTEREST EARNED ON U S TREASURY NT 1.875% 8/31/22 \$1 PV ON 6000000.0000 SHARES DUE 8/31/2019	0.0000	0.000000	56,250.00	0.00	0.00
09/03/2019	912828W48	INTEREST EARNED ON U S TREASURY NT 2.125% 2/29/24 \$1 PV ON 10000000.0000 SHARES DUE 8/31/2019	0.0000	0.000000	106,250.00	0.00	0.00
09/05/2019	06051GHF9	INTEREST EARNED ON BANK OF AMERICA 3.550% 3/05/24 \$1 PV ON 6675000.0000 SHARES DUE 9/5/2019	0.0000	0.000000	118,481.25	0.00	0.00
09/05/2019	40428HPR7	INTEREST EARNED ON HSBC USA INC MTN 2.350% 3/05/20 \$1 PV ON 2500000.0000 SHARES DUE 9/5/2019	0.0000	0.000000	29,375.00	0.00	0.00
09/05/2019	40428HPR7	INTEREST EARNED ON HSBC USA INC MTN 2.350% 3/05/20 \$1 PV ON 2500000.0000 SHARES DUE 9/5/2019	0.0000	0.000000	29,375.00	0.00	0.00
09/09/2019	313383YJ4	INTEREST EARNED ON F H L B DEB 3.375% 9/08/23 \$1 PV ON 10000000.0000 SHARES DUE 9/8/2019	0.0000	0.000000	168,750.00	0.00	0.00
09/11/2019	06406HCW7	INTEREST EARNED ON BANK OF NY MTN 2.300% 9/11/19 \$1 PV ON 2120000.0000 SHARES DUE 9/11/2019 INTEREST ON 9/11/19 MATURITY	0.0000	0.000000	24,380.00	0.00	0.00
09/12/2019	78013XZU5	PAID ACCRUED INTEREST ON PURCHASE OF ROYAL BANK OF MTN 2.550% 7/16/24	0.0000	0.000000	-25,783.33	0.00	0.00
09/12/2019	912828WU0	BOOK VALUE OF U S TREASURY I P S 0.125% 7/15/24 ADJUSTED BY 8736.00 UNITS INCREASE TO ADJUST FOR CHANGE IN CPI	0.0000	0.000000	0.00	0.00	0.00
09/12/2019	912828WU0	FED BASIS OF U S TREASURY I P S 0.125% 7/15/24 ADJUSTED BY 8736.00 UNITS INCREASE TO ADJUST FOR CHANGE IN CPI	0.0000	0.000000	0.00	8,736.00	0.00
09/12/2019	912828WU0	PAR VALUE OF U S TREASURY I P S 0.125% 7/15/24 ADJUSTED BY 8736.0000 UNITS INCREASE TO ADJUST FOR CHANGE IN CPI	8,736.0000	0.000000	0.00	0.00	0.00
09/12/2019	912828WU0	STATE COST OF U S TREASURY I P S 0.125% 7/15/24 ADJUSTED BY 8736.00 UNITS INCREASE TO ADJUST FOR CHANGE IN CPI	0.0000	0.000000	0.00	0.00	0.00
09/13/2019	00440EAP2	INTEREST EARNED ON ACE INA HOLDINGS 2.700% 3/13/23 \$1 PV ON 2000000.0000 SHARES DUE 9/13/2019	0.0000	0.000000	27,000.00	0.00	0.00
09/13/2019	21687BWD9	INTEREST EARNED ON COOPERATIEVE CENTRAL C P 9/13/19 \$1 PV ON 2000000.0000 SHARES DUE 9/13/2019 2,000,000 PAR VALUE AT 100 %	0.0000	0.000000	42,135.56	0.00	0.00
09/13/2019	96130ABJ6	INTEREST EARNED ON WESTPAC BKING C D 2.970% 9/13/19 \$1 PV ON 1500000.0000 SHARES DUE 9/13/2019 INTEREST ON 9/13/19 MATURITY	0.0000	0.000000	33,783.75	0.00	0.00
09/16/2019	02587AAJ3	INTEREST EARNED ON AMERICAN EXPRESS 1.930% 9/15/22 \$1 PV ON 10084.2400 SHARES DUE 9/15/2019 \$0.00161/PV ON 6,270,000.00 PV DUE 9/15/19	0.0000	0.000000	10,084.24	0.00	0.00
09/16/2019	084670BR8	INTEREST EARNED ON BERKSHIRE HATHAWAY 2.750% 3/15/23 \$1 PV ON 2500000.0000 SHARES DUE 9/15/2019	0.0000	0.000000	34,375.00	0.00	0.00
09/16/2019	24422ESS9	INTEREST EARNED ON JOHN DEERE CAP MTN 2.300% 9/16/19 \$1 PV ON 5000000.0000 SHARES DUE 9/16/2019 INTEREST ON 9/16/19 MATURITY	0.0000	0.000000	57,500.00	0.00	0.00
09/16/2019	3133TCE95	INTEREST EARNED ON F H L M C MLTCL MTG 4.016% 8/15/32 \$1 PV ON 27.9600 SHARES DUE 9/15/2019 \$0.00335/PV ON 8,354.65 PV DUE 9/15/19	0.0000	0.000000	27.96	0.00	0.00

U.S. Bank
Transaction History
07/01/2019 Thru 09/30/2019

Entry Date	CUSIP Id	Explanation	Units	Price	Net Cash Amt	Cost	Gain/Loss
09/16/2019	31348SWZ3	INTEREST EARNED ON F H L M C #786064 4.677% 1/01/28 \$1 PV ON 7.2300 SHARES DUE 9/15/2019 JULY FHLMC DUE 9/15/19	0.0000	0.000000	7.23	0.00	0.00
09/16/2019	43815NAB0	INTEREST EARNED ON HONDA AUTO 1.900% 4/15/22 \$1 PV ON 3353.5000 SHARES DUE 9/15/2019 \$0.00095/PV ON 3,530,000.00 PV DUE 9/15/19	0.0000	0.000000	3,353.50	0.00	0.00
09/16/2019	4581X0CS5	INTEREST EARNED ON INTER AMER BK M T N 1.875% 3/15/21 \$1 PV ON 5000000.0000 SHARES DUE 9/15/2019	0.0000	0.000000	46,875.00	0.00	0.00
09/16/2019	4581X0CZ9	INTEREST EARNED ON INTER AMER DEV BK 1.750% 9/14/22 \$1 PV ON 6500000.0000 SHARES DUE 9/14/2019	0.0000	0.000000	56,875.00	0.00	0.00
09/16/2019	46647PAU0	PAID ACCRUED INTEREST ON PURCHASE OF JPMORGAN CHASE CO 3.797% 7/23/24	0.0000	0.000000	-13,975.07	0.00	0.00
09/16/2019	477870AB5	INTEREST EARNED ON JOHN DEERE OWNER 2.280% 5/16/22 \$1 PV ON 9044.0000 SHARES DUE 9/15/2019 \$0.00323/PV ON 2,800,000.00 PV DUE 9/15/19	0.0000	0.000000	9,044.00	0.00	0.00
09/16/2019	47788BAD6	INTEREST EARNED ON JOHN DEERE OWNER 1.820% 10/15/21 \$1 PV ON 719.8800 SHARES DUE 9/15/2019 \$0.00152/PV ON 474,644.17 PV DUE 9/15/19	0.0000	0.000000	719.88	0.00	0.00
09/16/2019	47788CAB8	INTEREST EARNED ON JOHN DEERE OWNER 2.420% 10/15/20 \$1 PV ON 632.1200 SHARES DUE 9/15/2019 \$0.00202/PV ON 313,448.89 PV DUE 9/15/19	0.0000	0.000000	632.12	0.00	0.00
09/16/2019	47788CAC6	INTEREST EARNED ON JOHN DEERE OWNER 2.660% 4/18/22 \$1 PV ON 2970.3300 SHARES DUE 9/15/2019 \$0.00222/PV ON 1,340,000.00 PV DUE 9/15/19	0.0000	0.000000	2,970.33	0.00	0.00
09/16/2019	47788EAC2	INTEREST EARNED ON JOHN DEERE OWNER 3.080% 11/15/22 \$1 PV ON 11883.6700 SHARES DUE 9/15/2019 \$0.00257/PV ON 4,630,000.00 PV DUE 9/15/19	0.0000	0.000000	11,883.67	0.00	0.00
09/16/2019	47788NAD0	INTEREST EARNED ON JOHN DEERE OWNER 1.490% 5/15/23 \$1 PV ON 1376.1800 SHARES DUE 9/15/2019 \$0.00124/PV ON 1,108,332.07 PV DUE 9/15/19	0.0000	0.000000	1,376.18	0.00	0.00
09/16/2019	47789JAB2	INTEREST EARNED ON JOHN DEERE OWNER 2.850% 12/15/21 \$1 PV ON 7754.3800 SHARES DUE 9/15/2019 \$0.00238/PV ON 3,265,000.00 PV DUE 9/15/19	0.0000	0.000000	7,754.38	0.00	0.00
09/16/2019	65478GAD2	INTEREST EARNED ON NISSAN AUTO 1.750% 10/15/21 \$1 PV ON 3279.3100 SHARES DUE 9/15/2019 \$0.00146/PV ON 2,248,666.82 PV DUE 9/15/19	0.0000	0.000000	3,279.31	0.00	0.00
09/16/2019	65478VAD9	INTEREST EARNED ON NISSAN AUTO 1.320% 1/15/21 \$1 PV ON 363.6200 SHARES DUE 9/15/2019 \$0.00110/PV ON 330,562.90 PV DUE 9/15/19	0.0000	0.000000	363.62	0.00	0.00
09/16/2019	65479GAD1	INTEREST EARNED ON NISSAN AUTO 3.060% 3/15/23 \$1 PV ON 9078.0000 SHARES DUE 9/15/2019 \$0.00255/PV ON 3,560,000.00 PV DUE 9/15/19	0.0000	0.000000	9,078.00	0.00	0.00
09/16/2019	68389XBK0	INTEREST EARNED ON ORACLE CORP 1.900% 9/15/21 \$1 PV ON 3000000.0000 SHARES DUE 9/15/2019	0.0000	0.000000	28,500.00	0.00	0.00
09/16/2019	89238BAB8	INTEREST EARNED ON TOYOTA AUTO 2.100% 10/15/20 \$1 PV ON 1788.4300 SHARES DUE 9/15/2019 \$0.00175/PV ON 1,021,960.05 PV DUE 9/15/19	0.0000	0.000000	1,788.43	0.00	0.00
09/16/2019	89239AAB9	INTEREST EARNED ON TOYOTA AUTO 2.830% 10/15/21 \$1 PV ON 8525.3700 SHARES DUE 9/15/2019 \$0.00236/PV ON 3,615,000.00 PV DUE 9/15/19	0.0000	0.000000	8,525.37	0.00	0.00
09/18/2019	09247XAL5	INTEREST EARNED ON BLACKROCK INC 3.500% 3/18/24 \$1 PV ON 1000000.0000 SHARES DUE 9/18/2019	0.0000	0.000000	17,500.00	0.00	0.00

U.S. Bank
Transaction History
07/01/2019 Thru 09/30/2019

Entry Date	CUSIP Id	Explanation	Units	Price	Net Cash Amt	Cost	Gain/Loss
09/18/2019	313384LW7	INTEREST EARNED ON F H L B DISC NTS 9/18/19 \$1 PV ON 2850000.0000 SHARES DUE 9/18/2019 2,850,000 PAR VALUE AT 100 %	0.0000	0.000000	14,281.67	0.00	0.00
09/18/2019	43814PAC4	INTEREST EARNED ON HONDA AUTO 1.790% 9/20/21 \$1 PV ON 3440.8100 SHARES DUE 9/18/2019 \$0.00149/PV ON 2,306,690.87 PV DUE 9/18/19	0.0000	0.000000	3,440.81	0.00	0.00
09/18/2019	43814RAC0	INTEREST EARNED ON HONDA AUTO 1.210% 12/18/20 \$1 PV ON 694.9300 SHARES DUE 9/18/2019 \$0.00101/PV ON 689,190.43 PV DUE 9/18/19	0.0000	0.000000	694.93	0.00	0.00
09/18/2019	43814UAG4	INTEREST EARNED ON HONDA AUTO 3.010% 5/18/22 \$1 PV ON 4289.2500 SHARES DUE 9/18/2019 \$0.00251/PV ON 1,710,000.00 PV DUE 9/18/19	0.0000	0.000000	4,289.25	0.00	0.00
09/18/2019	43814WAB1	INTEREST EARNED ON HONDA AUTO 2.750% 9/20/21 \$1 PV ON 10071.8800 SHARES DUE 9/18/2019 \$0.00229/PV ON 4,395,000.00 PV DUE 9/18/19	0.0000	0.000000	10,071.88	0.00	0.00
09/18/2019	69353RDZ8	INTEREST EARNED ON PNC BANK NA MTN 2.400% 10/18/19 \$1 PV ON 1000000.0000 SHARES DUE 9/18/2019	0.0000	0.000000	10,000.00	0.00	0.00
09/20/2019	36225CAZ9	INTEREST EARNED ON G N M A I I #080023 4.125% 12/20/26 \$1 PV ON 53.3400 SHARES DUE 9/20/2019 AUGUST GNMA DUE 9/20/19	0.0000	0.000000	53.34	0.00	0.00
09/20/2019	36225CC20	INTEREST EARNED ON G N M A I I #080088 3.875% 6/20/27 \$1 PV ON 49.3100 SHARES DUE 9/20/2019 AUGUST GNMA DUE 9/20/19	0.0000	0.000000	49.31	0.00	0.00
09/20/2019	36225CN28	INTEREST EARNED ON G N M A I I #080408 3.875% 5/20/30 \$1 PV ON 164.9100 SHARES DUE 9/20/2019 AUGUST GNMA DUE 9/20/19	0.0000	0.000000	164.91	0.00	0.00
09/20/2019	36225CNM4	INTEREST EARNED ON G N M A I I #080395 3.875% 4/20/30 \$1 PV ON 21.4100 SHARES DUE 9/20/2019 AUGUST GNMA DUE 9/20/19	0.0000	0.000000	21.41	0.00	0.00
09/20/2019	36225DCB8	INTEREST EARNED ON G N M A I I #080965 3.750% 7/20/34 \$1 PV ON 143.3200 SHARES DUE 9/20/2019 AUGUST GNMA DUE 9/20/19	0.0000	0.000000	143.32	0.00	0.00
09/23/2019	43815HAC1	INTEREST EARNED ON HONDA AUTO 2.950% 8/22/22 \$1 PV ON 9759.5800 SHARES DUE 9/21/2019 \$0.00246/PV ON 3,970,000.00 PV DUE 9/21/19	0.0000	0.000000	9,759.58	0.00	0.00
09/24/2019	912796VW6	INTEREST EARNED ON U S TREASURY BILL 9/24/19 \$1 PV ON 1650000.0000 SHARES DUE 9/24/2019 1,650,000 PAR VALUE AT 100 %	0.0000	0.000000	2,527.59	0.00	0.00
09/24/2019	912828TR1	PAID ACCRUED INTEREST ON PURCHASE OF U S TREASURY NT 1.000% 9/30/19	0.0000	0.000000	-7,979.51	0.00	0.00
09/25/2019	03215PFN4	INTEREST EARNED ON AMRESCO 3.08529% 6/25/29 \$1 PV ON 319.1500 SHARES DUE 9/25/2019 \$0.00257/PV ON 124,130.25 PV DUE 9/25/19	0.0000	0.000000	319.15	0.00	0.00
09/25/2019	313384MD8	INTEREST EARNED ON F H L B DISC NTS 9/25/19 \$1 PV ON 2500000.0000 SHARES DUE 9/25/2019 2,500,000 PAR VALUE AT 100 %	0.0000	0.000000	8,244.44	0.00	0.00
09/25/2019	31371NUC7	INTEREST EARNED ON F N M A #257179 4.500% 4/01/28 \$1 PV ON 55.7600 SHARES DUE 9/25/2019 AUGUST FNMA DUE 9/25/19	0.0000	0.000000	55.76	0.00	0.00
09/25/2019	31376KT22	INTEREST EARNED ON F N M A #357969 5.000% 9/01/35 \$1 PV ON 418.3300 SHARES DUE 9/25/2019 AUGUST FNMA DUE 9/25/19	0.0000	0.000000	418.33	0.00	0.00
09/25/2019	31381PDA3	INTEREST EARNED ON F N M A #466397 3.400% 11/01/20 \$1 PV ON 989.7600 SHARES DUE 9/25/2019 AUGUST FNMA DUE 9/25/19	0.0000	0.000000	989.76	0.00	0.00
09/25/2019	3138EG6F6	INTEREST EARNED ON F N M A #AL0869 4.500% 6/01/29 \$1 PV ON 38.2900 SHARES DUE 9/25/2019 AUGUST FNMA DUE 9/25/19	0.0000	0.000000	38.29	0.00	0.00

U.S. Bank
Transaction History
07/01/2019 Thru 09/30/2019

Entry Date	CUSIP Id	Explanation	Units	Price	Net Cash Amt	Cost	Gain/Loss
09/25/2019	31394JY35	INTEREST EARNED ON F H L M C MLTCL MTG 6.500% 9/25/43 \$1 PV ON 3783.7400 SHARES DUE 9/25/2019 \$0.00542/PV ON 698,535.87 PV DUE 9/25/19	0.0000	0.000000	3,783.74	0.00	0.00
09/25/2019	31397QRE0	INTEREST EARNED ON F N M A GTD REMIC 2.825% 2/25/41 \$1 PV ON 448.8900 SHARES DUE 9/25/2019 \$0.00235/PV ON 190,664.36 PV DUE 9/25/19	0.0000	0.000000	448.89	0.00	0.00
09/25/2019	31398VJ98	INTEREST EARNED ON F H L M C MLTCL MTG 4.251% 1/25/20 \$1 PV ON 2511.6400 SHARES DUE 9/25/2019 \$0.00354/PV ON 709,002.27 PV DUE 9/25/19	0.0000	0.000000	2,511.64	0.00	0.00
09/25/2019	31403DJZ3	INTEREST EARNED ON F N M A #745580 5.000% 6/01/36 \$1 PV ON 392.0900 SHARES DUE 9/25/2019 AUGUST FNMA DUE 9/25/19	0.0000	0.000000	392.09	0.00	0.00
09/25/2019	31403GXF4	INTEREST EARNED ON F N M A #748678 5.000% 10/01/33 \$1 PV ON 7.4600 SHARES DUE 9/25/2019 AUGUST FNMA DUE 9/25/19	0.0000	0.000000	7.46	0.00	0.00
09/25/2019	31406PQY8	INTEREST EARNED ON F N M A #815971 5.000% 3/01/35 \$1 PV ON 663.4800 SHARES DUE 9/25/2019 AUGUST FNMA DUE 9/25/19	0.0000	0.000000	663.48	0.00	0.00
09/25/2019	31406XWT5	INTEREST EARNED ON F N M A #823358 4.722% 2/01/35 \$1 PV ON 431.7000 SHARES DUE 9/25/2019 AUGUST FNMA DUE 9/25/19	0.0000	0.000000	431.70	0.00	0.00
09/25/2019	31407BXH7	INTEREST EARNED ON F N M A #826080 5.000% 7/01/35 \$1 PV ON 79.0800 SHARES DUE 9/25/2019 AUGUST FNMA DUE 9/25/19	0.0000	0.000000	79.08	0.00	0.00
09/25/2019	31410F4V4	INTEREST EARNED ON F N M A #888336 5.000% 7/01/36 \$1 PV ON 767.0300 SHARES DUE 9/25/2019 AUGUST FNMA DUE 9/25/19	0.0000	0.000000	767.03	0.00	0.00
09/25/2019	31417YAY3	INTEREST EARNED ON F N M A #MA0022 4.500% 4/01/29 \$1 PV ON 62.5700 SHARES DUE 9/25/2019 AUGUST FNMA DUE 9/25/19	0.0000	0.000000	62.57	0.00	0.00
09/26/2019	912828F39	PAID ACCRUED INTEREST ON PURCHASE OF U S TREASURY NT 1.750% 9/30/19	0.0000	0.000000	-11,554.30	0.00	0.00
09/26/2019	912828WU0	BOOK VALUE OF U S TREASURY I P S 0.125% 7/15/24 ADJUSTED BY 9360.00 UNITS INCREASE TO ADJUST FOR CHANGE IN CPI	0.0000	0.000000	0.00	0.00	0.00
09/26/2019	912828WU0	FED BASIS OF U S TREASURY I P S 0.125% 7/15/24 ADJUSTED BY 9360.00 UNITS INCREASE TO ADJUST FOR CHANGE IN CPI	0.0000	0.000000	0.00	9,360.00	0.00
09/26/2019	912828WU0	PAR VALUE OF U S TREASURY I P S 0.125% 7/15/24 ADJUSTED BY 9360.0000 UNITS INCREASE TO ADJUST FOR CHANGE IN CPI	9,360.0000	0.000000	0.00	0.00	0.00
09/26/2019	912828WU0	STATE COST OF U S TREASURY I P S 0.125% 7/15/24 ADJUSTED BY 9360.00 UNITS INCREASE TO ADJUST FOR CHANGE IN CPI	0.0000	0.000000	0.00	0.00	0.00
09/30/2019	89114MM20	INTEREST EARNED ON TORONTO DOMINION C D 2.470% 9/30/19 \$1 PV ON 2000000.0000 SHARES DUE 9/30/2019 INTEREST ON 9/30/19 MATURITY	0.0000	0.000000	17,015.56	0.00	0.00
09/30/2019	9128282X7	INTEREST EARNED ON U S TREASURY NT 1.375% 9/30/19 \$1 PV ON 10000000.0000 SHARES DUE 9/30/2019	0.0000	0.000000	68,750.00	0.00	0.00
09/30/2019	9128284D9	INTEREST EARNED ON U S TREASURY NT 2.500% 3/31/23 \$1 PV ON 10000000.0000 SHARES DUE 9/30/2019	0.0000	0.000000	125,000.00	0.00	0.00
09/30/2019	912828F39	INTEREST EARNED ON U S TREASURY NT 1.750% 9/30/19 \$1 PV ON 1350000.0000 SHARES DUE 9/30/2019	0.0000	0.000000	11,812.50	0.00	0.00
09/30/2019	912828F39	INTEREST EARNED ON U S TREASURY NT 1.750% 9/30/19 \$1 PV ON 5800000.0000 SHARES DUE 9/30/2019	0.0000	0.000000	50,750.00	0.00	0.00

U.S. Bank
Transaction History
07/01/2019 Thru 09/30/2019

Entry Date	CUSIP Id	Explanation	Units	Price	Net Cash Amt	Cost	Gain/Loss
09/30/2019	912828J76	INTEREST EARNED ON U S TREASURY NT SHARES DUE 9/30/2019	1.750% 3/31/22 \$1 PV ON 5000000.0000	0.0000	0.000000	43,750.00	0.00 0.00
09/30/2019	912828L57	INTEREST EARNED ON U S TREASURY NT 13000000.0000 SHARES DUE 9/30/2019	1.750% 9/30/22 \$1 PV ON	0.0000	0.000000	113,750.00	0.00 0.00
09/30/2019	912828T34	INTEREST EARNED ON U S TREASURY NT SHARES DUE 9/30/2019	1.125% 9/30/21 \$1 PV ON 7000000.0000	0.0000	0.000000	39,375.00	0.00 0.00
09/30/2019	912828TR1	INTEREST EARNED ON U S TREASURY NT 11650000.0000 SHARES DUE 9/30/2019	1.000% 9/30/19 \$1 PV ON	0.0000	0.000000	58,250.00	0.00 0.00
09/30/2019		CASH DISBURSEMENT PAID TO BANC OF CALIFORNIA OUTGOING DOMESTIC WIRE PER DIR DTD 9/26/19		0.0000	0.000000	-25,000,000.00	0.00 0.00
09/30/2019		CASH DISBURSEMENT PAID TO BANC OF CALIFORNIA OUTGOING DOMESTIC WIRE PER DIR DTD 9/26/19		0.0000	0.000000	-15,000,000.00	0.00 0.00
TOTAL OTHER TRANSACTIONS			46,072.0000		-107,644,240.87	38,598.38	0.00

September 30, 2019

Orange County Sanitation District



**Investment Measurement Service
Quarterly Review**

Information contained herein includes confidential, trade secret and proprietary information. Neither this Report nor any specific information contained herein is to be used other than by the intended recipient for its intended purpose or disseminated to any other person without Callan's permission. Certain information herein has been compiled by Callan and is based on information provided by a variety of sources believed to be reliable for which Callan has not necessarily verified the accuracy or completeness of or updated. This content may consist of statements of opinion, which are made as of the date they are expressed and are not statements of fact. This content is for informational purposes only and should not be construed as legal or tax advice on any matter. Any decision you make on the basis of this content is your sole responsibility. You should consult with legal and tax advisers before applying any of this information to your particular situation. Past performance is no guarantee of future results. For further information, please see Appendix for Important Information and Disclosures.

Table of Contents

September 30, 2019

Capital Market Review	1
<hr/>	
Active Management Overview	
Market Overview	7
Domestic Fixed Income	8
<hr/>	
Asset Allocation	
Investment Manager Asset Allocation	10
Investment Manager Returns	11
Asset Class Risk and Return	15
<hr/>	
Manager Analysis	
Chandler-Long Term Operating Fund	17
Chandler-Liquid Operating Money	21
<hr/>	
Callan Research/Education	23
<hr/>	
Definitions	26
<hr/>	
Disclosures	31

Orange County Sanitation District Executive Summary for Period Ending September 30, 2019

Asset Allocation

	September 30, 2019			Inv. Return	June 30, 2019	
	Market Value	Weight	Net New Inv.		Market Value	Weight
Domestic Fixed Income						
Long Term Operating Fund*	548,126,927	88.93%	(15,000,000)	4,926,318	558,200,609	77.23%
Liquid Operating Monies*	68,233,258	11.07%	(97,000,000)	666,613	164,566,646	22.77%
Total Fund	\$616,360,185	100.0%	\$(112,000,000)	\$5,592,930	\$722,767,255	100.0%

Performance

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years
Domestic Fixed Income					
Long Term Operating Fund^	0.88%	5.57%	2.04%	1.98%	1.40%
Chandler	0.88%	5.57%	2.04%	-	-
Blmbg Govt/Cred 1-5 Year Idx	0.89%	6.01%	2.01%	2.01%	1.65%
ML 1-5 Govt/Corp	0.90%	6.02%	2.04%	2.05%	1.70%
Liquid Operating Monies^	0.58%	2.48%	1.61%	1.08%	0.81%
Chandler	0.58%	2.48%	1.61%	-	-
Citigroup 3-Month Treasury Bill	0.56%	2.36%	1.52%	0.96%	0.70%
Total Fund	0.86%	4.98%	1.91%	1.78%	1.26%
Target*	0.84%	5.28%	1.94%	1.83%	1.50%

* Current Quarter Target = 80.0% ML 1-5 Govt/Corp and 20.0% FTSE 3mo T-Bills.

^Assets were transferred in kind to Chandler on 12/1/2014. Previous performance reflects PIMCO.

Recent Developments

- During the quarter, \$15.0 million was withdrawn from the Long Term Operating Fund and \$97.0 million was withdrawn from the Liquid Operating Monies for a combined withdrawal of \$112.0 million.

Organizational Issues

- N/A

Fixed Income Market Snapshot

- The Federal Open Market Committee (FOMC) met market expectations with two 25 basis point rate cuts in the third quarter (July and September) to finish the period at a target range of 1.75-2.00%. Another rate cut is expected at the Fed's meeting in late October. Yields fell across the maturity spectrum, with the long-end of the curve realizing the largest drop. Significantly, the closely watched spread between the two- and ten-year Treasury yields briefly inverted toward the end of August and the 30-year rate fell below 2.00% to 1.94% on August 28th. In September, the repo market saw a significant increase in volatility, with rates reaching as high

as 10%, causing the Fed to temporarily inject funds in an attempt to level out the market. The spike was largely idiosyncratic and partially caused by the simultaneous settling of a significant amount of Treasury debt and federal tax payments coming due. Treasuries rallied in the third quarter in response to fears of slowing growth, geopolitical concerns, and trade tensions with China. The two-year fell 12 bps to finish the quarter at 1.63%, the 10-year fell 32 bps to finish at 1.68% and the 30-year fell 40 bps to finish at 2.12%. Corporate spreads were steady in the third quarter as issuance was offset by investor demand; investment grade corporates performed well

Manager Performance

- The Long Term Operating Fund returned 0.88% during the quarter, which was generally in line with the return of the ML U.S. 1-5 Corp/Gov Index (+0.90%). Over the trailing 12 months, the Fund has underperformed the benchmark by 45 basis points. However, ranked against the Callan Short Term Fixed Income Peer Group, the Fund is performing in the top quartile over the trailing year (15th percentile) and ranked above median in the third quarter of 2019 (37th percentile). The manager increased the portfolio's duration slightly in the third quarter to 2.46 from 2.43 in the prior quarter. Even with the uptick, duration remains lower than that of the benchmark. From a term structure perspective, the portfolio has larger exposure to the front and back end of the curve versus the benchmark. The fund also holds overweight positions in the Agency, Asset Backed and Corporate sectors which benefited relative performance during the quarter. The portfolio had less than 30% invested in credit (22%) and less than the permitted 20% invested in the combination of asset-backed securities (9%), commercial mortgage backed securities (0%), and CMOs (0%) as of September 30, 2019 (see page 20).
- The Liquid Operating Portfolio appreciated 0.55% (after fees) in the third quarter, performing in line with the 3-month Treasury return of 0.56%. Over the trailing 12 months, the Portfolio gained 2.33%, which ranked in the 26th percentile among peers.

Cordially,



Gordon M. Weightman, CFA
Senior Vice President

Capital Market Review

U.S. EQUITY

U.S. equity markets posted mixed results amid a market that saw 30-year Treasury yields hit historic lows and the most meaningful, albeit short-lived, factor rotation among equities since the Global Financial Crisis (GFC). Large cap (+1.4%) and mid cap stocks (+0.5%) posted modest gains for the quarter while small caps declined (Russell 2000: -2.4%). Ongoing U.S.-China trade tension, earnings and interest rate uncertainty, and the global political landscape continued to drive investor uncertainty.

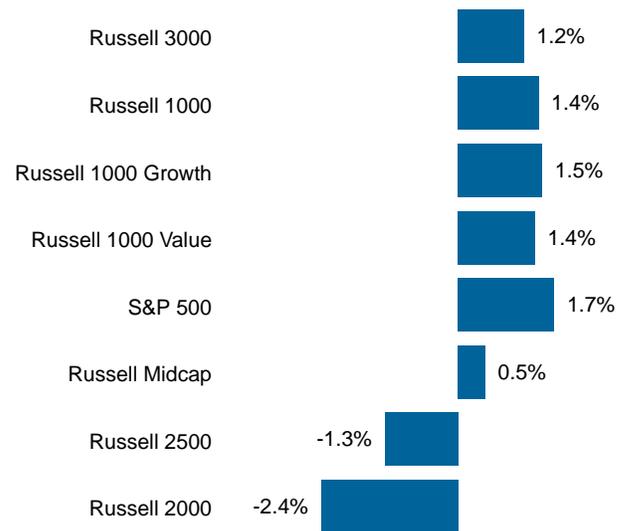
Large Cap U.S. Equity (S&P 500: +1.7%; Russell 1000: +1.4%)

- Top sectors were in defensive areas including Utilities (+9.3%), Real Estate (+7.7%), and Consumer Staples (+6.1%) in response to investors' continued flight to quality.
- Energy, hurt by falling oil prices, fell 6.3%; Health Care lagged (-2.2%) amid discussions around price transparency and pricing reform by U.S. presidential candidates.
- Cyclical sector exposure has been volatile given uncertainty around the trade deal (and continued sideways movement of markets) along with slowed global growth.
- Up to September, momentum stocks (which have shifted to include many of the market's least volatile stocks) outperformed as investors shunned the cheapest quintile of value (and more volatile) stocks. This trend sharply reversed in early September as the 10-year Treasury yield rose from 1.46% to 1.73% and momentum stocks fell precipitously while value stocks traded up over the course of two days. The magnitude of the reversal gave a boost to value stocks across market capitalizations for the quarter.

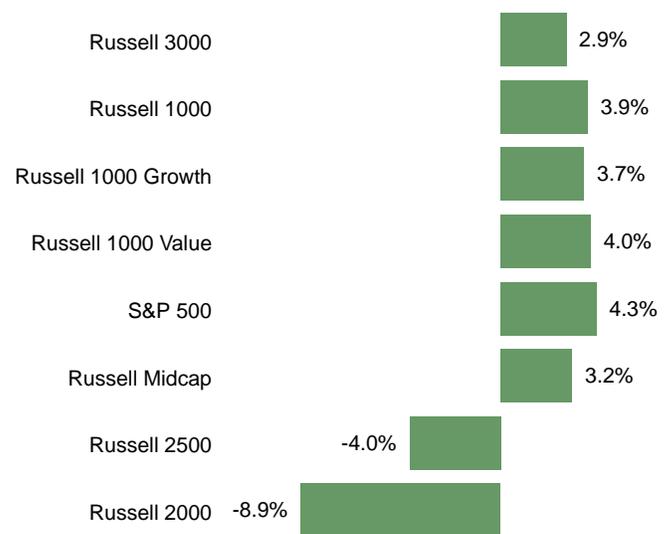
Growth vs. Value (Russell 1000 Value: +1.4%, Russell 1000 Growth: +1.5%; Russell 2000 Value: -0.6%, Russell 2000 Growth: -4.2%)

- While value continues to trail growth year-to-date, it gained ground during September's factor reversal, finishing the quarter essentially in line with growth within large caps.
- Within small cap, value benefited as investors favored the cheapest 20% of small caps while the most expensive quintile within the Russell 2000 declined double digits.

U.S. Equity: Quarterly Returns

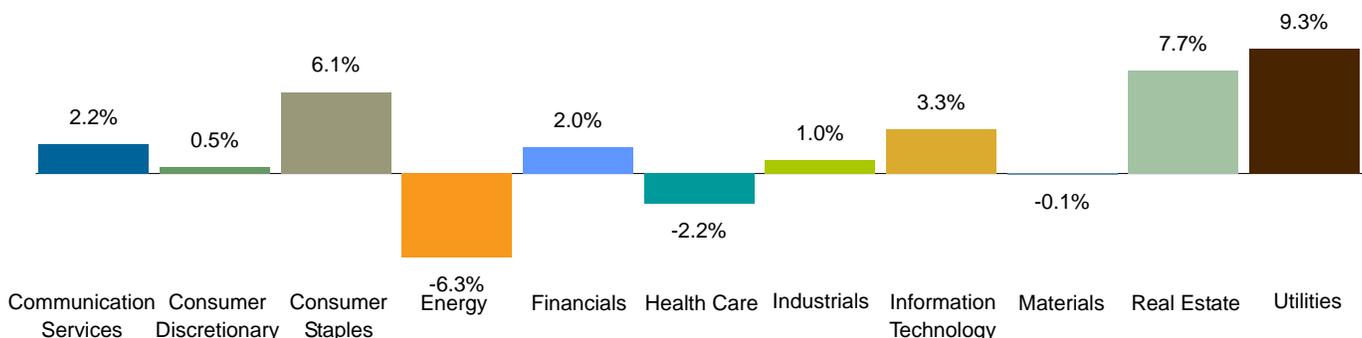


U.S. Equity: One-Year Returns



Sources: FTSE Russell, Standard & Poor's

S&P Sector Returns, Quarter Ended September 30, 2019



Source: Standard & Poor's

NON-U.S./GLOBAL EQUITY

Global equity markets turned negative in the third quarter. After more modest positive results in the second quarter, fears over continued trade war impacts, a no-deal Brexit, and a potential global slowdown impacted investor behavior. Given this backdrop, more defensive areas of the market outperformed.

Global/Non-U.S. Developed (MSCI EAFE: -1.1%; MSCI World ex USA: -0.9%; MSCI ACWI ex USA: -1.8%; MSCI Hong Kong: -11.9%; MSCI Japan: +3.1%)

- Boris Johnson's attempted suspension of Parliament and no-deal Brexit proclamations weighed on U.K. stocks (-2.5%).
- Germany (-4.0%) experienced recession fears; industrial production dropped 1.5% in June from the prior month, while the estimate was -0.5%.
- Hong Kong protests proved to be a headwind as the market fell -11.9% over the three-month period.
- Japan was one of the few bright spots within developed markets as low short-term interest rates remain unchanged and a resolution to the Japan/South Korea trade war looked more promising.
- Cyclical sectors trailed as investors were positioned defensively; Energy (-6.5%) had the worst performance.
- For the quarter, factor performance reflected cautious investor behavior as quality and low volatility did well. However, the month of September saw a brief recovery in value across all markets as trade talks improved and central banks eased.

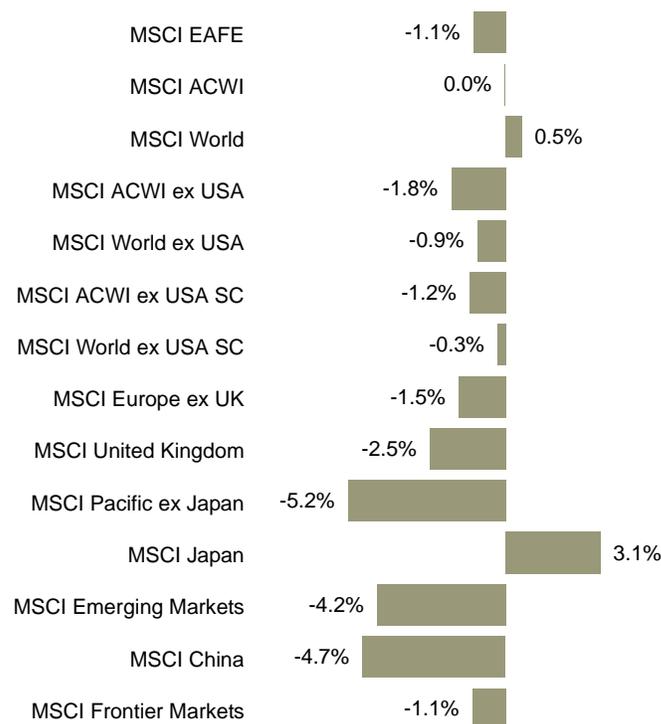
Emerging Markets (MSCI Emerging Markets Index: -4.2%)

- Emerging markets fared worst among global markets; uncertainty weighed heavily on these volatile countries.
- Though most emerging market countries fell during the quarter, Turkey (+11.7%) had strong results as its central bank cut rates two times in less than two months.
- Factor performance in emerging markets favored quality and price momentum as investors moved toward safe assets.

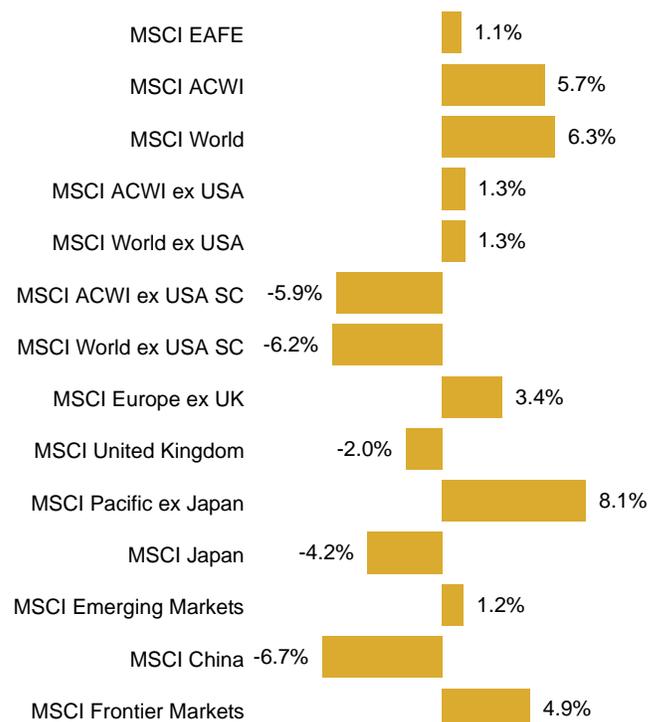
Non-U.S. Small Cap (MSCI World ex USA Small Cap: -0.3%; MSCI EM Small Cap: -4.6%; MSCI ACWI ex USA Small Cap: -1.2%)

- Small cap marginally outperformed large cap, both in developed and all country ex-U.S. markets; despite overall defensive posturing, idiosyncratic businesses pushed past global market issues.
- Japan (+4.0%) helped drive developed returns as small cap companies also benefited from low rates and resolved trade tensions; Hong Kong (-7.6%) detracted as local businesses were hurt by the protests.

Global Equity: Quarterly Returns



Global Equity: One-Year Returns



Source: MSCI

FIXED INCOME

The Federal Open Market Committee (FOMC) cut short-term interest rates by 25 basis points twice in the third quarter amid an economic backdrop that has been supported by strong consumer spending and a solid labor market, but challenged by weakening manufacturing data and business investment. The Fed chair stated that the FOMC would act as “appropriate to sustain the expansion,” and the European Central Bank and other central banks around the world also moved in the direction of easing monetary policy. Yields fell in the U.S. and abroad given global growth headwinds fueled by mounting trade tensions as well as geopolitical uncertainty.

U.S. Fixed Income (Bloomberg Barclays US Aggregate Bond Index: +2.3%)

- Treasuries returned 2.4% as rates fell across the yield curve.
- While the widely monitored 2- and 10-year key rates remained positive, the spread between the 3-month and 10-year key rates remained inverted.
- Long Treasuries soared (+7.9%) as 30-year yields fell roughly 40 bps.
- Nominal Treasuries outperformed TIPS as inflation expectations continued to fall; 10-year breakeven spreads were 1.53% as of quarter-end, down from 1.69% as of June 30. The 10-year real yield dipped briefly into negative territory in early September.

Investment Grade Corporates (Bloomberg Barclays Corporate: +3.1%)

- Investment grade corporate credit spreads were range-bound, but their yield advantage was enough to generate positive excess returns versus like-duration Treasuries.
- Issuance in the corporate bond market was \$320 billion in the quarter, \$50 billion higher than a year ago; demand remained solid. BBB-rated corporates (+3.1%) modestly outperformed A-rated or higher corporates (+3.0%).

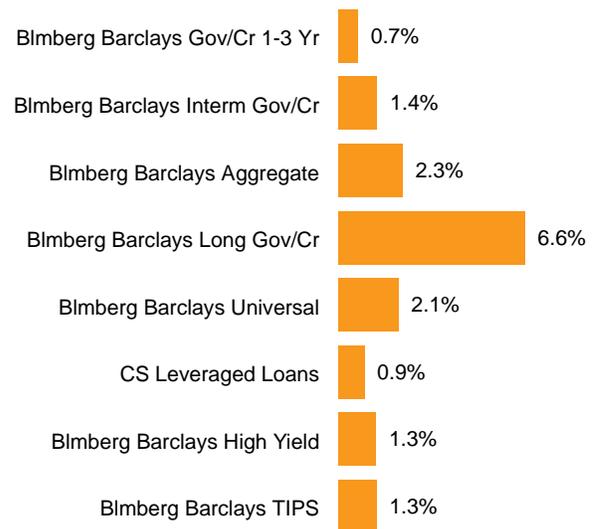
High Yield (Bloomberg Barclays Corporate High Yield: +1.3%)

- BB-rated corporates (+2.0%) outperformed CCC-rated corporates (-1.8%). BB- and B-rated spreads narrowed slightly, but the rally in rates helped drive outperformance as a result of higher quality bonds’ greater sensitivity to interest rate movements.
- CCC-rated bond spreads widened significantly, representing some concern about deteriorating quality at the lower-end of the spectrum.

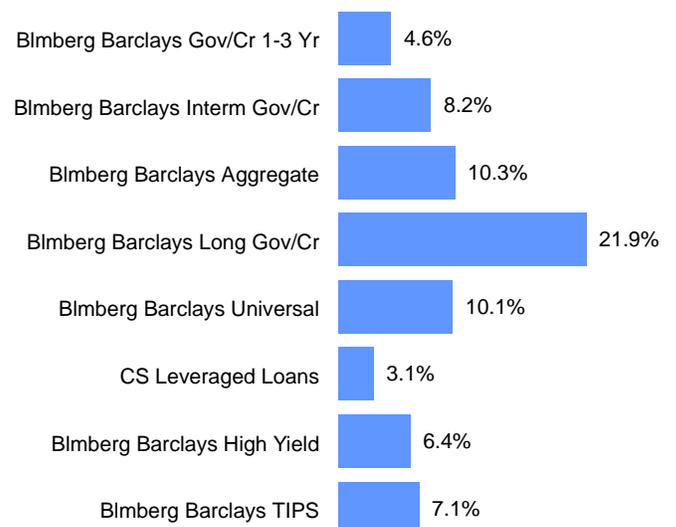
Leveraged Loans (CS Leveraged Loans: +0.9%)

- Bank loans, which have floating rate coupons, underperformed high yield bonds as rates rallied and investors worried about deteriorating credit quality.
- CLO issuance continued to exceed expectations, providing positive technical support to the leveraged loan market.

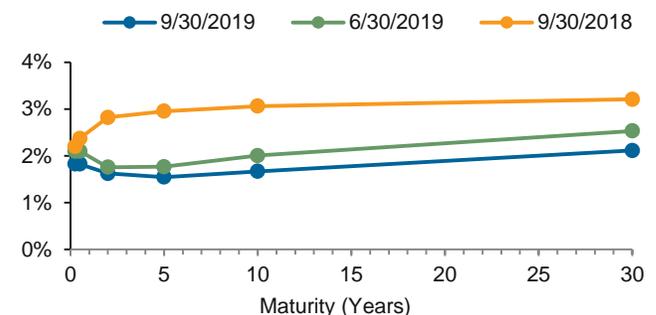
U.S. Fixed Income: Quarterly Returns



U.S. Fixed Income: One-Year Returns



U.S. Treasury Yield Curves



Sources: Bloomberg, Bloomberg Barclays, Credit Suisse

NON-U.S. FIXED INCOME

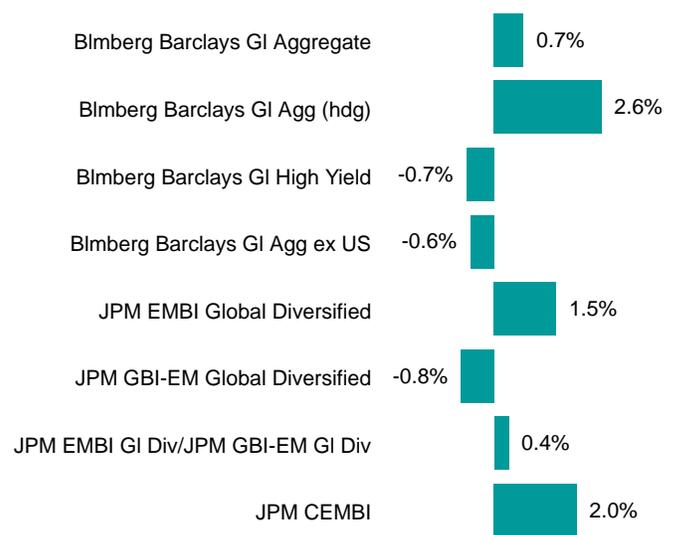
Global Fixed Income (Bloomberg Barclays Global Aggregate (unhedged): +0.7%; (hedged): +2.6%)

- Developed market sovereign bond yields rallied, pushing European sovereigns further into negative territory as the ECB reduced its deposit rate and announced a new bond purchasing stimulus program.
- Negative yielding debt totals nearly \$17 trillion, a record high.
- The U.S. dollar was up 3.4% versus a basket of trade partner currencies and up 4.3% vs the beleaguered euro.

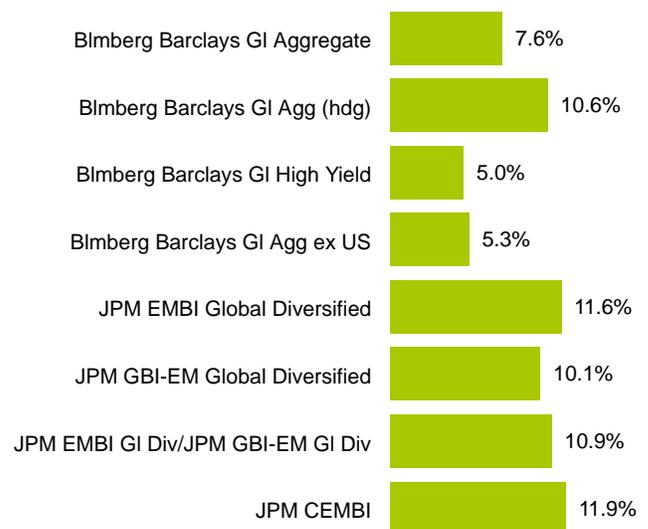
US\$ EMD (JPM EMBI Global Diversified: +1.5%), **Local Currency EMD** (JPM GBI-EM Global Diversified: -0.8%)

- Broadly, emerging market currencies depreciated versus the U.S. dollar, hampering local currency returns.
- Within the dollar-denominated benchmark, Argentina (-42%) and Venezuela (-51%) were among the few to post negative returns. Conversely, returns in the local debt benchmark were more mixed with Turkey (+19%) and Argentina (-60%) being outliers.

Global Fixed Income: Quarterly Returns

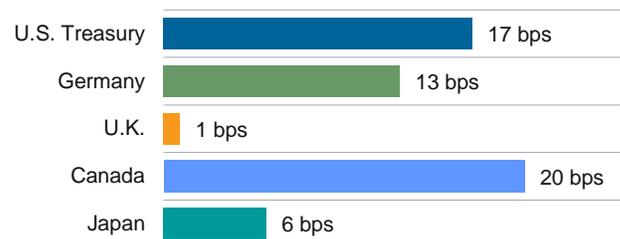


Global Fixed Income: One-Year Returns



Change in 10-Year Global Government Bond Yields

2Q19 to 3Q19



Sources: Bloomberg, Bloomberg Barclays, JP Morgan

Active Management Overview

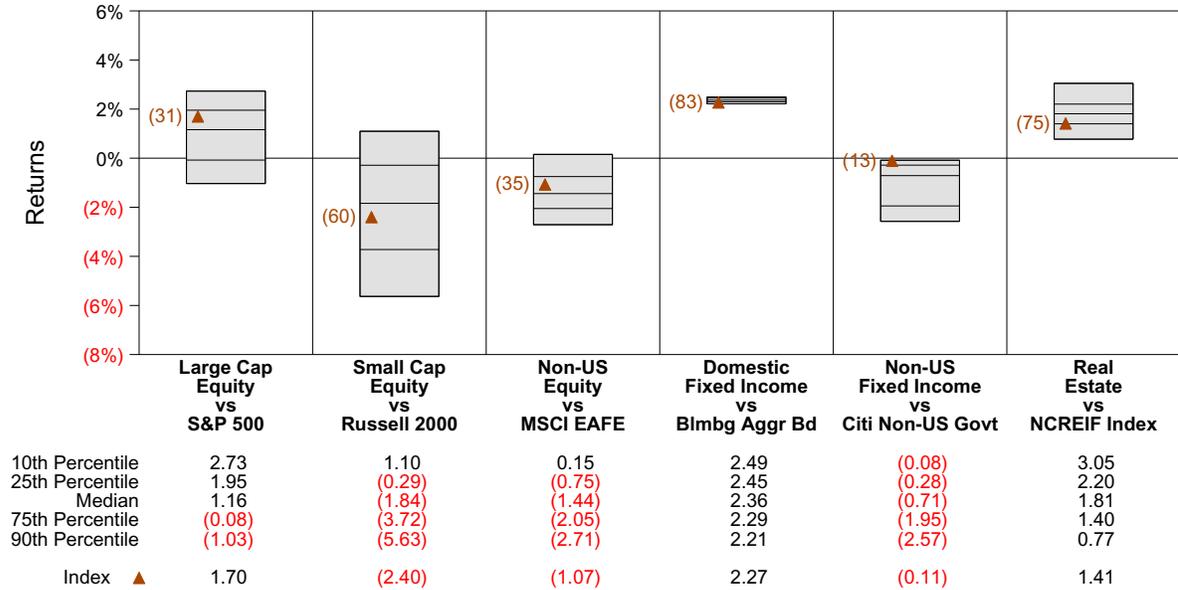
Market Overview

Active Management vs Index Returns

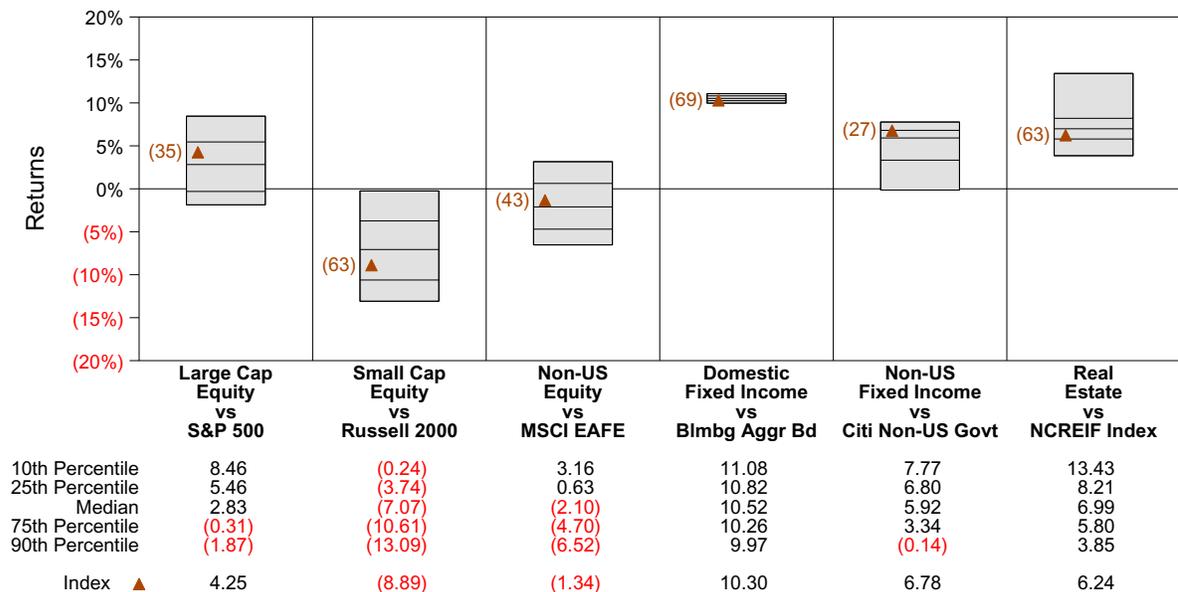
Market Overview

The charts below illustrate the range of returns across managers in Callan's Separate Account database over the most recent one quarter and one year time periods. The database is broken down by asset class to illustrate the difference in returns across those asset classes. An appropriate index is also shown for each asset class for comparison purposes. As an example, the first bar in the upper chart illustrates the range of returns for domestic equity managers over the last quarter. The triangle represents the S&P 500 return. The number next to the triangle represents the ranking of the S&P 500 in the Large Cap Equity manager database.

Range of Separate Account Manager Returns by Asset Class One Quarter Ended September 30, 2019



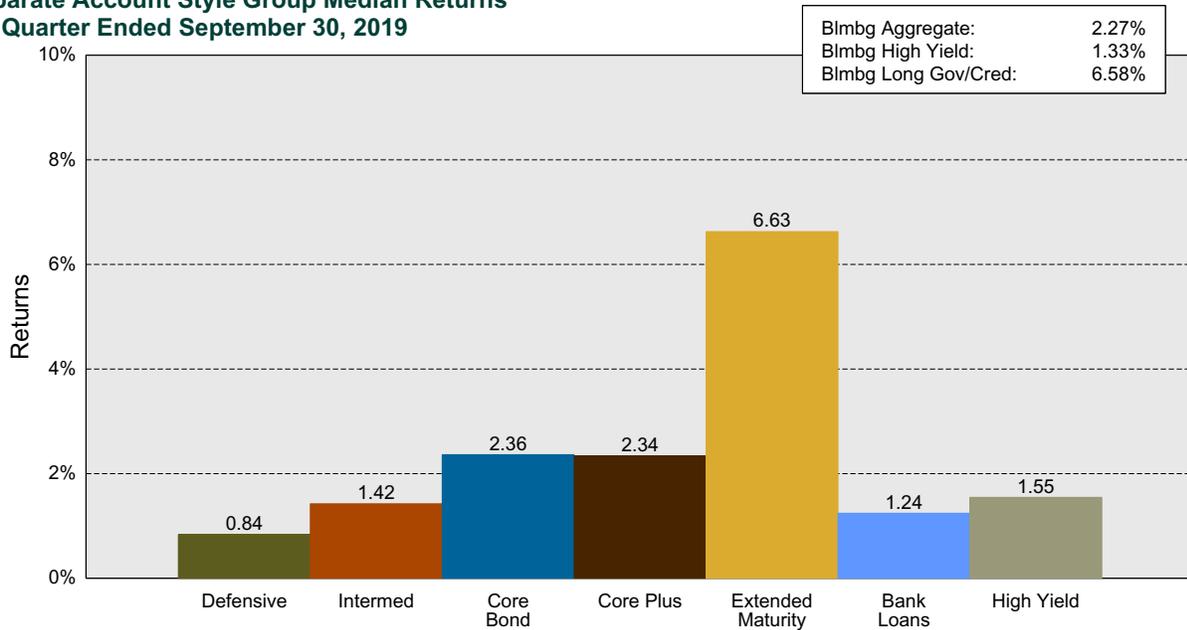
Range of Separate Account Manager Returns by Asset Class One Year Ended September 30, 2019



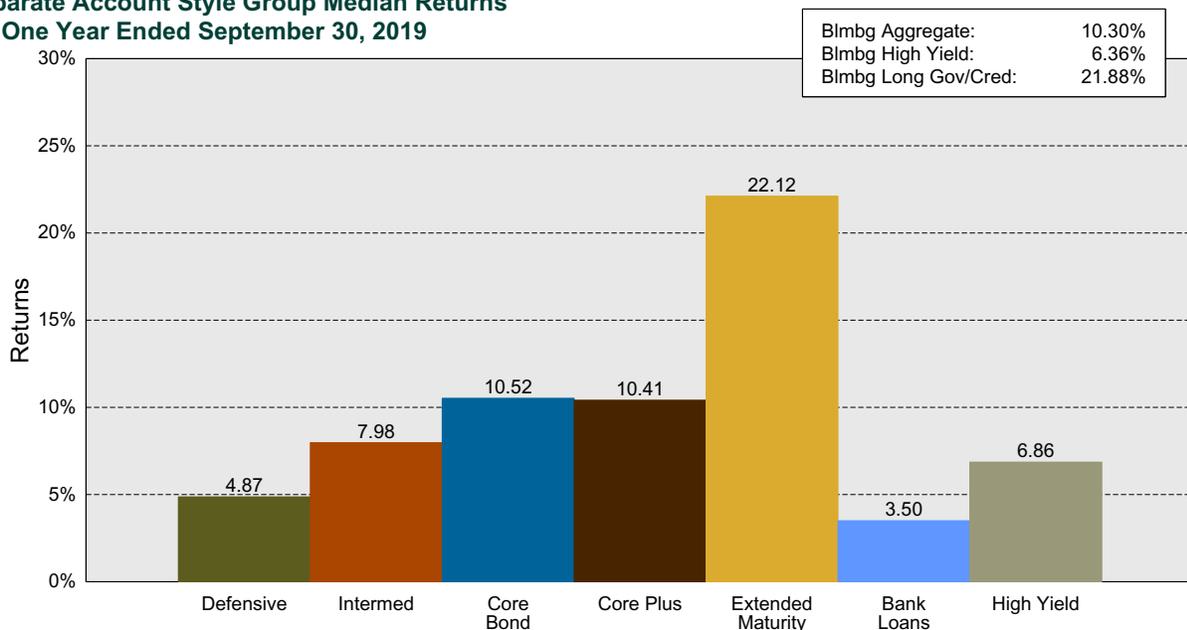
Domestic Fixed Income Active Management Overview

Ten-year U.S. Treasury yields were volatile in the third quarter, especially in September, hitting a 2019 low of 1.40% on Sept. 4, soaring to 1.90% mid-month and closing the quarter at 1.68%, down 32 bps from June 30. U.S. Treasuries thus posted strong results (Bloomberg Barclays US Treasury Index: +2.4%). Long U.S. Treasuries soared (Bloomberg Barclays Long US Treasury Index: +7.9%; +19.8% YTD) in the falling rate environment. The Bloomberg Barclays Aggregate rose 2.3%, bringing its YTD result to an impressive +8.5%. High yield was up just over 1% (+11.4% YTD) but, notably, lower quality significantly underperformed (CCC: -1.8% vs BB: +2.0%, and +5.6% vs +12.8% YTD) representing some concern about deteriorating quality at the lower end of the spectrum. TIPS (Bloomberg Barclays TIPS: +1.3%) underperformed as inflation expectations waned; 10-year breakeven spreads were 1.53% as of quarter-end, down from 1.69% as of 6/30/19. The 10-year real yield dipped briefly into negative territory in early September.

Separate Account Style Group Median Returns for Quarter Ended September 30, 2019



Separate Account Style Group Median Returns for One Year Ended September 30, 2019



Asset Allocation

Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of September 30, 2019, with the distribution as of June 30, 2019. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

Asset Distribution Across Investment Managers

	September 30, 2019		Net New Inv.	Inv. Return	June 30, 2019	
	Market Value	Weight			Market Value	Weight
Domestic Fixed Income						
Long Term Operating Fund*	548,126,927	88.93%	(15,000,000)	4,926,318	558,200,609	77.23%
Liquid Operating Monies*	68,233,258	11.07%	(97,000,000)	666,613	164,566,646	22.77%
Total Fund	\$616,360,185	100.0%	\$(112,000,000)	\$5,592,930	\$722,767,255	100.0%

*Chandler replaced PIMCO during the 4th quarter of 2014. Assets were transferred in-kind as of 12/01/2014.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended September 30, 2019. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended September 30, 2019

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years
Domestic Fixed Income					
Long Term Operating Fund^	0.88%	5.57%	2.04%	1.98%	1.40%
Chandler	0.88%	5.57%	2.04%	-	-
Blmbg Govt/Cred 1-5 Year Idx	0.89%	6.01%	2.01%	2.01%	1.65%
ML 1-5 Govt/Corp	0.90%	6.02%	2.04%	2.05%	1.70%
Liquid Operating Monies^	0.58%	2.48%	1.61%	1.08%	0.81%
Chandler	0.58%	2.48%	1.61%	-	-
Citigroup 3-Month Treasury Bill	0.56%	2.36%	1.52%	0.96%	0.70%
Total Fund	0.86%	4.98%	1.91%	1.78%	1.26%
Target*	0.84%	5.28%	1.94%	1.83%	1.50%

* Current Quarter Target = 80.0% ML:Corp/Gov 1-5 Yr and 20.0% FTSE 3 Mo T-Bill.

^Assets were transferred in kind to Chandler on 12/1/2014. Previous performance reflects PIMCO.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended September 30, 2019. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended September 30, 2019

	Last 10 Years	Last 15 Years	Last 24 Years
Domestic Fixed Income			
Long Term Operating Fund^	2.19%	3.11%	4.25%
Blmbg Govt/Cred 1-5 Year Idx	2.12%	2.89%	4.08%
ML 1-5 Govt/Corp	2.18%	2.92%	4.11%
Liquid Operating Monies^	0.63%	1.54%	2.58%
Citigroup 3-Month Treasury Bill	0.51%	1.32%	2.29%
Total Fund	1.90%	2.81%	3.98%
Target*	1.85%	2.60%	3.75%

* Current Quarter Target = 80.0% ML:Corp/Gov 1-5 Yr and 20.0% FTSE 3 Mo T-Bill.

^Assets were transferred in kind to Chandler on 12/1/2014. Previous performance reflects PIMCO.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

	12/2018- 9/2019	2018	2017	2016	2015
Domestic Fixed Income					
Long Term Operating Fund^	4.17%	1.60%	1.18%	1.58%	0.85%
Chandler	4.17%	1.60%	1.18%	1.58%	0.85%
BImbg Govt/Cred 1-5 Year Idx	4.48%	1.38%	1.27%	1.56%	0.97%
ML 1-5 Govt/Corp	4.52%	1.40%	1.28%	1.62%	1.05%
Liquid Operating Monies^	1.88%	1.90%	0.91%	0.47%	0.22%
Chandler	1.88%	1.90%	0.91%	0.47%	0.22%
Citigroup 3-Month Treasury Bill	1.78%	1.86%	0.84%	0.27%	0.03%
Total Fund	3.74%	1.72%	1.02%	1.15%	0.80%
Target*	3.97%	1.49%	1.19%	1.35%	0.85%

* Current Quarter Target = 80.0% ML:Corp/Gov 1-5 Yr and 20.0% FTSE 3 Mo T-Bill.

^Assets were transferred in kind to Chandler on 12/1/2014. Previous performance reflects PIMCO.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

	2014	2013	2012	2011	2010
Domestic Fixed Income					
Long Term Operating Fund^	1.98%	(1.77%)	3.06%	4.59%	4.42%
Blmbg Govt/Cred 1-5 Year Idx	1.42%	0.28%	2.24%	3.14%	4.08%
ML 1-5 Govt/Corp	1.51%	0.32%	2.47%	3.10%	4.17%
Liquid Operating Monies^	0.09%	0.13%	0.17%	0.24%	0.25%
Citigroup 3-Month Treasury Bill	0.03%	0.05%	0.07%	0.08%	0.13%
Total Fund	1.73%	(1.49%)	2.70%	3.70%	3.68%
Target*	1.21%	0.26%	1.99%	2.49%	3.36%

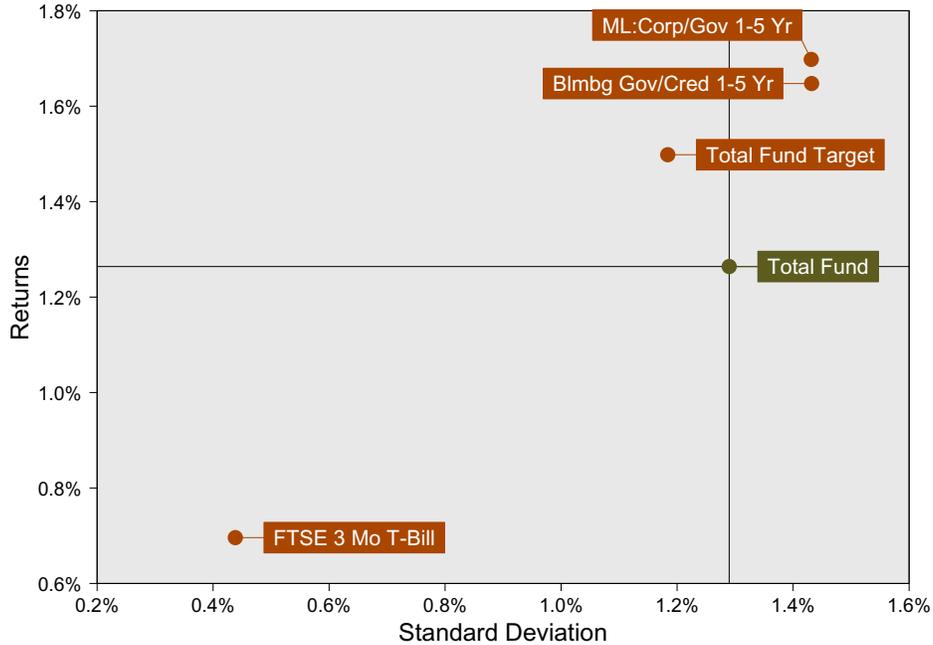
* Current Quarter Target = 80.0% ML:Corp/Gov 1-5 Yr and 20.0% FTSE 3 Mo T-Bill.

^Assets were transferred in kind to Chandler on 12/1/2014. Previous performance reflects PIMCO.

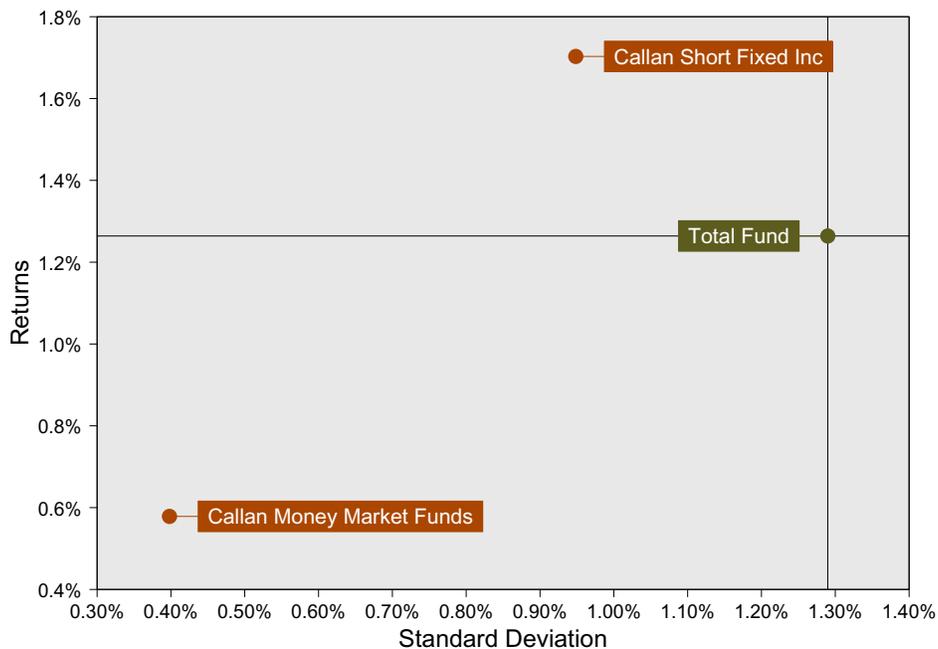
Asset Class Risk and Return

The charts below show the seven year annualized risk and return for each asset class component of the Total Fund. The first graph contrasts these values with those of the appropriate index for each asset class. The second chart contrasts them with the risk and return of the median portfolio in each of the appropriate CAI comparative databases. In each case, the crosshairs on the chart represent the return and risk of the Total Fund.

Seven Year Annualized Risk vs Return Asset Classes vs Benchmark Indices



Seven Year Annualized Risk vs Return Asset Classes vs Asset Class Median



Manager Analysis

Chandler-Long Term Operating Fund Period Ended September 30, 2019

Investment Philosophy

Chandler Asset Management's Short Term Bond strategy is driven by quantitative models and focuses on active duration management, sector selection and term structure. The strategy seeks to achieve consistent above-benchmark returns with low volatility relative to the style's performance benchmark. The firm has a unique focus on high quality fixed income management, and places risk control as a higher objective than return. Assets were transferred in kind to Chandler on 12/1/2014. Previous performance reflects PIMCO.

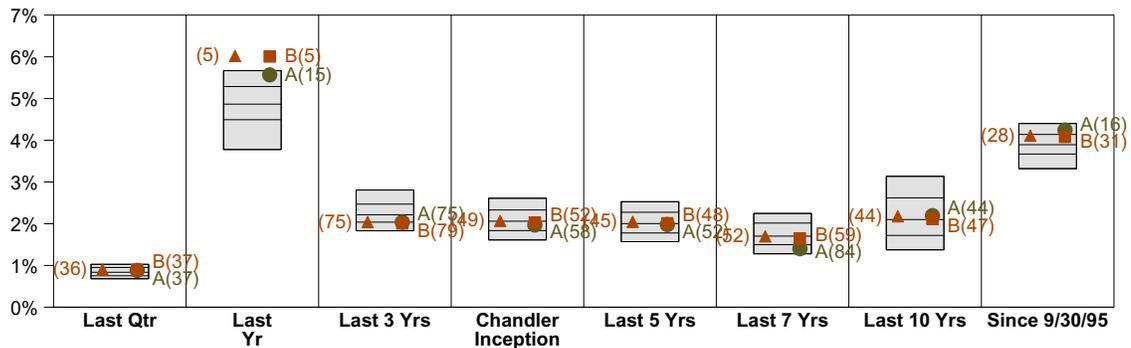
Quarterly Summary and Highlights

- Long Term Operating Fund's portfolio posted a 0.88% return for the quarter placing it in the 37 percentile of the Callan Short Term Fixed Income group for the quarter and in the 15 percentile for the last year.
- Long Term Operating Fund's portfolio underperformed the ML:Corp/Gov 1-5 Yr by 0.02% for the quarter and underperformed the ML:Corp/Gov 1-5 Yr for the year by 0.45%.

Quarterly Asset Growth

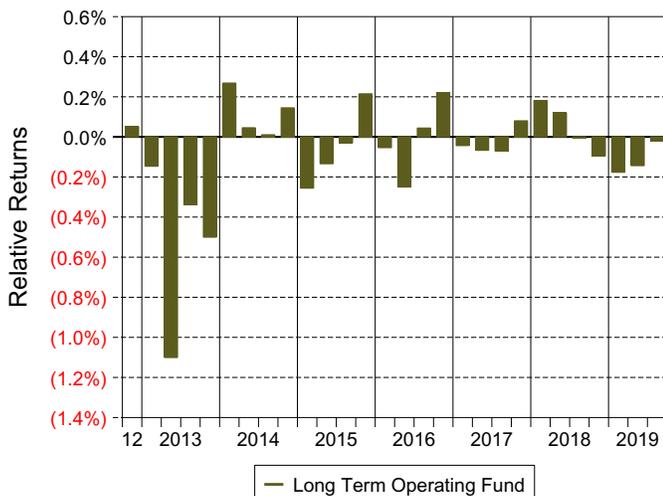
Beginning Market Value	\$558,200,609
Net New Investment	\$-15,000,000
Investment Gains/(Losses)	\$4,926,318
Ending Market Value	\$548,126,927

Performance vs Callan Short Term Fixed Income (Gross)

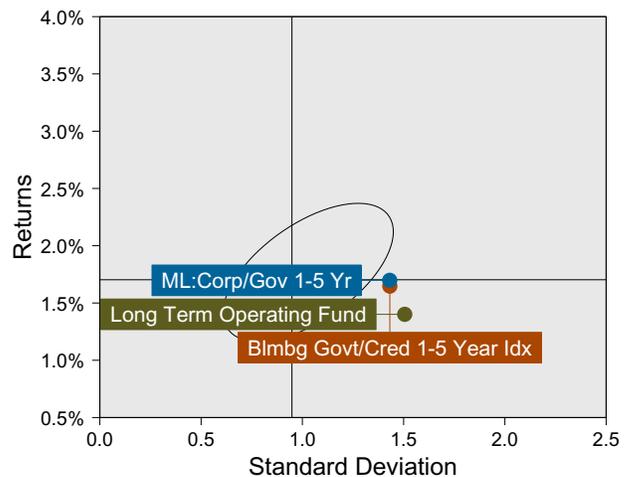


10th Percentile	1.03	5.67	2.81	2.61	2.53	2.25	3.14	4.40	
25th Percentile	0.95	5.29	2.47	2.33	2.27	2.02	2.62	4.14	
Median	0.84	4.87	2.21	2.06	2.00	1.70	2.10	3.89	
75th Percentile	0.75	4.49	2.04	1.84	1.78	1.50	1.72	3.67	
90th Percentile	0.68	3.78	1.83	1.61	1.57	1.28	1.37	3.32	
Long Term Operating Fund	● A	0.88	5.57	2.04	1.97	1.98	1.40	2.19	4.25
Bmlbg Govt/Cred 1-5 Year Idx	■ B	0.89	6.01	2.01	2.03	2.01	1.65	2.12	4.08
ML:Corp/Gov 1-5 Yr	▲	0.90	6.02	2.04	2.07	2.05	1.70	2.18	4.11

Relative Return vs ML:Corp/Gov 1-5 Yr



Callan Short Term Fixed Income (Gross) Annualized Seven Year Risk vs Return

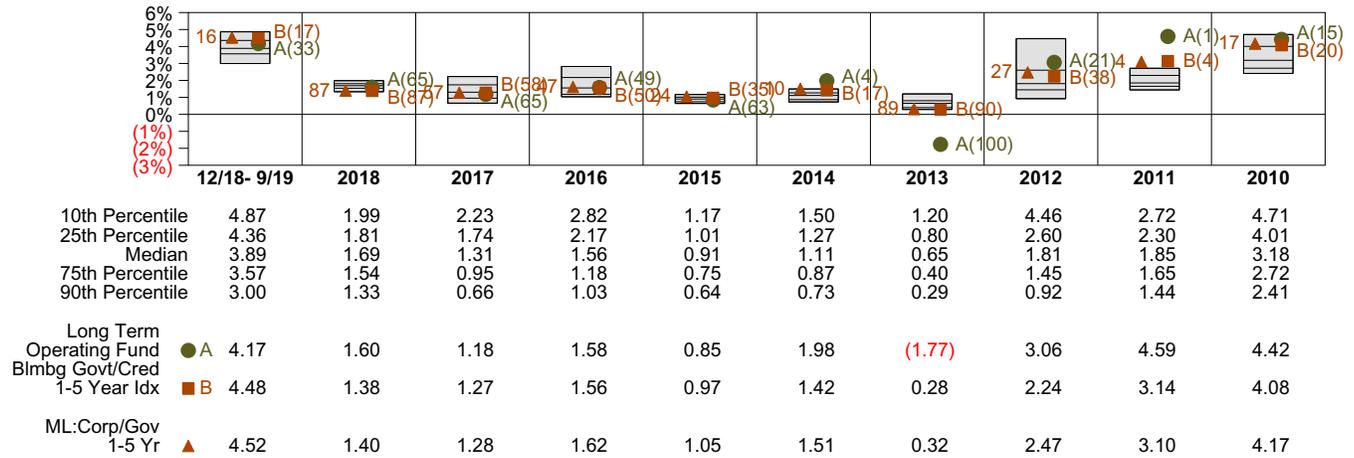


Long Term Operating Fund Return Analysis Summary

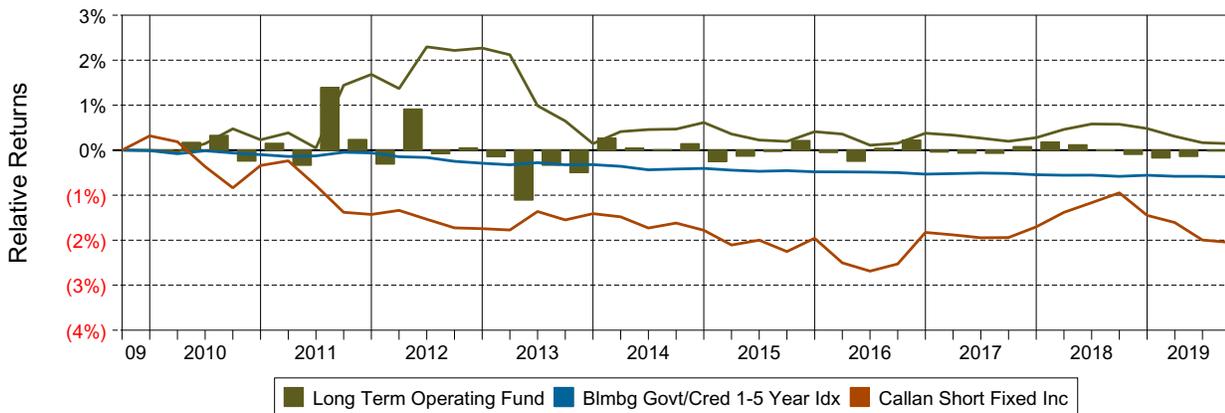
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures. Assets were transferred in kind to Chandler on 12/1/2014. Previous performance reflects PIMCO.

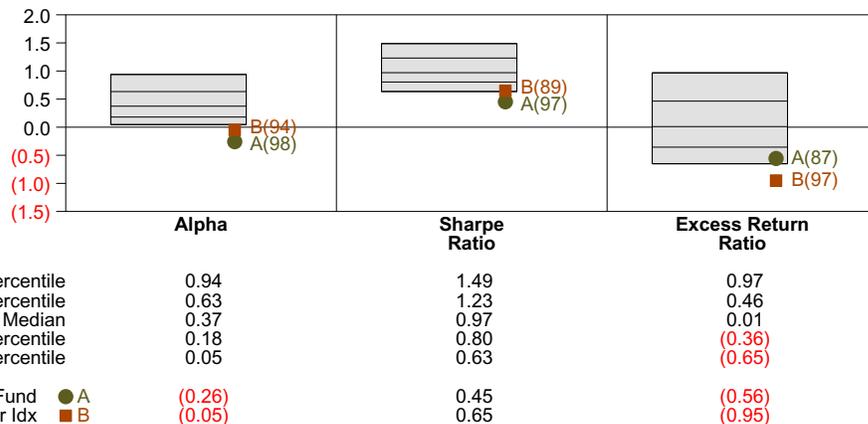
Performance vs Callan Short Term Fixed Income (Gross)



Cumulative and Quarterly Relative Return vs ML:Corp/Gov 1-5 Yr



Risk Adjusted Return Measures vs ML:Corp/Gov 1-5 Yr Rankings Against Callan Short Term Fixed Income (Gross) Seven Years Ended September 30, 2019

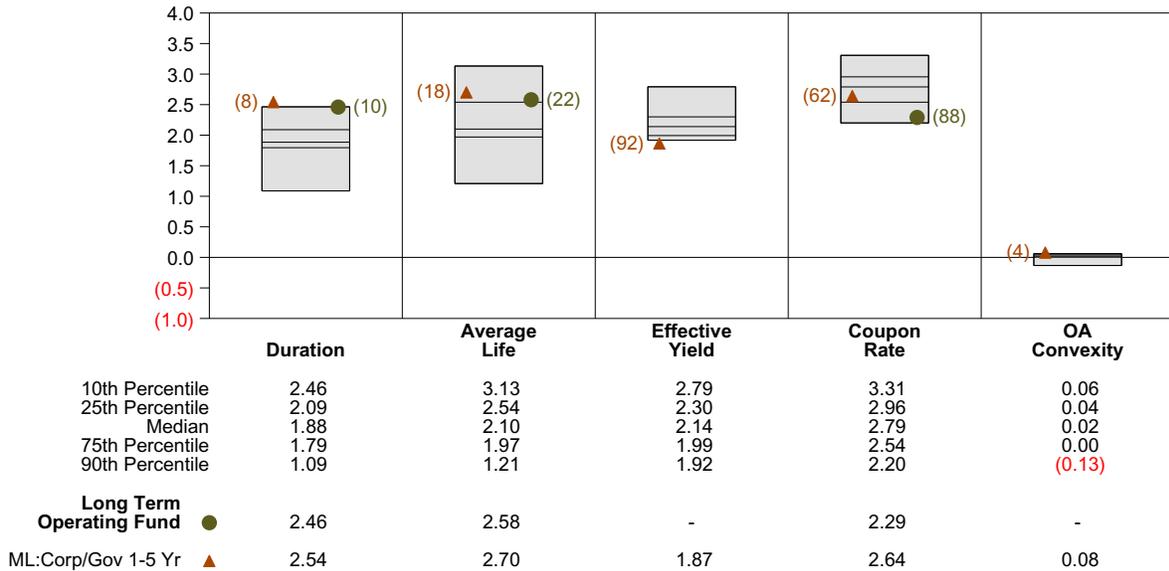


Long Term Operating Fund Bond Characteristics Analysis Summary

Portfolio Characteristics

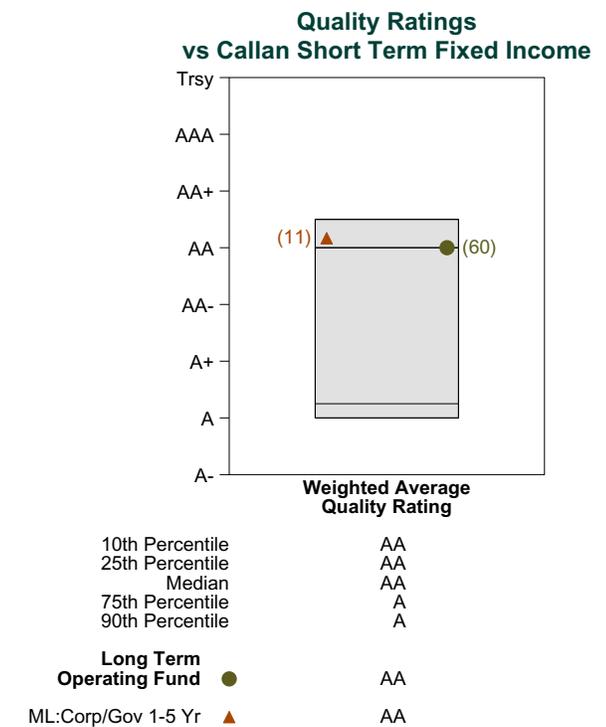
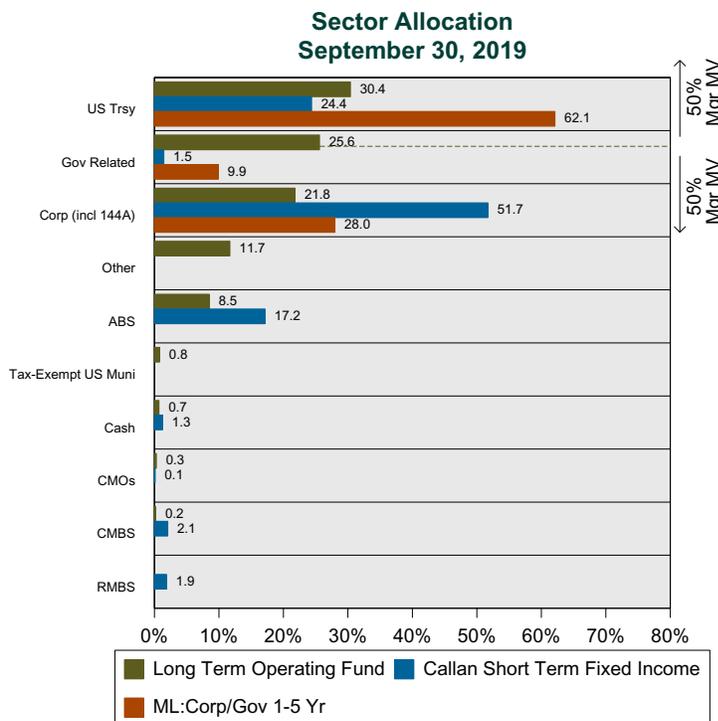
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Fixed Income Portfolio Characteristics Rankings Against Callan Short Term Fixed Income as of September 30, 2019



Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.

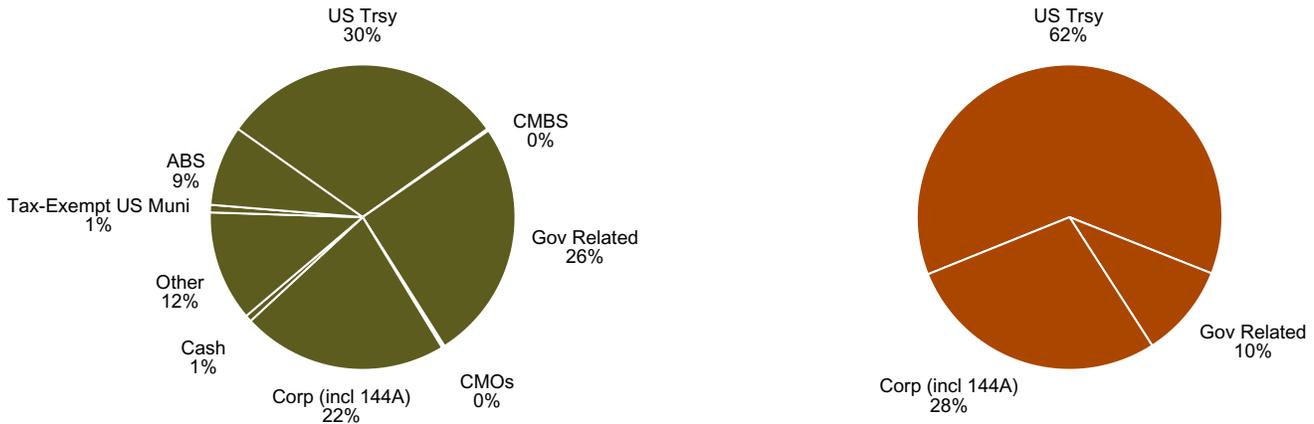


Long Term Operating Fund Portfolio Characteristics Summary As of September 30, 2019

Portfolio Structure Comparison

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.

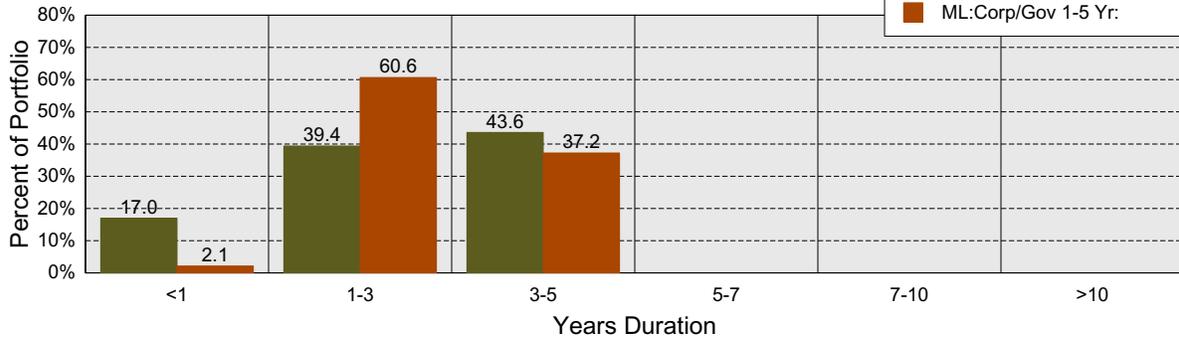
Sector Allocation



Long Term Operating Fund

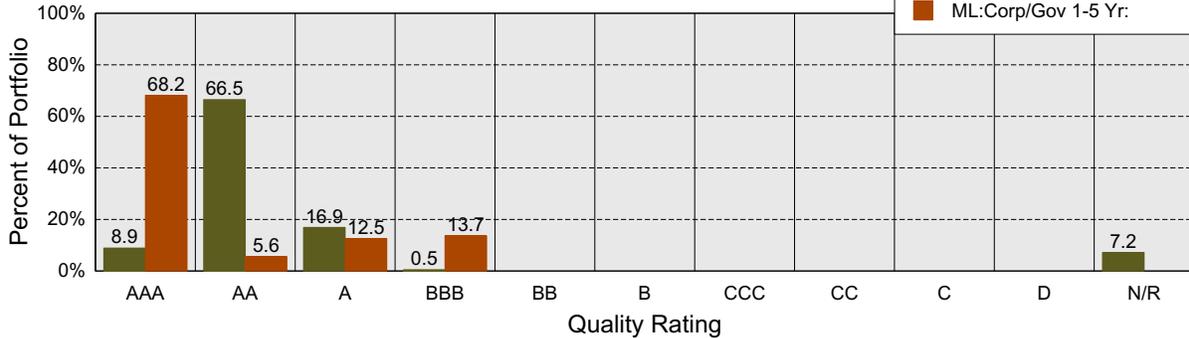
ML:Corp/Gov 1-5 Yr

Duration Distribution



Weighted Average:	Duration
Long Term Operating Fund:	2.46
ML:Corp/Gov 1-5 Yr:	2.54

Quality Distribution



Weighted Average:	Quality
Long Term Operating Fund:	AA
ML:Corp/Gov 1-5 Yr:	AA

Chandler-Liquid Operating Money Period Ended September 30, 2019

Investment Philosophy

Assets were transferred in kind to Chandler on 12/1/2014. Previous performance reflects PIMCO.

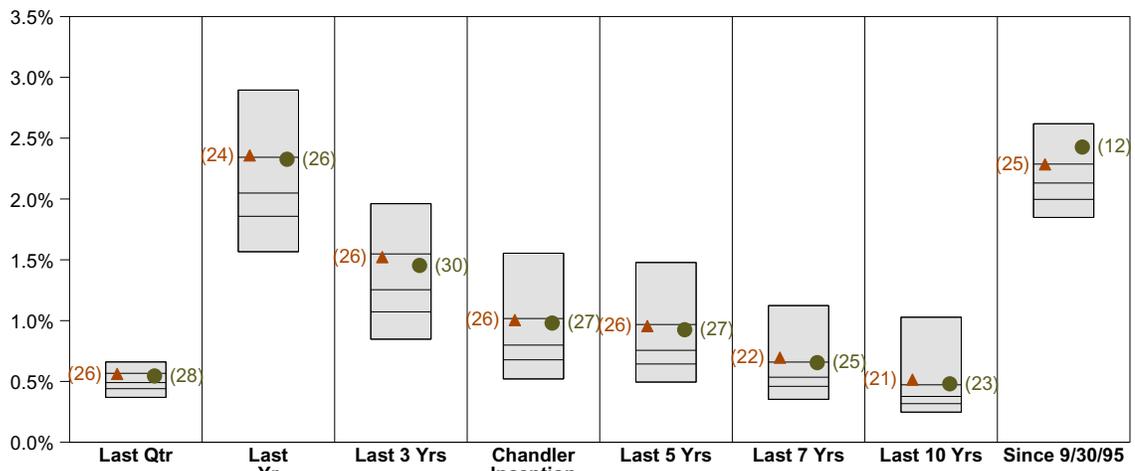
Quarterly Summary and Highlights

- Liquid Operating Money Net's portfolio posted a 0.55% return for the quarter placing it in the 28 percentile of the Callan Money Market Funds group for the quarter and in the 26 percentile for the last year.
- Liquid Operating Money Net's portfolio underperformed the Citigroup 3-Month Treasury Bill by 0.02% for the quarter and underperformed the Citigroup 3-Month Treasury Bill for the year by 0.03%.

Quarterly Asset Growth

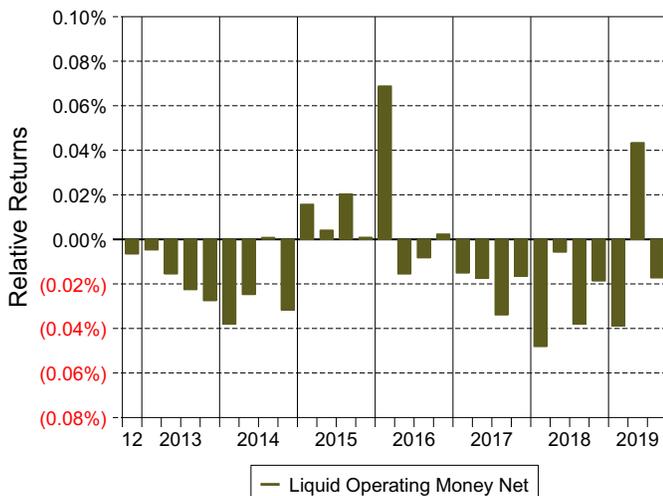
Beginning Market Value	\$164,566,646
Net New Investment	\$-97,000,000
Investment Gains/(Losses)	\$666,613
Ending Market Value	\$68,233,258

Performance vs Callan Money Market Funds (Net)

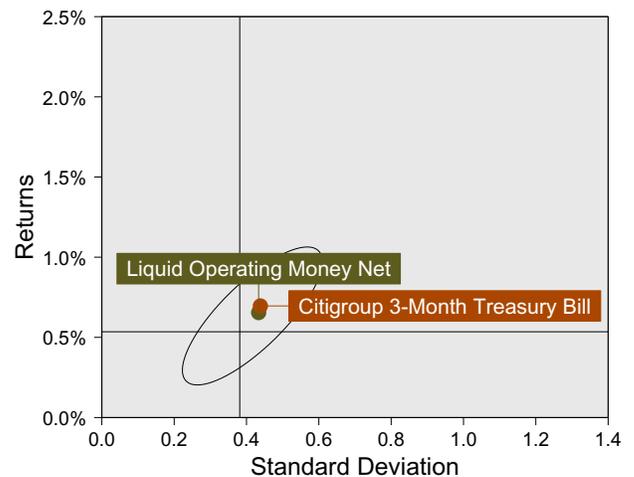


	Last Qtr	Last Yr	Last 3 Yrs	Chandler Inception	Last 5 Yrs	Last 7 Yrs	Last 10 Yrs	Since 9/30/95
10th Percentile	0.66	2.90	1.96	1.55	1.48	1.12	1.03	2.62
25th Percentile	0.57	2.34	1.55	1.02	0.97	0.66	0.47	2.29
Median	0.49	2.05	1.25	0.80	0.76	0.53	0.38	2.13
75th Percentile	0.44	1.86	1.07	0.68	0.64	0.46	0.32	2.00
90th Percentile	0.37	1.57	0.85	0.52	0.49	0.35	0.25	1.85
Liquid Operating Money Net	● 0.55	2.33	1.45	0.98	0.93	0.65	0.48	2.43
Citigroup 3-Month Treasury Bill	▲ 0.56	2.36	1.52	1.01	0.96	0.70	0.51	2.29

Relative Returns vs Citigroup 3-Month Treasury Bill



Callan Money Market Funds (Net) Annualized Seven Year Risk vs Return



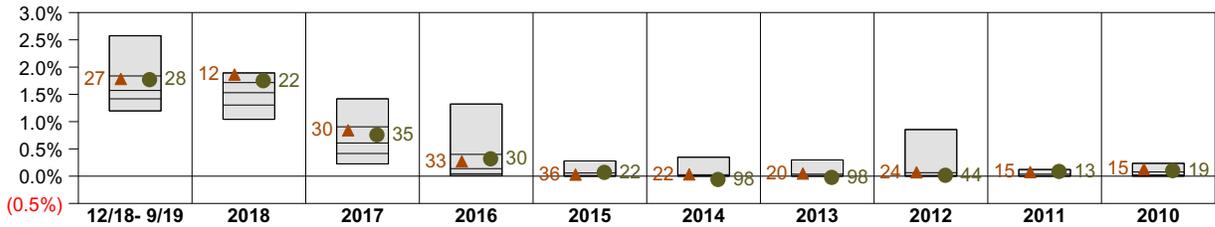
Liquid Operating Money Net Return Analysis Summary

Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

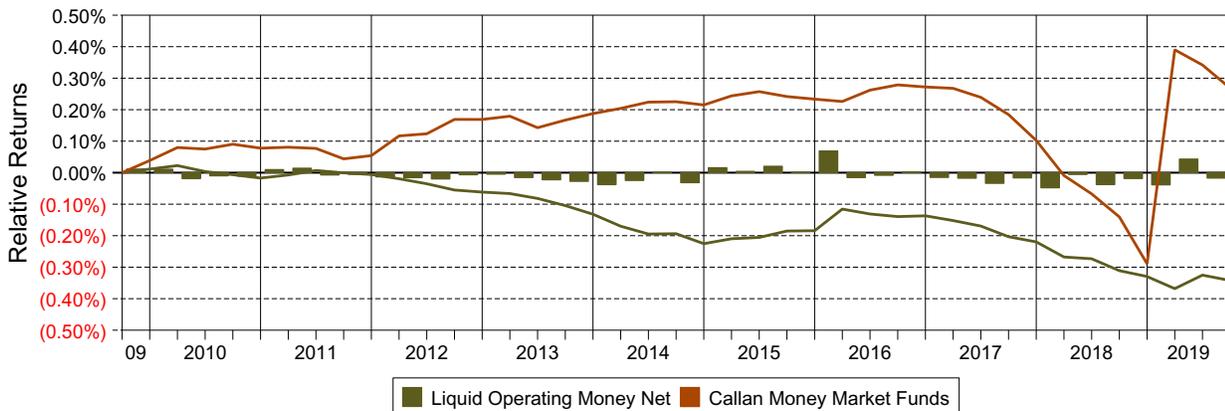
Assets were transferred in kind to Chandler on 12/1/2014. Previous performance reflects PIMCO.

Performance vs Callan Money Market Funds (Net)

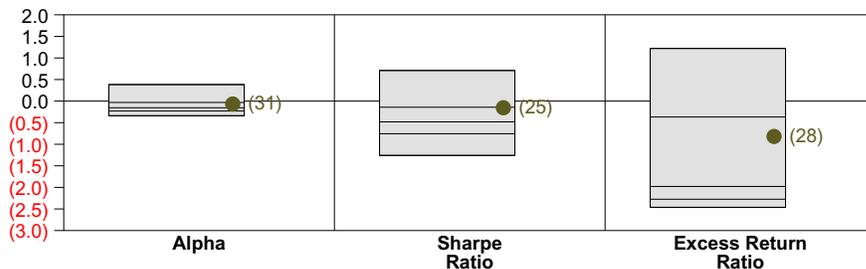


	12/18- 9/19	2018	2017	2016	2015	2014	2013	2012	2011	2010
10th Percentile	2.57	1.89	1.42	1.32	0.28	0.35	0.30	0.85	0.12	0.24
25th Percentile	1.84	1.72	0.91	0.40	0.06	0.03	0.04	0.06	0.04	0.08
Median	1.57	1.53	0.61	0.14	0.01	0.01	0.01	0.01	0.01	0.02
75th Percentile	1.42	1.30	0.42	0.04	0.01	0.01	0.01	0.01	0.01	0.01
90th Percentile	1.20	1.04	0.23	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Liquid Operating Money Net	● 1.77	1.75	0.76	0.32	0.07	(0.06)	(0.02)	0.02	0.09	0.10
Citigroup 3-Month Treasury Bill	▲ 1.78	1.86	0.84	0.27	0.03	0.03	0.05	0.07	0.08	0.13

Cumulative and Quarterly Relative Return vs Citigroup 3-Month Treasury Bill



Risk Adjusted Return Measures vs Citigroup 3-Month Treasury Bill Rankings Against Callan Money Market Funds (Net) Seven Years Ended September 30, 2019



	Alpha	Sharpe Ratio	Excess Return Ratio
10th Percentile	0.38	0.71	1.22
25th Percentile	(0.03)	(0.14)	(0.37)
Median	(0.15)	(0.48)	(1.98)
75th Percentile	(0.23)	(0.76)	(2.27)
90th Percentile	(0.34)	(1.26)	(2.46)
Liquid Operating Money Net	● (0.07)	(0.15)	(0.82)

Callan Research/Education

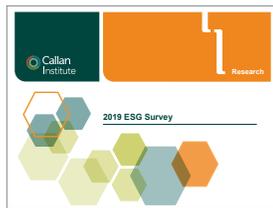
Research and Educational Programs

The Callan Institute provides research to update clients on the latest industry trends and carefully structured educational programs to enhance the knowledge of industry professionals. Visit www.callan.com/library to see all of our publications, and www.callan.com/blog to view our blog “Perspectives.” For more information contact Barb Gerraty at 415-274-3093 / institute@callan.com.

New Research from Callan’s Experts

DTS Offers Some Key Advantages for Evaluating Fixed Income Portfolios

This paper describes duration times spread (DTS), which measures systematic credit-spread risk exposure. DTS estimates the return of any bond, by percentage, if its spread were to change from the current level, all else equal. DTS offers several advantages for monitoring risk in credit portfolios over other methods.



2019 ESG Survey | Callan’s seventh annual survey assessing the status of environmental, social, and governance (ESG) investing in the U.S. institutional investment market.

Callan’s DC Index in Detail | A video about the Callan DC Index™: why we started it, what it measures, and how it can benefit defined contribution plan sponsors.

DC Plan Hacks: Tips for an Efficient Design



plan sponsors should regularly evaluate their plans to make sure they serve the organization’s

benefits philosophy. When evaluating changes, the sponsor should consider its demographics, cost of benefits, vendor capabilities, impact on nondiscrimination testing, communication capabilities, and legal requirements.

2019 June Workshop Summary: In the Age of Illiquidity | For many nonprofits and defined benefit plans, the shift to higher-returning but less liquid asset classes has myriad implications. This summary discusses how consultants, institutional investors, and investment managers can work together to identify solutions tailored to each plan.

The Keys to Unlocking Private Equity Portfolio Assessment

Private equity performance evaluation has some unique considerations, so return calculations and benchmarking methodologies differ from public securities. Closed-end private equity vehicles are assessed using ratio analyses and internal rate of return (IRR) measures. Using performance metrics, private equity portfolios can be evaluated at the partnership level, at the vintage year level, and then at the total portfolio level.

Survivorship Bias and the Walking Dead

Survivorship bias, the predisposition to evaluate a data set by focusing on the “survivors” rather than also examining the record of non-survivors, is important to understand for hedge fund peer groups, which tend to have a relatively large number of constituents that disappear. Using a proprietary approach, Callan is able to adjust peer group comparisons for survivorship bias. This better-informed perspective enables a more honest assessment in considering performance relative to other opportunities.

Quarterly Periodicals

Private Equity Trends | A newsletter on private equity activity, covering both the fundraising cycle and performance over time.

Market Pulse Flipbook | A market reference guide covering trends in the U.S. economy, developments for institutional investors, and the latest data for U.S. and non-U.S. equities and fixed income, alternatives, and defined contribution plans.

Active vs. Passive Charts | This series of charts compares active managers alongside relevant benchmarks over the long term.

Capital Market Review | A newsletter providing analysis and a broad overview of the economy and public and private market activity each quarter across a wide range of asset classes.

Events

Miss out on a Callan conference or workshop? Event summaries and speakers' presentations are available on our website: www.callan.com/library/

Please mark your calendar and look forward to upcoming invitations.

2020 National Conference

Celebrating the 40th anniversary of the Callan Institute
January 27-29, 2020 – San Francisco

Please also keep your eye out for upcoming Webinars in 2019! We will be sending invitations to register for these events and will also have registration links on our website at www.callan.com/webinarsupcoming.

For more information about events, please contact Barb Gerraty: 415-274-3093 / gerraty@callan.com

The Center for Investment Training Educational Sessions

The Center for Investment Training, better known as the “Callan College,” provides a foundation of knowledge for industry professionals who are involved in the investment decision-making process. It was founded in 1994 to provide clients and non-clients alike with basic- to intermediate-level instruction.

Introduction to Investments

April 21-22, 2020

July 21-22, 2020

This program familiarizes institutional investor trustees and staff and asset management advisers with basic investment theory, terminology, and practices. It lasts one-and-a-half days and is designed for individuals who have less than two years of experience with asset-management oversight and/or support responsibilities. Tuition for the Introductory “Callan College” session is \$2,350 per person. Tuition includes instruction, all materials, breakfast and lunch on each day, and dinner on the first evening with the instructors.

Learn more at www.callan.com/events/callan-college-intro

Education: By the Numbers

525 Attendees (on average) of the Institute's annual National Conference

50+ Unique pieces of research the Institute generates each year

3,700 Total attendees of the “Callan College” since 1994

1980 Year the Callan Institute was founded



“Research is the foundation of all we do at Callan, and sharing our best thinking with the investment community is our way of helping to foster dialogue to raise the bar across the industry.”

Greg Allen, CEO and Chief Research Officer

Definitions

Risk/Reward Statistics

The risk statistics used in this report examine performance characteristics of a manager or a portfolio relative to a benchmark (market indicator) which assumes to represent overall movements in the asset class being considered. The main unit of analysis is the excess return, which is the portfolio return minus the return on a risk free asset (3 month T-Bill).

Alpha measures a portfolio's return in excess of the market return adjusted for risk. It is a measure of the manager's contribution to performance with reference to security selection. A positive alpha indicates that a portfolio was positively rewarded for the residual risk which was taken for that level of market exposure.

Beta measures the sensitivity of rates of portfolio returns to movements in the market index. A portfolio's beta measures the expected change in return per 1% change in the return on the market. If a beta of a portfolio is 1.5, a 1 percent increase in the return on the market will result, on average, in a 1.5 percent increase in the return on the portfolio. The converse would also be true.

Downside Risk stems from the desire to differentiate between "good risk" (upside volatility) and "bad risk" (downside volatility). Whereas standard deviation punishes both upside and downside volatility, downside risk measures only the standard deviation of returns below the target. Returns above the target are assigned a deviation of zero. Both the frequency and magnitude of underperformance affect the amount of downside risk.

Excess Return Ratio is a measure of risk adjusted relative return. This ratio captures the amount of active management performance (value added relative to an index) per unit of active management risk (tracking error against the index.) It is calculated by dividing the manager's annualized cumulative excess return relative to the index by the standard deviation of the individual quarterly excess returns. The Excess Return Ratio can be interpreted as the manager's active risk/reward tradeoff for diverging from the index when the index is mandated to be the "riskless" market position.

Information Ratio measures the manager's market risk-adjusted excess return per unit of residual risk relative to a benchmark. It is computed by dividing alpha by the residual risk over a given time period. Assuming all other factors being equal, managers with lower residual risk achieve higher values in the information ratio. Managers with higher information ratios will add value relative to the benchmark more reliably and consistently.

R-Squared indicates the extent to which the variability of the portfolio returns are explained by market action. It can also be thought of as measuring the diversification relative to the appropriate benchmark. An r-squared value of .75 indicates that 75% of the fluctuation in a portfolio return is explained by market action. An r-squared of 1.0 indicates that a portfolio's returns are entirely related to the market and it is not influenced by other factors. An r-squared of zero indicates that no relationship exists between the portfolio's return and the market.

Relative Standard Deviation is a simple measure of a manager's risk (volatility) relative to a benchmark. It is calculated by dividing the manager's standard deviation of returns by the benchmark's standard deviation of returns. A relative standard deviation of 1.20, for example, means the manager has exhibited 20% more risk than the benchmark over that time period. A ratio of .80 would imply 20% less risk. This ratio is especially useful when analyzing the risk of investment grade fixed-income products where actual historical durations are not available. By using this relative risk measure over rolling time periods one can illustrate the "implied" historical duration patterns of the portfolio versus the benchmark.

Residual Portfolio Risk is the unsystematic risk of a fund, the portion of the total risk unique to the fund (manager) itself and not related to the overall market. This reflects the "bets" which the manager places in that particular asset market. These bets may reflect emphasis in particular sectors, maturities (for bonds), or other issue specific factors which the manager considers a good investment opportunity. Diversification of the portfolio will reduce or eliminate the residual risk of that portfolio.

Risk/Reward Statistics

Rising Declining Periods refer to the sub-asset class cycles vis-a-vis the broader asset class. This is determined by evaluating the cumulative relative sub-asset class index performance to that of the broader asset class index. For example, to determine the Growth Style cycle, the S&P 500 Growth Index (sub-asset class) performance is compared to that of the S&P 500 Index (broader asset class).

Sharpe Ratio is a commonly used measure of risk-adjusted return. It is calculated by subtracting the "risk-free" return (usually 3 Month Treasury Bill) from the portfolio return and dividing the resulting "excess return" by the portfolio's risk level (standard deviation). The result is a measure of return gained per unit of risk taken.

Sortino Ratio is a downside risk-adjusted measure of value-added. It measures excess return over a benchmark divided by downside risk. The natural appeal is that it identifies value-added per unit of truly bad risk. The danger of interpretation, however, lies in these two areas: (1) the statistical significance of the denominator, and (2) its reliance on the persistence of skewness in return distributions.

Standard Deviation is a statistical measure of portfolio risk. It reflects the average deviation of the observations from their sample mean. Standard deviation is used as an estimate of risk since it measures how wide the range of returns typically is. The wider the typical range of returns, the higher the standard deviation of returns, and the higher the portfolio risk. If returns are normally distributed (ie. has a bell shaped curve distribution) then approximately 2/3 of the returns would occur within plus or minus one standard deviation from the sample mean.

Total Portfolio Risk is a measure of the volatility of the quarterly excess returns of an asset. Total risk is composed of two measures of risk: market (non-diversifiable or systematic) risk and residual (diversifiable or unsystematic) risk. The purpose of portfolio diversification is to reduce the residual risk of the portfolio.

Tracking Error is a statistical measure of a portfolio's risk relative to an index. It reflects the standard deviation of a portfolio's individual quarterly or monthly returns from the index's returns. Typically, the lower the Tracking Error, the more "index-like" the portfolio.

Treynor Ratio represents the portfolio's average excess return over a specified period divided by the beta relative to its benchmark over that same period. This measure reflects the reward over the risk-free rate relative to the systematic risk assumed.

Note: Alpha, Total Risk, and Residual Risk are annualized.

Fixed Income Portfolio Characteristics

All Portfolio Characteristics are derived by first calculating the characteristics for each security, and then calculating the market value weighted average of these values for the portfolio.

Allocation by Sector - Sector allocation is one of the tools which managers often use to add value without impacting the duration of the portfolio. The sector weights exhibit can be used to contrast a portfolio's weights with those of the index to identify any significant sector bets.

Average Coupon - The average coupon is the market value weighted average coupon of all securities in the portfolio. The total portfolio coupon payments per year are divided by the total portfolio par value.

Average Moody's Rating for Total Portfolio - A measure of the credit quality as determined by the individual security ratings. The ratings for each security, from Moody's Investor Service, are compiled into a composite rating for the whole portfolio. Quality symbols range from Aaa+ (highest investment quality - lowest credit risk) to C (lowest investment quality - highest credit risk).

Average Option Adjusted (Effective) Convexity - Convexity is a measure of the portfolio's exposure to interest rate risk. It is a measure of how much the duration of the portfolio will change given a change in interest rates. Generally, securities with negative convexities are considered to be risky in that changes in interest rates will result in disadvantageous changes in duration. When a security's duration changes it indicates that the stream of expected future cash-flows has changed, generally having a significant impact on the value of the security. The option adjusted convexity for each security in the portfolio is calculated using models developed by Lehman Brothers and Salomon Brothers which determine the expected stream of cash-flows for the security based on various interest rate scenarios. Expected cash-flows take into account any put or call options embedded in the security, any expected sinking-fund paydowns or any expected mortgage principal prepayments.

Average Option Adjusted (Effective) Duration - Duration is one measure of the portfolio's exposure to interest rate risk. Generally, the higher a portfolio's duration, the more that its value will change in response to interest rate changes. The option adjusted duration for each security in the portfolio is calculated using models developed by Lehman Brothers and Salomon Brothers which determine the expected stream of cash-flows for the security based on various interest rate scenarios. Expected cash-flows take into account any put or call options embedded in the security, any expected sinking-fund paydowns or any expected mortgage principal prepayments.

Average Price - The average price is equal to the portfolio market value divided by the number of securities in the portfolio. Portfolios with an average price above par will tend to generate more current income than those with an average price below par.

Average Years to Expected Maturity - This is a measure of the market-value-weighted average of the years to expected maturity across all of the securities in the portfolio. Expected years to maturity takes into account any put or call options embedded in the security, any expected sinking-fund paydowns or any expected mortgage principal prepayments.

Average Years to Stated Maturity - The average years to stated maturity is the market value weighted average time to stated maturity for all securities in the portfolio. This measure does not take into account imbedded options, sinking fund paydowns, or prepayments.

Current Yield - The current yield is the current annual income generated by the total portfolio market value. It is equal to the total portfolio coupon payments per year divided by the current total portfolio market value.

Fixed Income Portfolio Characteristics

Duration Dispersion - Duration dispersion is the market-value weighted standard deviation of the portfolio's individual security durations around the total portfolio duration. The higher the dispersion, the more variable the security durations relative to the total portfolio duration ("barbellness"), and the smaller the dispersion, the more concentrated the holdings' durations around the overall portfolio's ("bulletness"). The purpose of this statistic is to gauge the "bulletness" or "barbellness" of a portfolio relative to its total duration and to that of its benchmark index.

Effective Yield - The effective yield is the actual total annualized return that would be realized if all securities in the portfolio were held to their expected maturities. Effective yield is calculated as the internal rate of return, using the current market value and all expected future interest and principal cash flows. This measure incorporates sinking fund paydowns, expected mortgage principal prepayments, and the exercise of any "in-the-money" imbedded put or call options.

Weighted Average Life - The weighted average life of a security is the weighted average time to payment of all remaining principal. It is calculated by multiplying each expected future principal payment amount by the time left to the payment. This amount is then divided by the total amount of principal remaining. Weighted average life is commonly used as a measure of the investment life for pass-through security types for comparison to non-pass-through securities.

Disclosures

List of Callan's Investment Manager Clients

Confidential – For Callan Client Use Only

Callan takes its fiduciary and disclosure responsibilities to clients very seriously. We recognize that there are numerous potential conflicts of interest encountered in the investment consulting industry and that it is our responsibility to manage those conflicts effectively and in the best interest of our clients. At Callan, we employ a robust process to identify, manage, monitor and disclose potential conflicts on an on-going basis.

The list below is an important component of our conflicts management and disclosure process. It identifies those investment managers that pay Callan fees for educational, consulting, software, database or reporting products and services. We update the list quarterly because we believe that our fund sponsor clients should know the investment managers that do business with Callan, particularly those investment manager clients that the fund sponsor clients may be using or considering using. Please note that if an investment manager receives a product or service on a complimentary basis (e.g. attending an educational event), they are not included in the list below. Callan is committed to ensuring that we do not consider an investment manager's business relationship with Callan, or lack thereof, in performing evaluations for or making suggestions or recommendations to its other clients. Please refer to Callan's ADV Part 2A for a more detailed description of the services and products that Callan makes available to investment manager clients through our Institutional Consulting Group, Independent Adviser Group and Fund Sponsor Consulting Group. Due to the complex corporate and organizational ownership structures of many investment management firms, parent and affiliate firm relationships are not indicated on our list.

Fund sponsor clients may request a copy of the most currently available list at any time. Fund sponsor clients may also request specific information regarding the fees paid to Callan by particular fund manager clients. Per company policy, information requests regarding fees are handled exclusively by Callan's Compliance Department.

Manager Name
Aberdeen Standard Investments
Acadian Asset Management LLC
AEGON USA Investment Management Inc.
Alcentra
AllianceBernstein
Allianz Global Investors
Allianz Life Insurance Company of North America
American Century Investments
Amundi Pioneer Asset Management
AQR Capital Management
Ares Management LLC
Ariel Investments, LLC
Atlanta Capital Management Co., LLC
Aurelius Capital Management
Aviva Investors Americas
AXA Investment Managers
Baillie Gifford International, LLC
Baird Advisors
Baron Capital Management, Inc.
Barrow, Hanley, Mewhinney & Strauss, LLC
BlackRock
BMO Global Asset Management
BNP Paribas Asset Management
BNY Mellon Asset Management
Boston Partners
Brandes Investment Partners, L.P.
Brandywine Global Investment Management, LLC
BrightSphere Investment Group
Brown Brothers Harriman & Company
Cambiar Investors, LLC
Capital Group
Carillon Tower Advisers
CastleArk Management, LLC
Causeway Capital Management LLC
Chartwell Investment Partners

Manager Name
ClearBridge Investments, LLC
Cohen & Steers Capital Management, Inc.
Columbia Threadneedle Investments
Columbus Circle Investors
Corbin Capital Partners, L.P.
Cooke & Bieler, L.P.
Credit Suisse Asset Management
DePrince, Race & Zollo, Inc.
Diamond Hill Capital Management, Inc.
Dimensional Fund Advisors LP
Doubleline
Duff & Phelps Investment Management Co.
DWS
EARNEST Partners, LLC
Eaton Vance Management
Epoch Investment Partners, Inc.
Fayez Sarofim & Company
Federated Investors
Fidelity Institutional Asset Management
Fiera Capital Corporation
Financial Engines
First Hawaiian Bank Wealth Management Division
First State Investments
Fisher Investments
Franklin Templeton
Fred Alger Management, Inc.
GAM (USA) Inc.
Glenmeade Investment Management, LP
GlobeFlex Capital, L.P.
Goldman Sachs
Green Square Capital Advisors, LLC
Guggenheim Investments
GW&K Investment Management
Harbor Capital Group Trust
Hartford Investment Management Co.

Manager Name
Heitman LLC
Hotchkis & Wiley Capital Management, LLC
HSBC Global Asset Management
Income Research + Management, Inc.
Insight Investment Management Limited
Intech Investment Management, LLC
Intercontinental Real Estate Corporation
Invesco
Investec Asset Management North America, Inc.
Ivy Investments
J.P. Morgan
Janus
Jarislowsky Fraser Global Investment Management
Jennison Associates LLC
Jobs Peak Advisors
KeyCorp
Lazard Asset Management
Legal & General Investment Management America
Lincoln National Corporation
LMCG Investments, LLC
Logan Circle Partners, L.P.
Longview Partners
Loomis, Sayles & Company, L.P.
Lord Abbett & Company
Los Angeles Capital Management
LSV Asset Management
MacKay Shields LLC
Macquarie Investment Management (MIM)
Manulife Investment Management
Marathon Asset Management, L.P.
McKinley Capital Management, LLC
Mellon
MFS Investment Management
MidFirst Bank
Mondrian Investment Partners Limited
Montag & Caldwell, LLC
Morgan Stanley Investment Management
Mountain Lake Investment Management LLC
Mountain Pacific Advisors, LLC
MUFG Union Bank, N.A.
Natixis Investment Managers
Neuberger Berman
Newton Investment Management
Nikko Asset Management Co., Ltd.
Northern Trust Asset Management
Nuveen
OFI Global Asset Management

Manager Name
Osterweis Capital Management, LLC
P/E Investments
Pacific Investment Management Company
Pathway Capital Management
Peregrine Capital Management, LLC.
Perkins Investment Management
PGIM Fixed Income
PineBridge Investments
PNC Capital Advisors, LLC
Polen Capital Management
Principal Global Investors
Putnam Investments, LLC
QMA LLC
RBC Global Asset Management
Regions Financial Corporation
Robeco Institutional Asset Management, US Inc.
Rockefeller Capital Management
Rothschild & Co. Asset Management US
Russell Investments
Schroder Investment Management North America Inc.
Smith Graham & Co. Investment Advisors, L.P.
South Texas Money Management, Ltd.
State Street Global Advisors
Strategic Global Advisors
Stone Harbor Investment Partners, L.P.
Sun Life Investment Management
T. Rowe Price Associates, Inc.
The TCW Group, Inc.
Thompson, Siegel & Walmsley LLC
Thornburg Investment Management, Inc.
Tri-Star Trust Bank
UBS Asset Management
VanEck
Versus Capital Group
Victory Capital Management Inc.
Virtus Investment Partners, Inc.
Vontobel Asset Management, Inc.
Voya
WCM Investment Management
WEDGE Capital Management
Wellington Management Company, LLP
Wells Fargo Asset Management
Western Asset Management Company LLC
Westfield Capital Management Company, LP
William Blair & Company LLC

Orange County Sanitation District

Period Ending September 30, 2019

CHANDLER ASSET MANAGEMENT, INC. | 800.317.4747 | www.chandlerasset.com



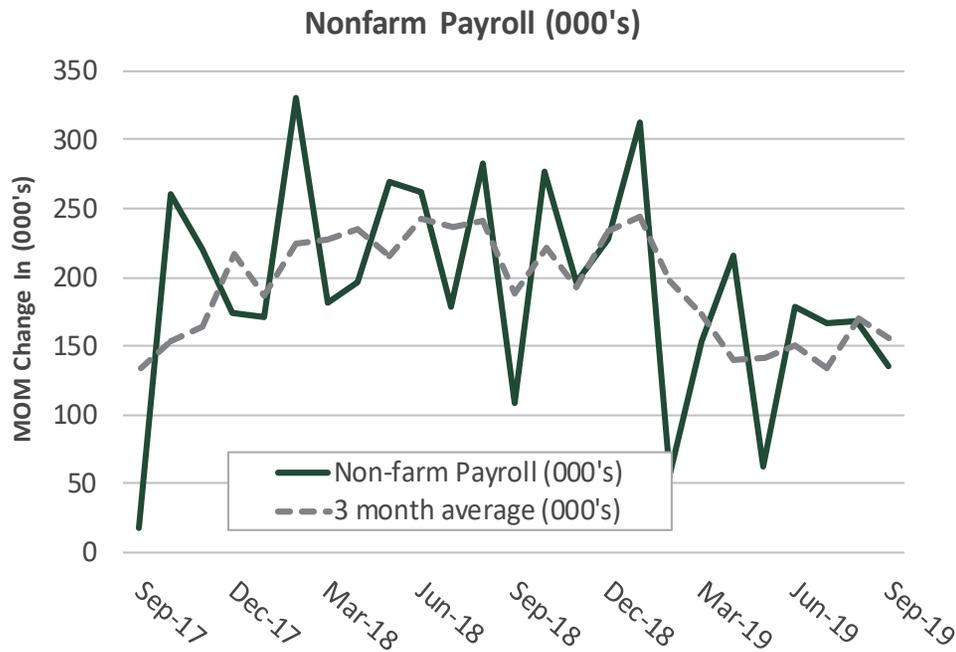
SECTION 1	Economic Update
SECTION 2	Account Profile
SECTION 3	Consolidated Information
SECTION 4	Portfolio Holdings
SECTION 5	Transactions

Section 1 | Economic Update

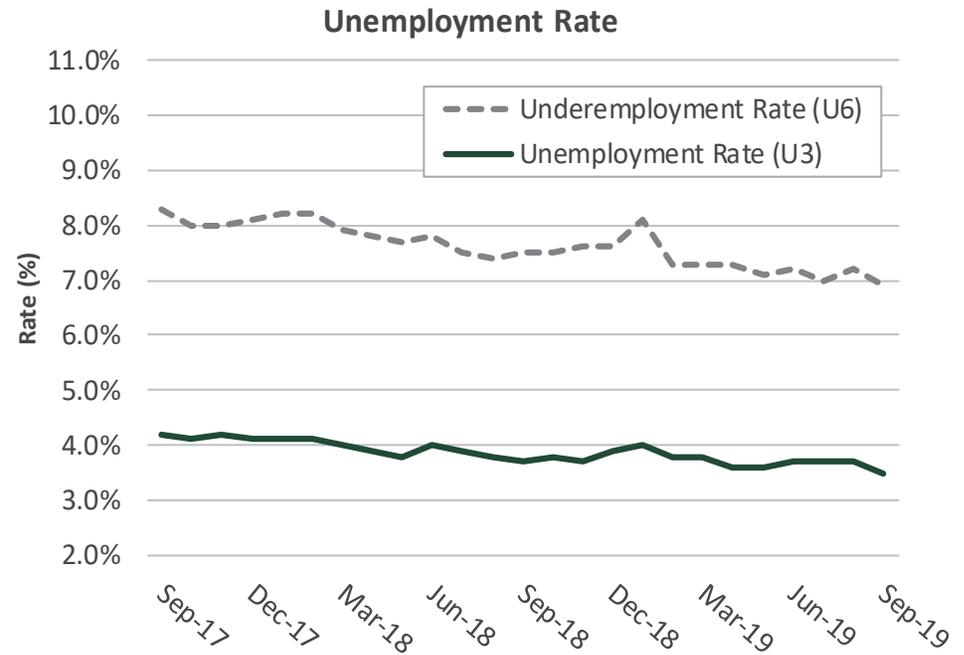
Economic Update

- Labor market and consumer fundamentals remain favorable, but manufacturing data continues to disappoint. We believe economic growth has slowed from earlier this year and downside risks to the outlook remain elevated. The US economy continues to face headwinds from trade disputes, slowing global economic growth, and an uncertain outlook for Brexit. However, we believe accommodative US monetary policy and a collective dovish stance by all of the major global central banks should help to combat headwinds. We also believe the Trump administration faces significant political pressure to make progress toward a trade agreement with China as we head into an election year.
- The Federal Open Market Committee (FOMC) lowered the target fed funds rate by 25 basis points in September (for the second time this year) to a range of 1.75%-2.00%. There were three dissenting votes; one policymaker favored a 50-basis point rate cut, and two policymakers favored leaving the fed funds rate unchanged. According to the Fed's dot plot, only seven out of 17 policymakers are anticipating another rate cut before year-end. Although there is a growing disparity among policymakers about the appropriate path of monetary policy, Fed Chair Powell's press conference suggested the Fed will be flexible and data dependent. Powell indicated more rate cuts may be appropriate if the economy slows further, but the Fed is not on a preset course. We continue to believe the Federal Reserve is likely to cut the fed funds target rate again before year-end, in the absence of a trade resolution or meaningful improvement in market-based measures of inflation. The next Federal Open Market Committee (FOMC) meeting is scheduled for October 29-30.
- The Treasury yield curve steepened modestly in September, although the curve remains partially inverted. The 3-month T-bill yield declined nearly 17 basis points to 1.81%, the 2-year Treasury yield increased nearly twelve basis points to 1.62%, and the 10-year Treasury yield increased about 17 basis points to 1.67%. An inversion of the yield curve in which the 10-year Treasury yield is lower than the 3-month T-bill yield is generally viewed as a powerful predictive signal of an upcoming recession. However, we believe increased short-term Treasury issuance to fund the deficit, and negative sovereign bond yields in other countries may be distorting the US Treasury yield curve. German sovereign bond yields (from 1-month out to 30-years) remained negative at September month-end.

Employment



Source: US Department of Labor

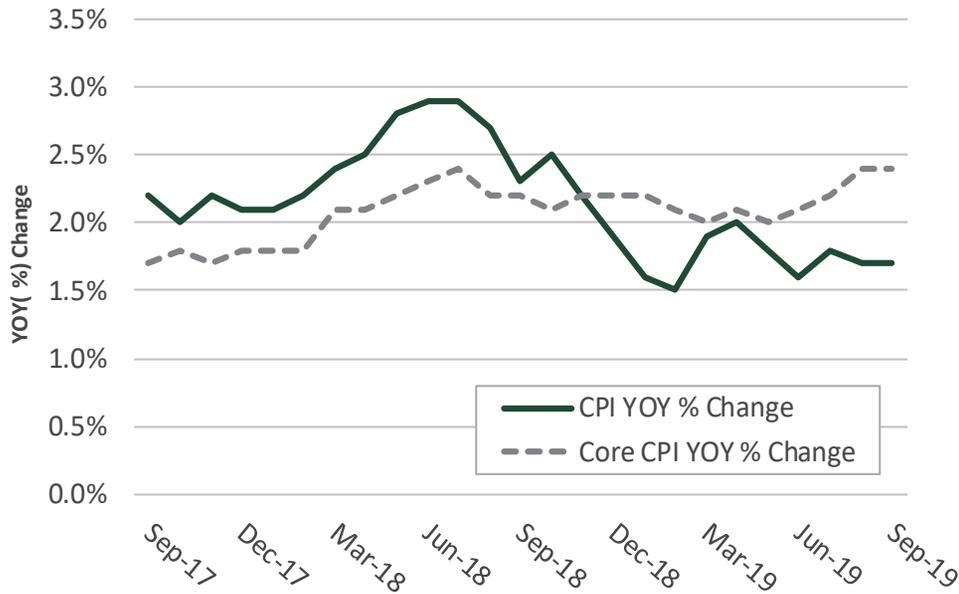


Source: US Department of Labor

U.S. nonfarm payrolls rose by 136,000 in September, slightly below expectations of 145,000. However, August payrolls were revised higher by 38,000. On a trailing 3-month and 6-month average basis, payrolls increased an average of about 157,000 and 154,000 per month, respectively. The unemployment rate declined to 3.5% (the lowest rate since December 1969) from 3.7% in August, and the participation rate held steady at 63.2%. A broader measure of unemployment called the U-6, which includes those who are marginally attached to the labor force and employed part time for economic reasons, dropped to 6.9% in September from 7.2% in August. Wages were flat in September, missing expectations for a 0.3% increase, and the average workweek was unchanged. On a year-over-year basis, wages were up 2.9% in September, versus up 3.2% in August.

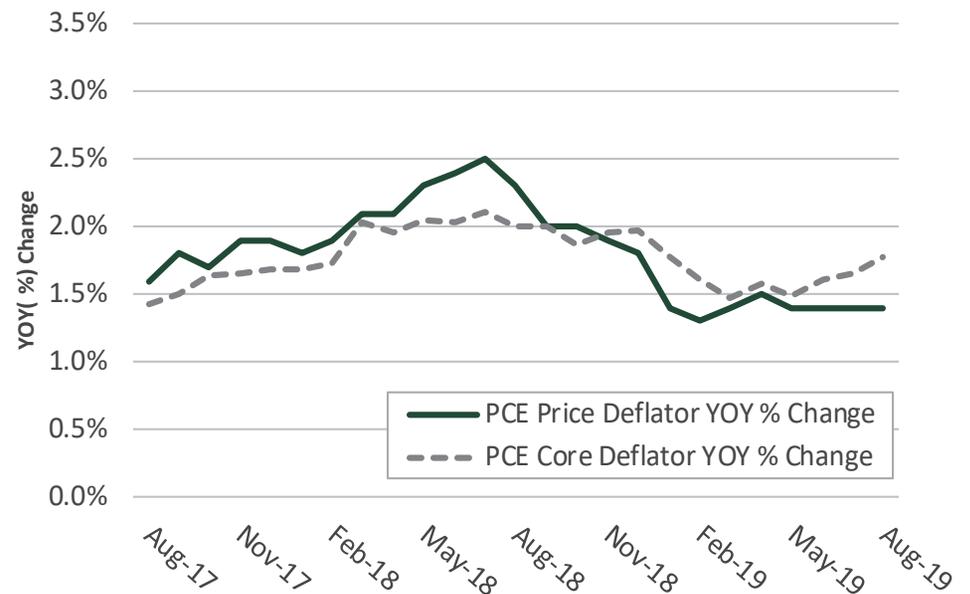
Inflation

Consumer Price Index (CPI)



Source: US Department of Labor

Personal Consumption Expenditures (PCE)

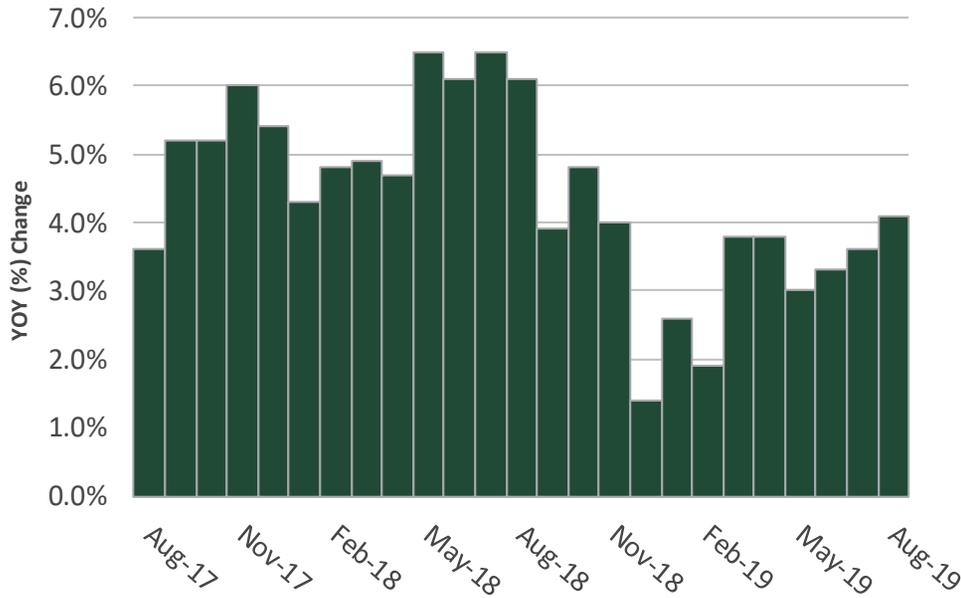


Source: US Department of Commerce

The Consumer Price Index (CPI) was up 1.7% year-over-year in September, unchanged from August. Core CPI (CPI less food and energy) was up 2.4% year-over-year in September, also unchanged from August. The Personal Consumption Expenditures (PCE) index was up 1.4% year-over-year in August, unchanged from July. Core PCE, which is the Fed's primary inflation gauge, was up 1.8% year-over-year in August versus 1.7% year-over-year in July. Core PCE remains below the Fed's 2.0% inflation target.

Consumer

Retail Sales YOY % Change



Source: US Department of Commerce

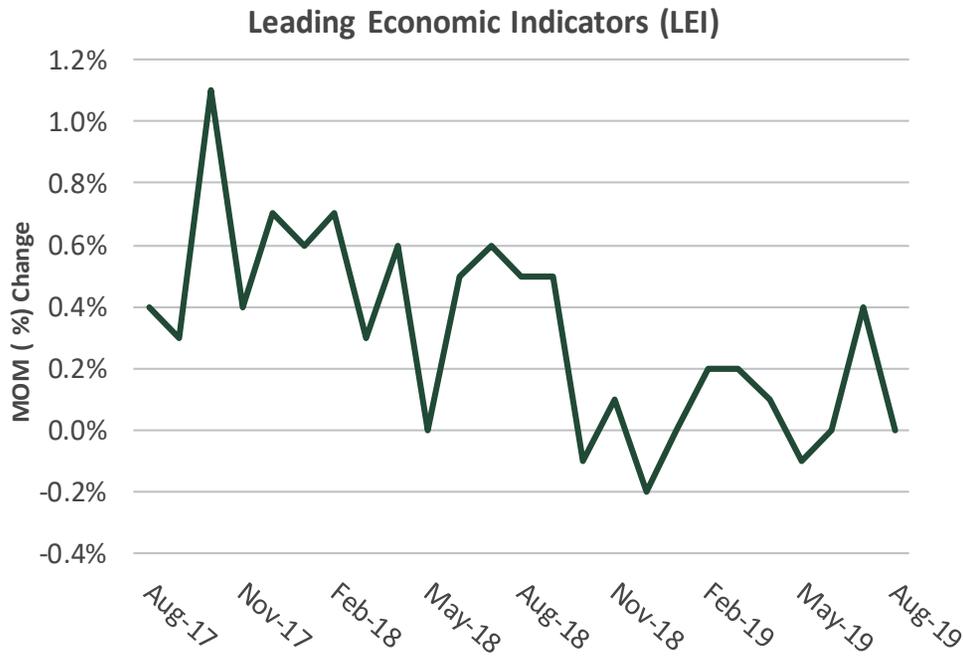
Consumer Confidence



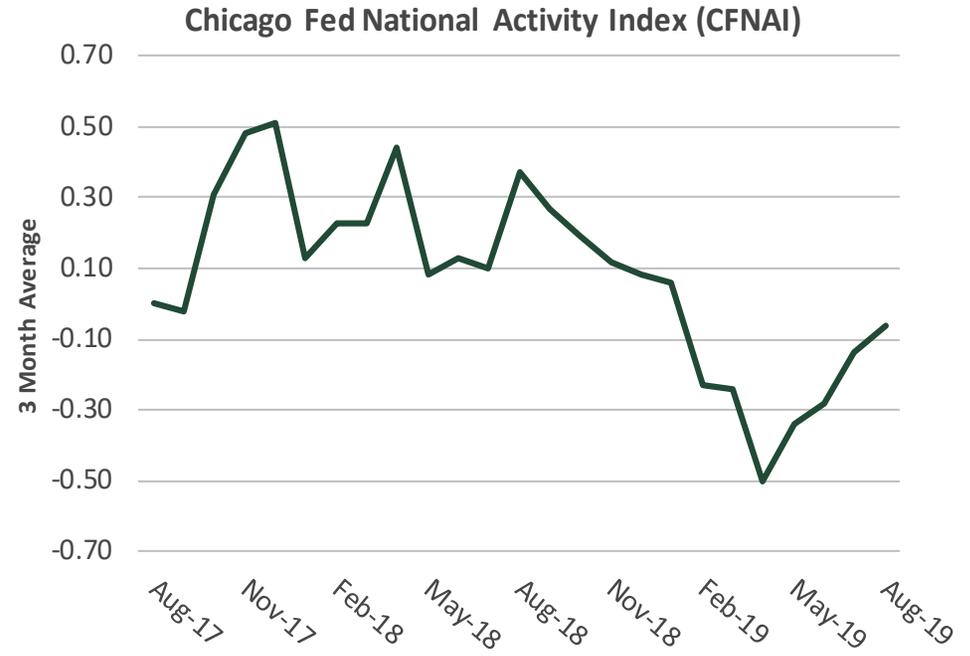
Source: The Conference Board

Retail sales in August were moderately above consensus expectations, coming in at 0.4% compared to the 0.2% estimate. Excluding auto and gas, retail sales were up 0.1% compared to expectations for a 0.2% increase. On a year-over-year basis, retail sales increased by 4.1%, a modest increase from the prior year-over-year number of 3.6%. The Consumer Confidence Index unexpectedly declined to 125.1 in September from 134.2 in August. Nevertheless, the index remains at a strong level.

Economic Activity



Source: The Conference Board

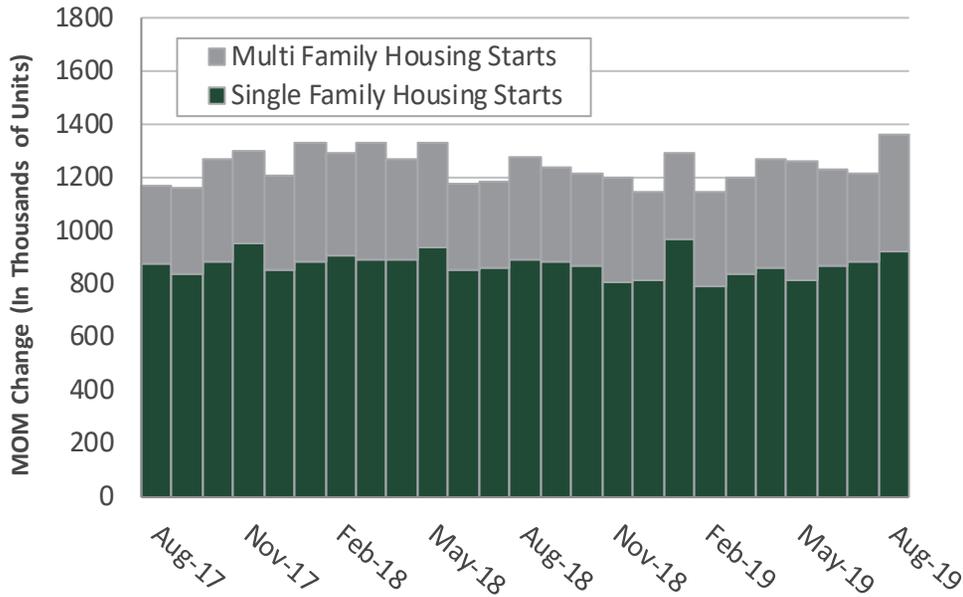


Source: Federal Reserve Bank of Chicago

The Leading Economic Index (LEI) was flat in August, in line with expectations, following a 0.4% increase in July. While the LEI remains higher on a year-over-year basis (up 1.1% in August) the pace of year-over-year improvement continues to decline, and the index suggests broad economic growth will continue to slow. The Chicago Fed National Activity Index (CFNAI) increased to 0.10 in August from -0.41 in July. On a 3-month moving average basis, the index improved to -0.06 in August versus -0.14 in July. Negative values are generally consistent with below-average growth. However, periods of economic contraction have historically been associated with values below -0.70 on a 3-month moving average basis.

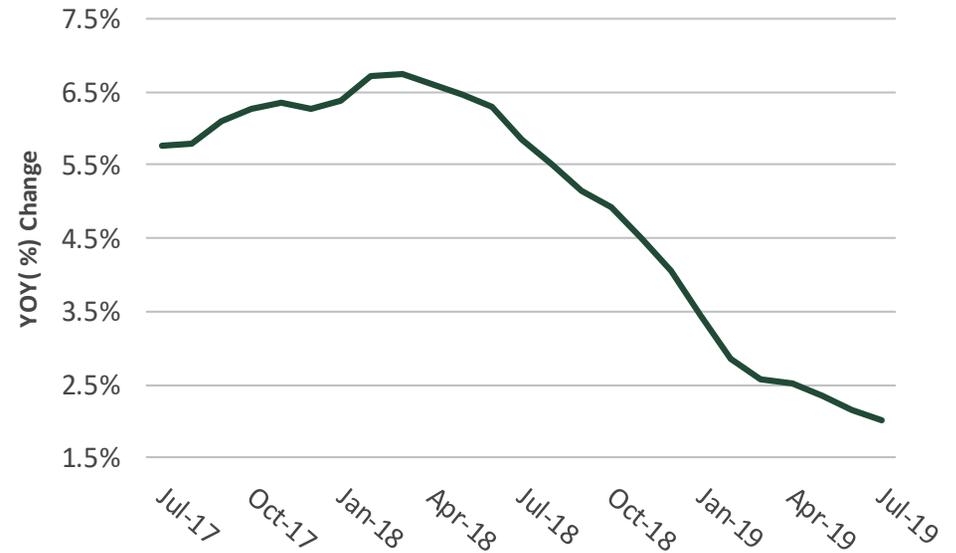
Housing

Housing Starts



Source: US Department of Commerce

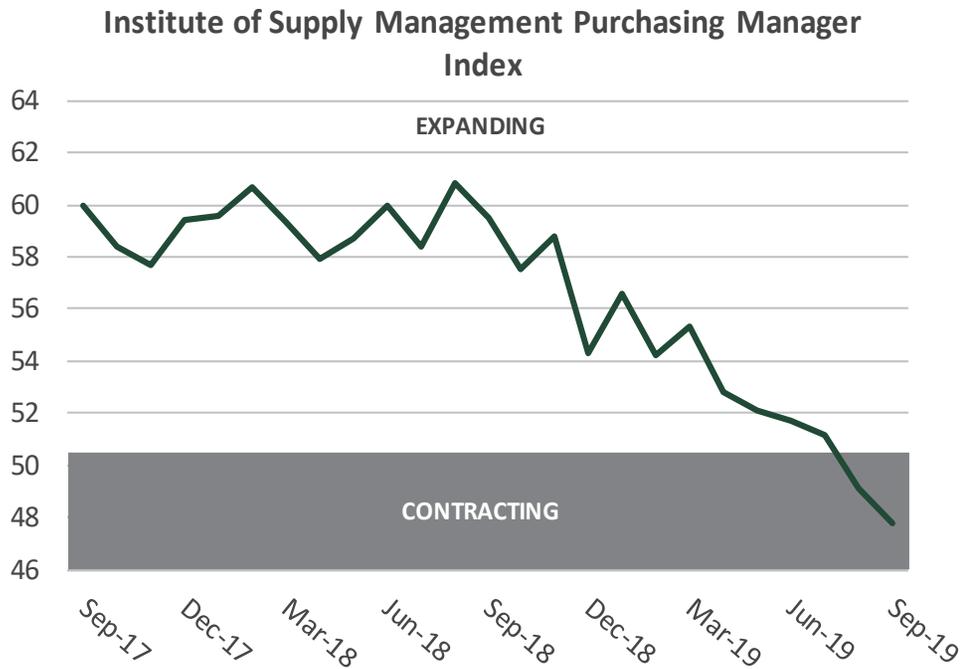
S&P/Case-Shiller 20 City Composite Home Price Index



Source: S&P

Housing starts were much stronger than expected in August, up 12.3% month-over-month to a 1.364 million annualized rate. Multi-family starts jumped 32.8% month-over-month to an annualized rate of 445,000, while single-family starts rose 4.4% to an annualized rate of 919,000. On a year-over-year basis, total housing starts were up 6.6% in August. Permits were also stronger than expected in the month. Although housing data tends to be volatile on a month-over-month basis, the August report and three-month moving averages suggest that housing activity is accelerating. According to the Case-Shiller 20-City home price index, home prices were up just 2.0% year-over-year in July, versus up 2.2% in June. The year-over-year pace of price appreciation is at a 7-year low.

Manufacturing



Source: Institute for Supply Management



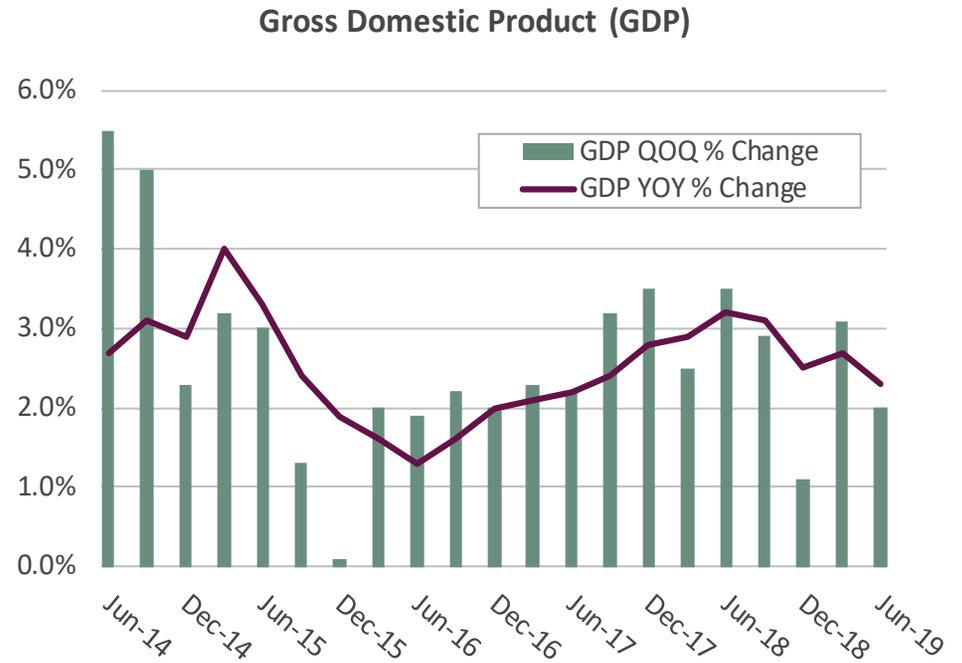
Source: Federal Reserve

The Institute for Supply Management (ISM) manufacturing index declined to 47.8 in September from 49.1 in August. The reading was worse than expected and suggests the manufacturing sector remains in contraction. New orders and backlog orders also remained below 50.0 in September. Overall, the ISM Manufacturing report suggests the outlook for the manufacturing sector is weak. The Industrial Production index was up 0.4% year-over-year in August versus up 0.5% year-over-year in July. On a month-over-month basis, the index rose 0.6% in August, above the consensus forecast of 0.2%. The manufacturing component of the index rose 0.5% in August, above the 0.1% consensus, following a 0.4% decline in July. Capacity Utilization increased to 77.9% in August from 77.5% in July, but remains below the long-run average of 79.8% indicating there is still excess capacity for growth.

Gross Domestic Product (GDP)

Components of GDP	9/18	12/18	3/19	6/19
Personal Consumption Expenditures	2.3%	1.0%	0.8%	3.0%
Gross Private Domestic Investment	2.3%	0.5%	1.1%	-1.2%
Net Exports and Imports	-2.1%	-0.4%	0.7%	-0.7%
Federal Government Expenditures	0.2%	0.1%	0.1%	0.5%
State and Local (Consumption and Gross Investment)	0.2%	-0.1%	0.4%	0.3%
Total	2.9%	1.1%	3.1%	2.0%

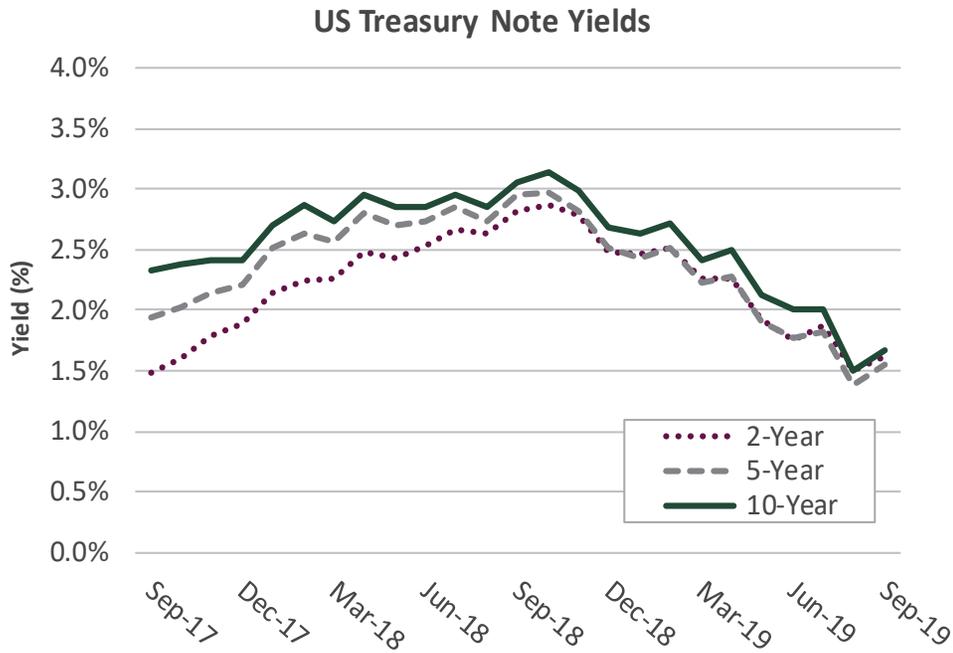
Source: US Department of Commerce



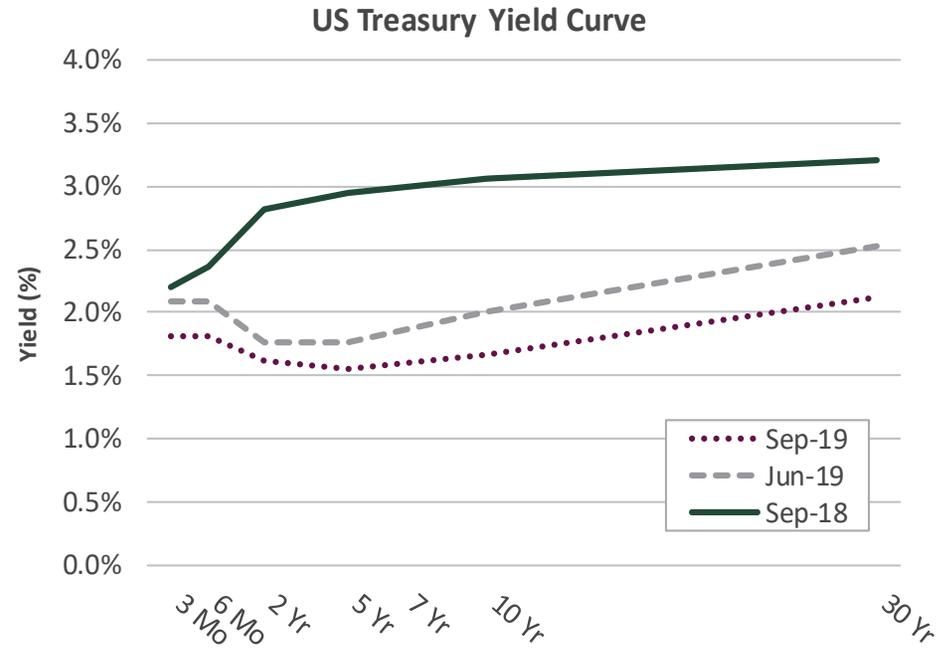
Source: US Department of Commerce

Second quarter GDP grew at an annualized rate of 2.0% following growth of 3.1% in the first quarter. Although the overall pace of GDP growth slowed in the second quarter (as expected), personal consumption expenditures accelerated and were up 4.6% in Q2, following sluggish growth of just 1.1% in Q1. Personal consumption expenditures contributed 3.00 percentage points to Q2 GDP, federal government spending contributed 0.53 percentage points, and state & local government spending contributed 0.29 percentage points. Meanwhile, gross private domestic investment and net exports were a drag on Q2 GDP growth. The consensus forecast calls for GDP growth of 1.9% in the third quarter and 1.7% in the fourth quarter, for full year growth of about 2.0-2.5% versus 2.9% growth in 2018.

Bond Yields



Source: Bloomberg



Source: Bloomberg

The shape of the Treasury yield curve has changed significantly on a year-over-year basis. As of September month-end, the 3-month T-bill yield was down 39 basis points, the 2-Year Treasury yield was down nearly 120 basis points, and the 10-Year Treasury yield was down nearly 140 basis points, year-over-year. The current shape of the yield curve implies that market participants are pricing-in additional rate cuts. We believe the year-over-year decline in long-term Treasury yields reflects a high level of market participants' nervousness about the outlook for global economic growth and a decline in global inflation expectations.



Section 2 | Account Profile

Objectives

Investment Objectives

The investment objectives of the Orange County Sanitation District are first, to provide safety of principal to ensure the preservation of capital in the overall portfolio; second, to provide sufficient liquidity to meet all operating requirements; and third, to earn a commensurate rate of return consistent with the constraints imposed by the safety and liquidity objectives.

Chandler Asset Management Performance Objective

Liquid Operating Monies – will be compared to the 3-month T-Bill rate and operate with a maximum maturity of one year.

Long-Term Operating Monies – will be compared to the ICE BAML 1-5 Year Corporate Government Rated AAA – A Index.

Strategy

In order to achieve these objectives, the portfolio invests in high quality fixed income securities consistent with the investment policy and California Government Code.

Orange County Sanitation District Long Term

Assets managed by Chandler Asset Management are in full compliance with state law and with the investment policy

Category	Standard	Comment
Treasury Issues	5 years maxmaturity; Minimum allocation of 10%	Complies*
U.S. Agencies	20% max issuer; 5 years max maturity	Complies
Supranational	"AA" rated or better by a NRSRO; 30% maximum; 5 years max maturity; USD denominated senior unsecured unsubordinated obligations issued or unconditionally guaranteed by IBRD, IFC, or IADB	Complies
Corporate (MTNs)	"A" rated or better long term debt by a NRSRO; 30% maximum; 5% max issuer; 5 years max maturity; Issued by corporations organized and operating within the U.S. or issued by depository institutions licensed by the U.S.	Complies
Municipal Securities	"A" rated or higher by a NRSRO; 10% maximum; 5% max issuer; 5 years max maturity	Complies
Asset Backed/ CMOs/ Mortgage-backed	"AA" rated or better by a NRSRO; "A" or higher issuer rating by a NRSRO; 20% maximum; 5% max issuer (excluding govt agency/mbs); 5 years max maturity	Complies*
Negotiable CDs	"A" rated or better long term debt by a NRSRO; or "A-1"/ highest short term rating by a NRSRO; 30% maximum; 5% max issuer; 5 years max maturity	Complies
Certificates of Deposit	5% max issuer; 5 years max maturity; Secured/ collateralized	Complies
Banker's Acceptances	A-1 rated or equivalent short term rating by a NRSRO; 40% maximum; 5% max issuer; 180 days max maturity	Complies
Commercial Paper	A-1 rated or equivalent short term rating by a NRSRO; "A" or better long term debt issuer by a NRSRO; Issued by a domestic corporation organized and operating in the US with AUM > \$500million; 25% maximum; 5% max issuer; 270 days max maturity	Complies
Mutual Fund & Money Market Mutual Fund	Highest rating or "AAA" rated by two NRSROs; SEC registered adviser with AUM > \$500 million and experience greater than 5 years; 10% per one Mutual Fund; 20% max per issuer on Money Market Mutual Funds; 20% max of the District's surplus money	Complies
Repurchase Agreements	102% collateralization	Complies
Reverse Repurchase Agreements	5% maximum, 90 days max maturity	Complies
LAIF	Not used by investment adviser	Complies
OCIP	Not used by investment adviser	Complies
Avg Duration	Not to exceed 60 months - (80% to 120% of the benchmark)	Complies
Max Per Issuer	5% of portfolio (except Supranationals, U.S. Government, Agencies, Mutual Fund)	Complies
Maximum Maturity	5 years maximum maturity	Complies*

*The portfolio has twenty (20) securities with maturities greater than 5 years including four (4) CMOs and sixteen (16) MBS. All securities were inherited from the previous manager and complied at time of purchase.

Orange County Sanitation District Long Term

	9/30/2019		6/30/2019
	Benchmark*	Portfolio	Portfolio
Average Maturity (yrs)	2.67	2.82	2.77
Average Modified Duration	2.53	2.46	2.43
Average Purchase Yield	n/a	2.36%	2.36%
Average Market Yield	1.75%	1.79%	1.98%
Average Quality**	AAA	AA/Aa1	AA/Aa1
Total Market Value		548,112,320	558,146,074

*ICE BAML 1-5 Yr US Corp/Govt Rated AAA-A Index

**Benchmark is a blended rating of S&P, Moody's, and Fitch. Portfolio is S&P and Moody's respectively.

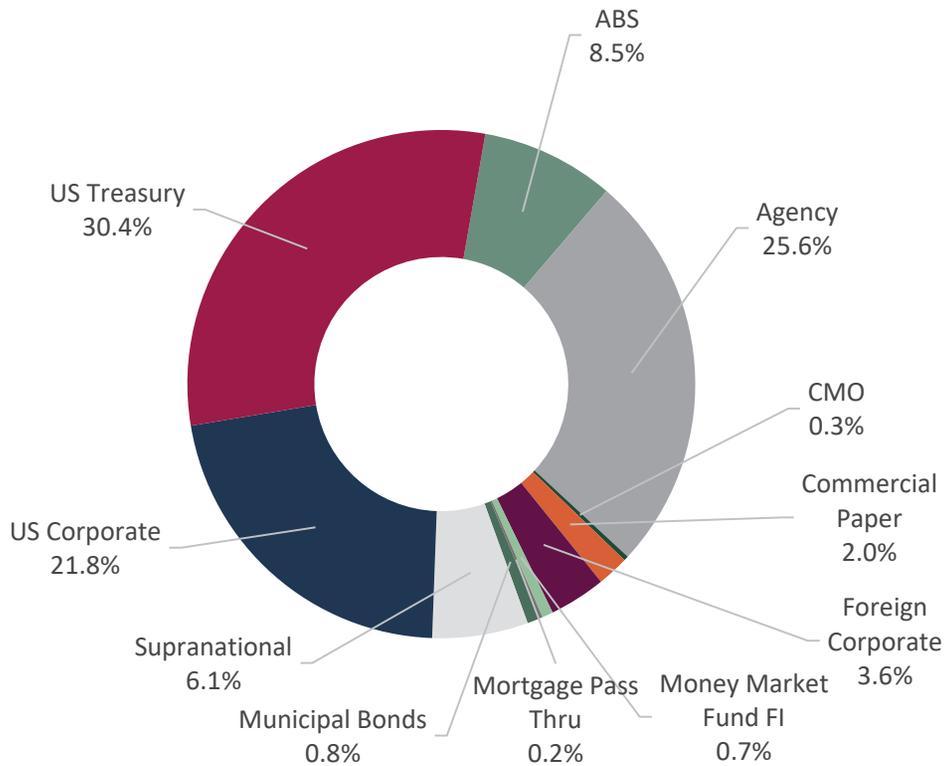
A diverse set of securities in the Treasury, Agency, Asset Backed, Commercial Paper and Corporate sectors were purchased during the quarter to keep the portfolio positioned in-line with Chandler objectives. The purchased securities ranged in maturity from November 2019 to July 2024. One security was sold, one was called, and several matured to facilitate the new holdings in the portfolio. Additionally, \$15 million was withdrawn from the portfolio late in the quarter to account for the liquidity needs of the District.

Sector Distribution

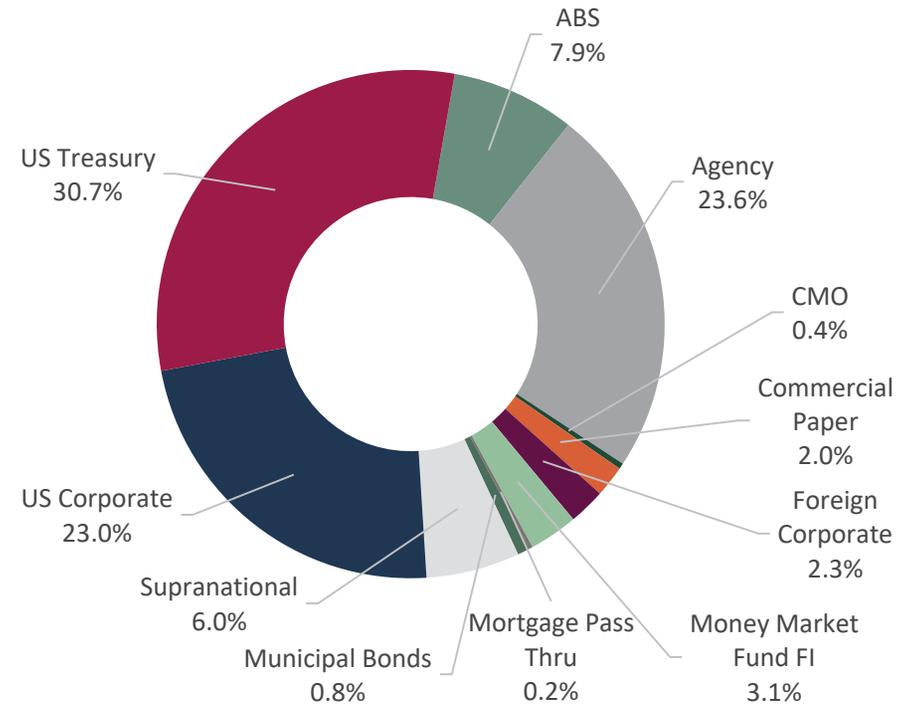
As of September 30, 2019

Orange County Sanitation District Long Term

September 30, 2019



June 30, 2019



The sector allocation was relatively stable during the quarter. Notably the Money Market allocation decreased by 2.4% to 0.7% of the portfolio partially offset by the 2.0% increase in the Agency allocation to 25.6% of the portfolio.

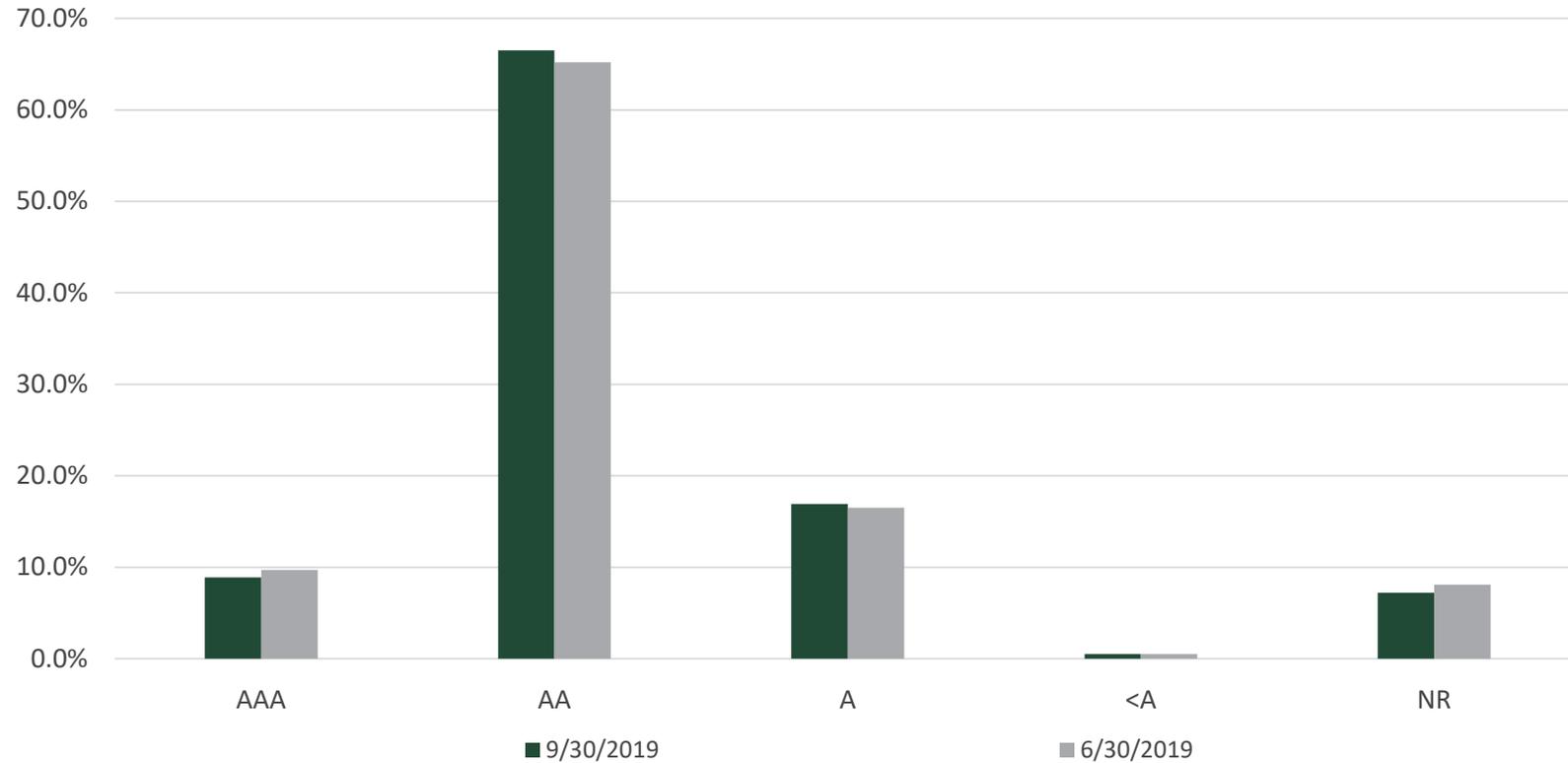
Orange County Sanitation District Long Term – Account #10268

Issue Name	Investment Type	% Portfolio
Government of United States	US Treasury	30.37%
Federal Home Loan Bank	Agency	10.16%
Federal National Mortgage Association	Agency	8.87%
Federal Home Loan Mortgage Corp	Agency	5.59%
Inter-American Dev Bank	Supranational	3.22%
Honda ABS	ABS	2.99%
John Deere ABS	ABS	2.51%
MUFG Bank Ltd/NY	Commercial Paper	2.05%
Intl Bank Recon and Development	Supranational	1.85%
Toronto Dominion Holdings	Foreign Corporate	1.53%
Wells Fargo Corp	US Corporate	1.48%
JP Morgan Chase & Co	US Corporate	1.42%
Apple Inc	US Corporate	1.31%
Bank of America Corp	US Corporate	1.27%
Charles Schwab Corp/The	US Corporate	1.26%
Berkshire Hathaway	US Corporate	1.23%
Royal Bank of Canada	Foreign Corporate	1.21%
Chubb Corporation	US Corporate	1.16%
PNC Financial Services Group	US Corporate	1.15%
American Express ABS	ABS	1.14%
ChevronTexaco Corp	US Corporate	1.13%
Nissan ABS	ABS	1.08%
IBM Corp	US Corporate	1.07%
International Finance Corp	Supranational	1.00%
Intel Corp	US Corporate	0.96%
US Bancorp	US Corporate	0.94%
Bank of New York	US Corporate	0.94%
Federal Farm Credit Bank	Agency	0.93%
Qualcomm Inc	US Corporate	0.92%
HSBC Holdings PLC	Foreign Corporate	0.83%
Toyota ABS	ABS	0.79%
Honda Motor Corporation	US Corporate	0.78%
Wal-Mart Stores	US Corporate	0.75%
First American Govt Obligation Fund Class-Z	Money Market Fund FI	0.69%
General Dynamics Corp	US Corporate	0.59%
Microsoft	US Corporate	0.55%
Exxon Mobil Corp	US Corporate	0.55%
Oracle Corp	US Corporate	0.55%

Orange County Sanitation District Long Term – Account #10268

Issue Name	Investment Type	% Portfolio
Morgan Stanley	US Corporate	0.55%
HSBC Holdings PLC	US Corporate	0.46%
Port Authority of New York and New Jersey	Municipal Bonds	0.46%
Merck & Company	US Corporate	0.38%
Federal Home Loan Mortgage Corp	CMO	0.27%
New York City Transitional Finance Authority	Municipal Bonds	0.27%
Deere & Company	US Corporate	0.25%
Federal National Mortgage Association	Mortgage Pass Thru	0.20%
BlackRock Inc/New York	US Corporate	0.20%
University of California	Municipal Bonds	0.08%
Federal National Mortgage Association	CMO	0.03%
GNMA	Mortgage Pass Thru	0.03%
AMRESO Residential Securities Corp	CMO	0.02%
SLM Corp	ABS	0.00%
Small Business Administration	ABS	0.00%
Federal Home Loan Mortgage Corp	Mortgage Pass Thru	0.00%
TOTAL		100.00%

**Orange County Sanitation District Long Term
September 30, 2019 vs. June 30, 2019**



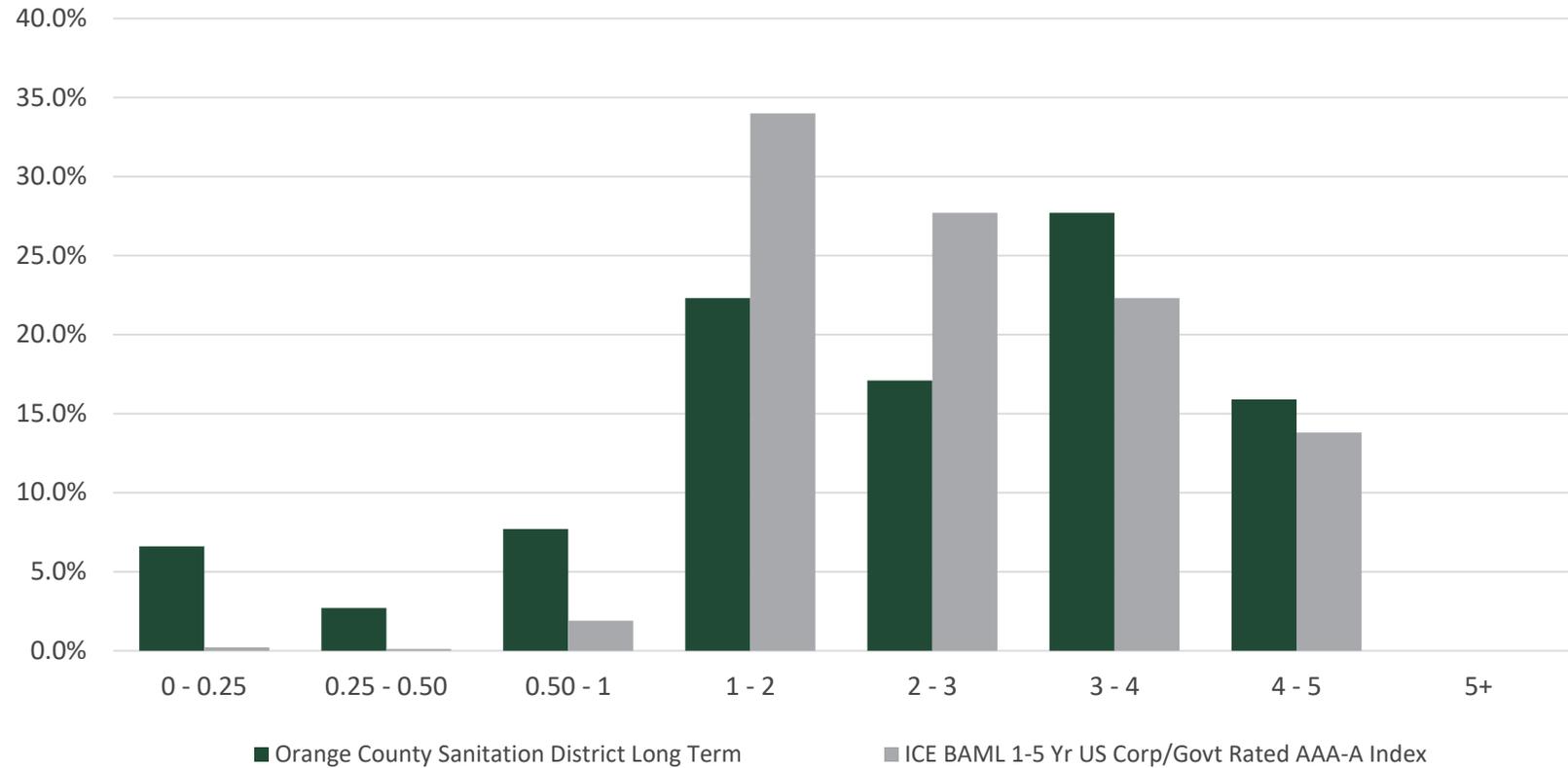
	AAA	AA	A	<A	NR
09/30/19	8.9%	66.5%	16.9%	0.5%	7.2%
06/30/19	9.7%	65.2%	16.5%	0.5%	8.1%

Source: S&P Ratings

Duration Distribution

As of September 30, 2019

**Orange County Sanitation District Long Term
Portfolio Compared to the Benchmark as of September 30, 2019**



	0 - 0.25	0.25 - 0.50	0.50 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5+
Portfolio	6.6%	2.7%	7.7%	22.3%	17.1%	27.7%	15.9%	0.0%
Benchmark*	0.2%	0.1%	1.9%	34.0%	27.7%	22.3%	13.8%	0.0%

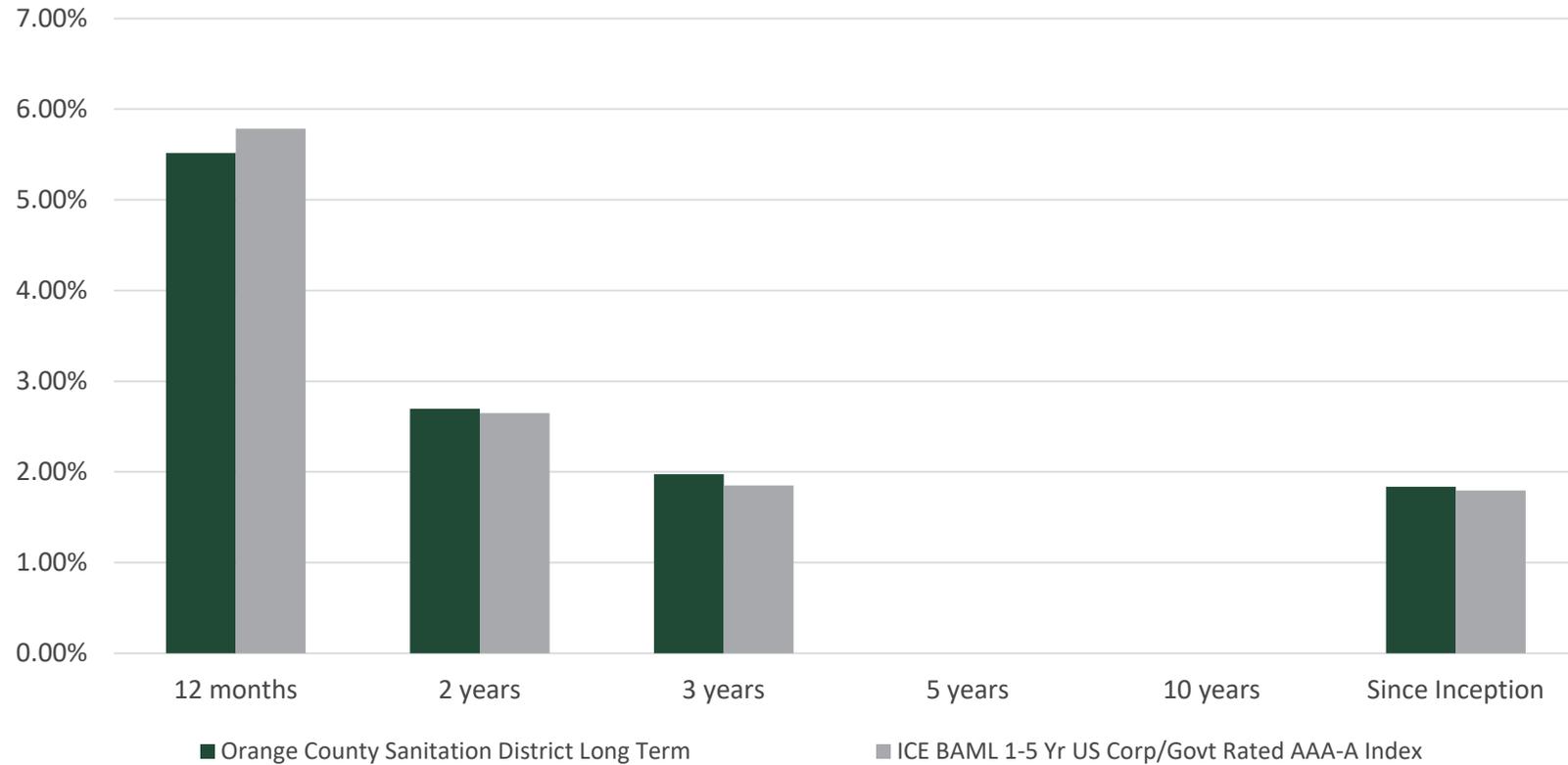
*ICE BAML 1-5 Yr US Corp/Govt Rated AAA-A Index

The duration of the portfolio moderately increased, currently 2.46 compared to 2.43 at the end of the prior reporting period. The Chandler team anticipates keeping the overall duration of the portfolio close to the benchmark in the coming quarter.

Investment Performance

As of September 30, 2019

Orange County Sanitation District Long Term Total Rate of Return Annualized Since Inception 11/30/2014



TOTAL RATE OF RETURN	Annualized						
	3 months	12 months	2 years	3 years	5 years	10 years	Since Inception
Orange County Sanitation District Long Term	0.88%	5.52%	2.69%	1.97%	N/A	N/A	1.84%
ICE BAML 1-5 Yr US Corp/Govt Rated AAA-A Index	0.82%	5.79%	2.65%	1.85%	N/A	N/A	1.79%

Total rate of return: A measure of a portfolio's performance over time. It is the internal rate of return, which equates the beginning value of the portfolio with the ending value; it includes interest earnings, realized and unrealized gains and losses in the portfolio.

Orange County Sanitation District Liquid

Assets managed by Chandler Asset Management are in full compliance with state law and with the investment policy

Category	Standard	Comment
Treasury Issues	1 year max maturity; Minimum allocation of 10%	Complies
U.S. Agencies	20% max issuer; 1 year max maturity	Complies
Supranational	"AA" rated or better by a NRSRO; 30% maximum; 1 year max maturity; USD denominated senior unsecured unsubordinated obligations issued or unconditionally guaranteed by IBRD, IFC, or IADB	Complies
Corporate (MTNs)	"A" rated or better long term debt by a NRSRO; 30% maximum; 5% max issuer; 1 year max maturity; Issued by corporations organized and operating within the U.S. or issued by depository institutions licensed by the U.S.	Complies
Asset Backed/ CMOs	"AA" rated or better by a NRSRO; "A" or higher issuer rating by a NRSRO; 20% maximum; 5% max issuer; 1 year max maturity	Complies
Negotiable CDs	"A" rated or better long term debt by a NRSRO; or "A-1"/ highest short term rating by a NRSRO; 30% maximum; 5% max issuer; 1 year max maturity	Complies
Certificates of Deposit	5% max issuer; 1 year max maturity; Secured/collateralized	Complies
Banker's Acceptances	A-1 rated or equivalent short term rating by a NRSRO; 40% maximum; 5% max issuer; 180 days max maturity	Complies
Commercial Paper	A-1 rated or equivalent short term rating by a NRSRO; "A" or better long term debt issuer by a NRSRO; Issued by a domestic corporation organized and operating in the US with AUM > \$500million; 25% maximum; 5% max issuer; 270 days max maturity	Complies
Mutual Fund & Money Market Mutual Fund	Highest rating or "AAA" rated by two NRSROs; SEC registered adviser with AUM > \$500 million and experience greater than 5 years; 10% per one Mutual Fund; 20% max per issuer on Money Market Mutual Funds; 20% max of the District's surplus money	Complies
Repurchase Agreements	102% collateralization	Complies
Reverse Repurchase Agreements	5% maximum, 90 days max maturity	Complies
LAIF	Not used by investment adviser	Complies
OCIP	Not used by investment adviser	Complies
Prohibited	Municipal Securities	Complies
Prohibited	Mortgage Securities	Complies
Avg Duration	Not to exceed 180 days; Max duration of 1/2 year	Complies
Max Per Issuer	5% of portfolio (except Supranationals, U.S. Government, Agencies, Mutual Fund)	Complies
Maximum Maturity	1 year maximum maturity	Complies

Orange County Sanitation District Liquid

	9/30/2019		6/30/2019
	Benchmark*	Portfolio	Portfolio
Average Maturity (yrs)	0.16	0.31	0.24
Average Modified Duration	0.16	0.30	0.24
Average Purchase Yield	n/a	2.26%	2.48%
Average Market Yield	1.84%	2.01%	2.24%
Average Quality**	AAA	AA+/Aa1	AA+/Aaa
Total Market Value		68,219,230	164,545,331

*ICE BAML 3-Month US Treasury Bill Index

**Benchmark is a blended rating of S&P, Moody's, and Fitch. Portfolio is S&P and Moody's respectively.

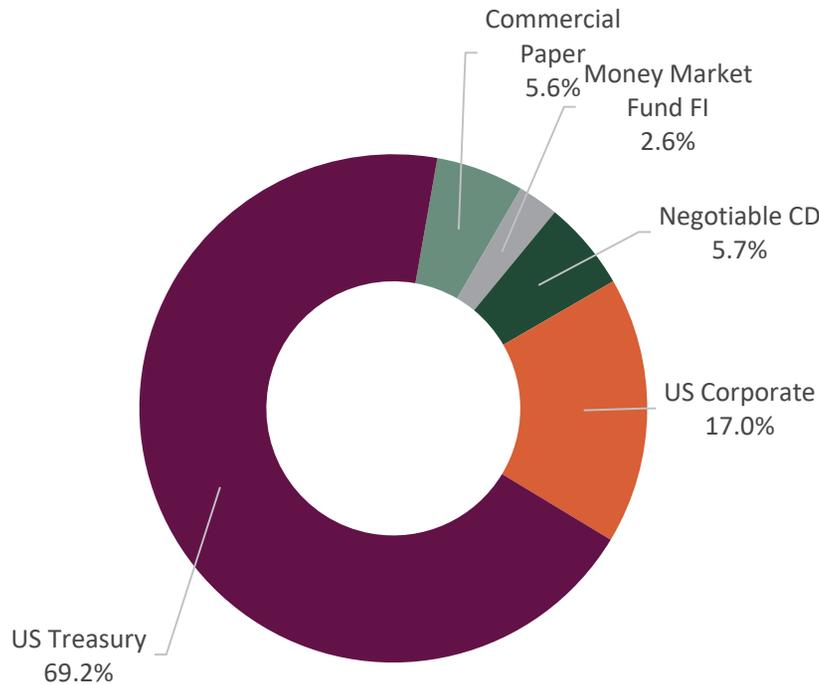
Multiple securities were purchased across the Treasury, Agency, Commercial Paper and Corporate sectors of the market to keep the portfolio fully invested in the liquidity strategy. The purchased securities ranged in maturity from October 2019 to May 2020. One security was called and many matured to facilitate the two liquidity needs totaling \$97 million.

Sector Distribution

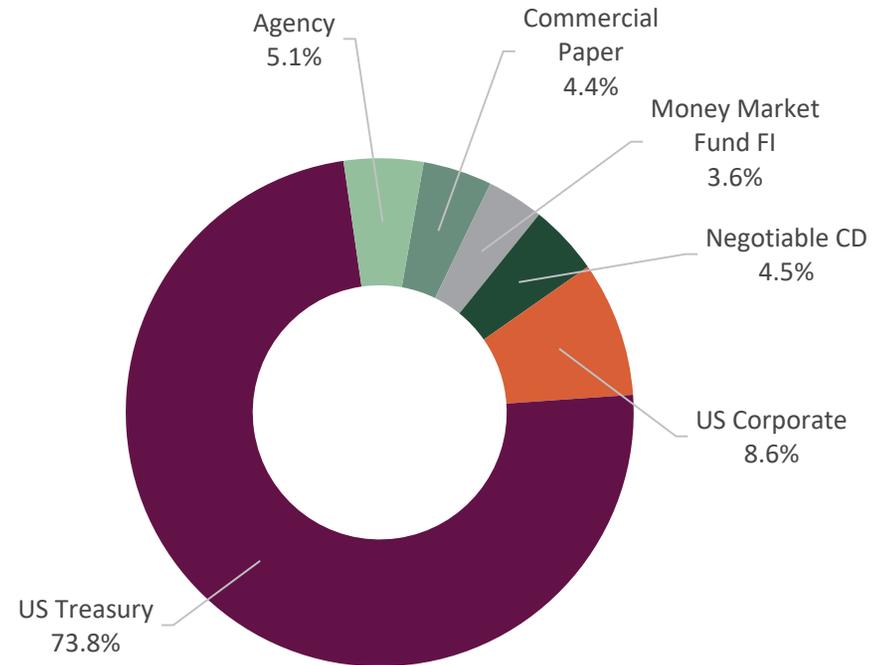
As of September 30, 2019

Orange County Sanitation District Liquid

September 30, 2019



June 30, 2019

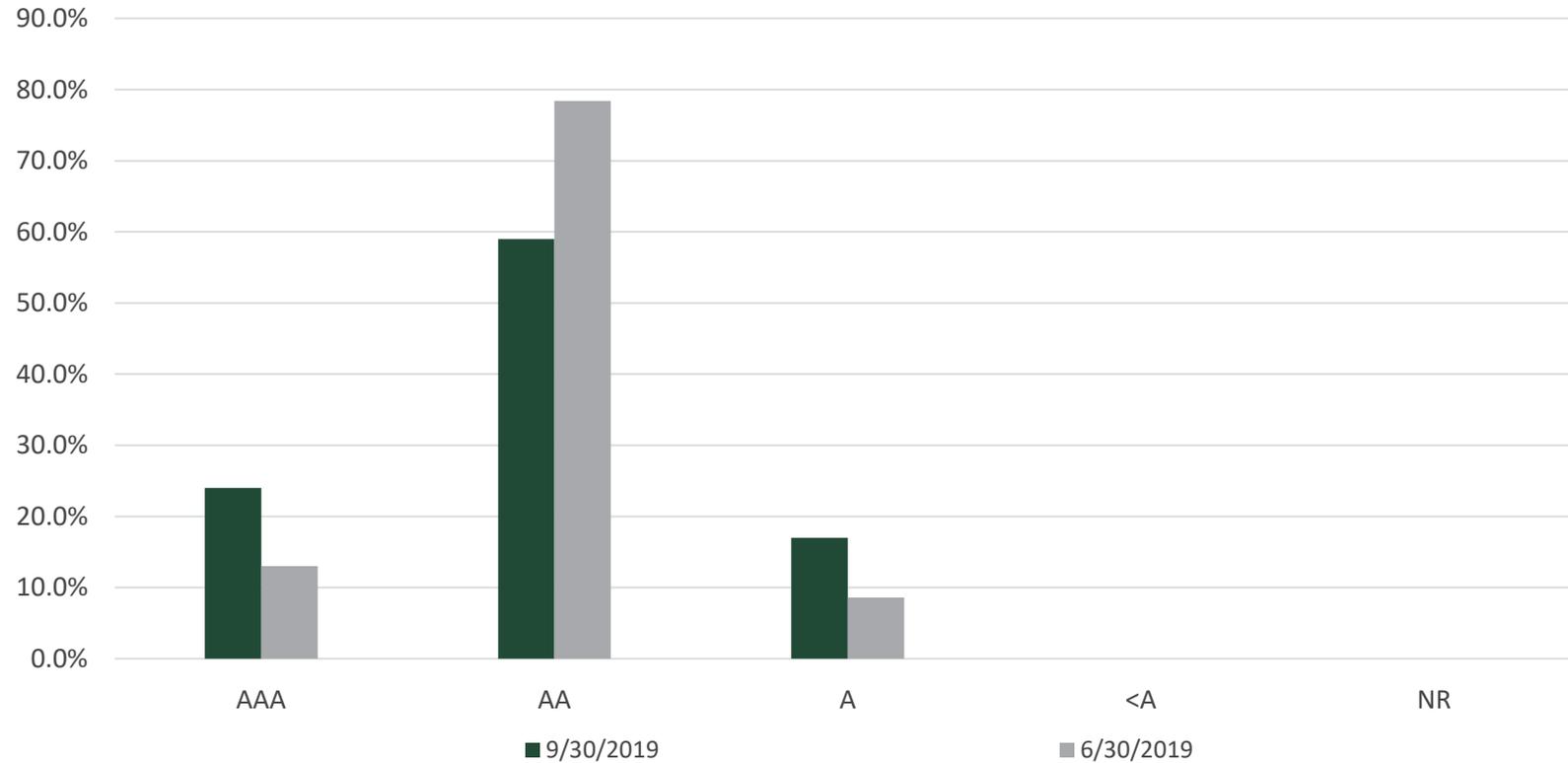


The sector allocation evolved with the drop-in market value due to the liquidity needs during the reporting period. The two largest adjustments were the 4.6% decline in the US Treasury allocation, to 69.2% of the portfolio, more than offset by the 8.4% increase in the US Corporate allocation, to 17.0% of the portfolio.

Orange County Sanitation District Liquid – Account #10282

Issue Name	Investment Type	% Portfolio
Government of United States	US Treasury	69.15%
HSBC Holdings PLC	US Corporate	3.68%
Bank of Nova Scotia Houston	Negotiable CD	3.42%
General Dynamics Corp	US Corporate	2.98%
Bank of America Corp	US Corporate	2.96%
Qualcomm Inc	US Corporate	2.96%
Toyota Motor Corp	Commercial Paper	2.91%
MUFG Bank Ltd/NY	Commercial Paper	2.72%
First American Govt Obligation Fund Class-Z	Money Market Fund FI	2.55%
Westpac Banking Corp NY	Negotiable CD	2.26%
Wells Fargo Corp	US Corporate	2.21%
Bank of New York	US Corporate	2.20%
TOTAL		100.00%

Orange County Sanitation District Liquid
September 30, 2019 vs. June 30, 2019



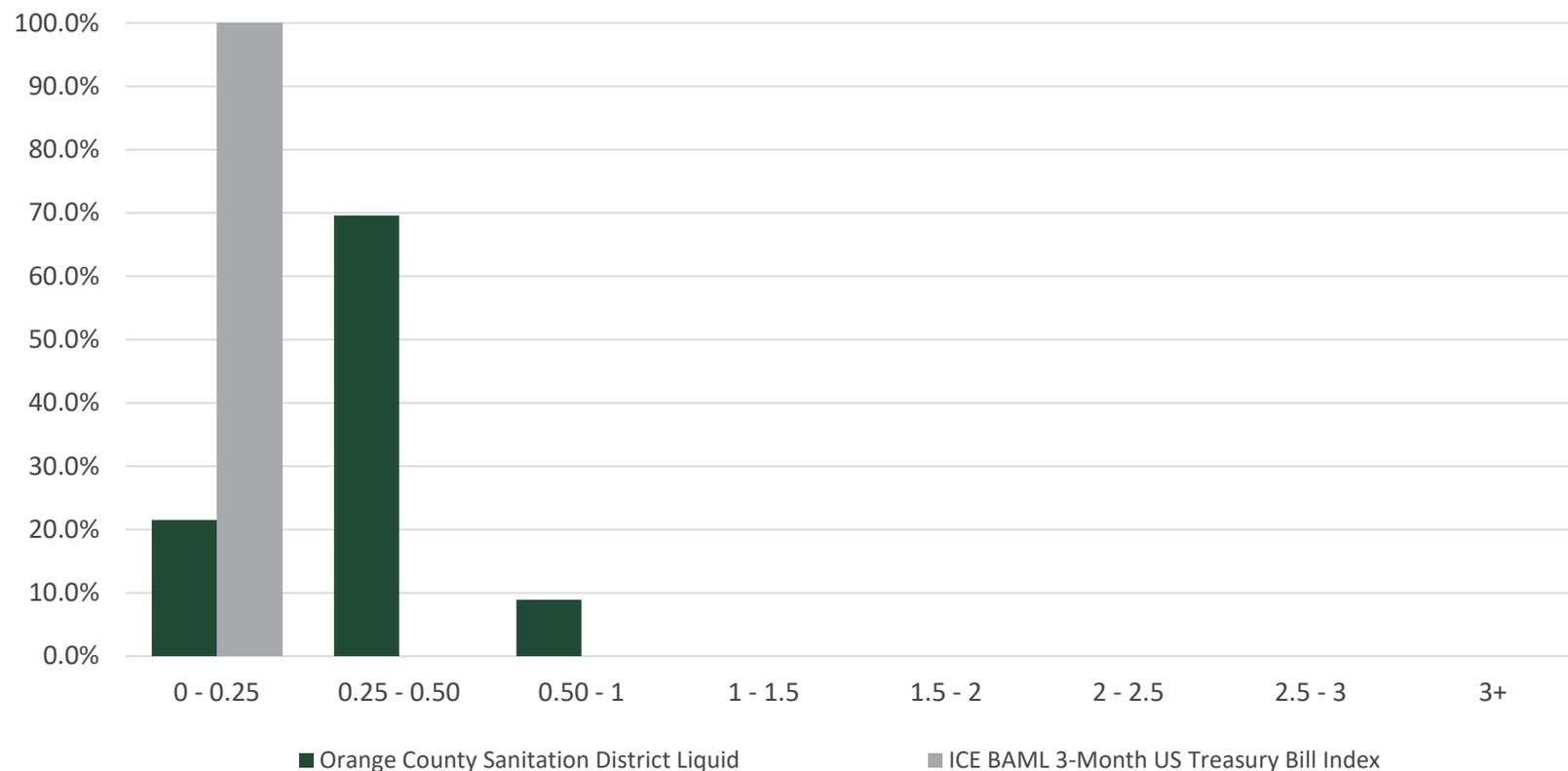
	AAA	AA	A	<A	NR
09/30/19	24.0%	59.0%	17.0%	0.0%	0.0%
06/30/19	13.0%	78.4%	8.6%	0.0%	0.0%

Source: S&P Ratings

Duration Distribution

As of September 30, 2019

**Orange County Sanitation District Liquid
Portfolio Compared to the Benchmark as of September 30, 2019**

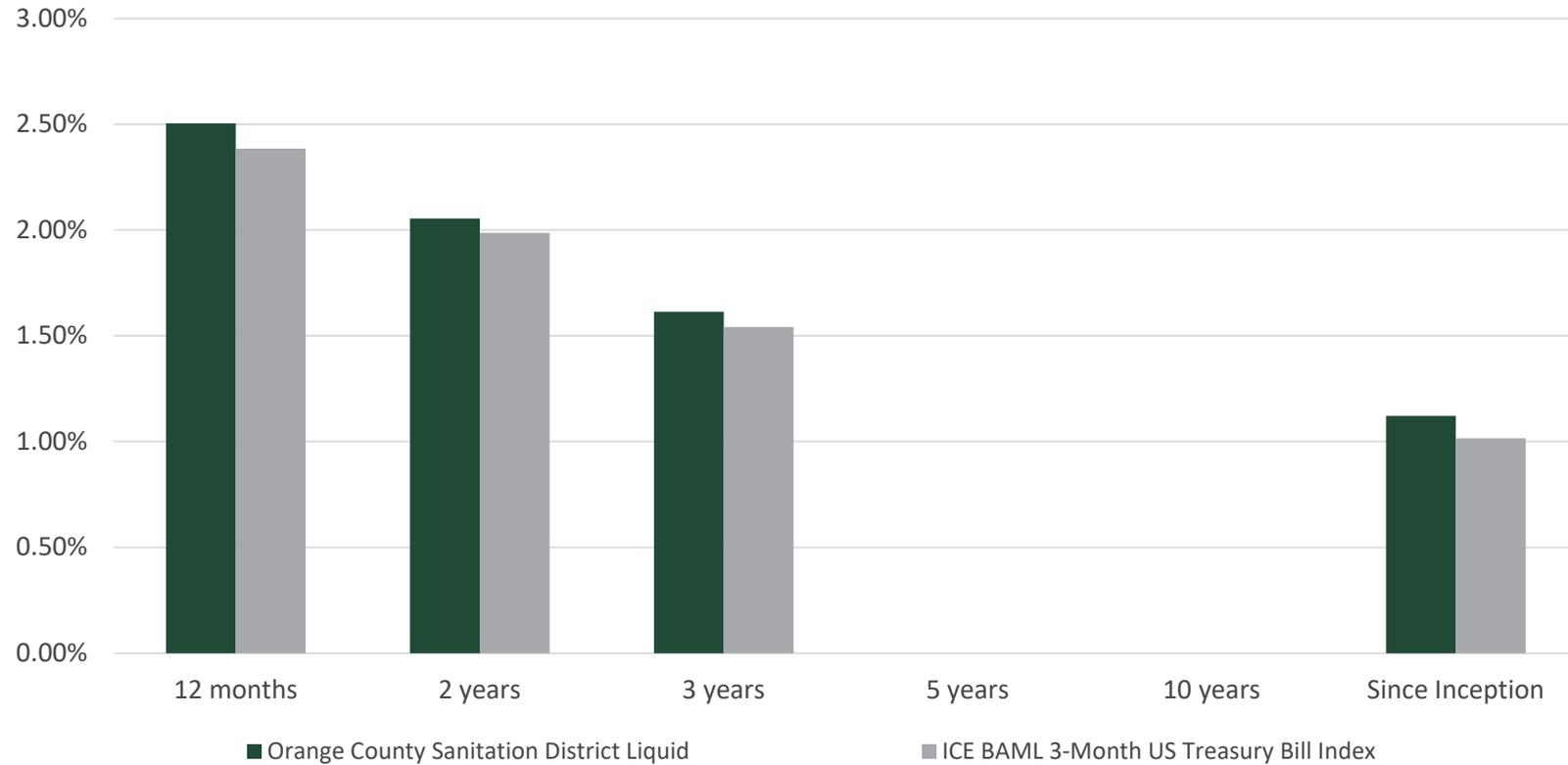


	0 - 0.25	0.25 - 0.50	0.50 - 1	1 - 1.5	1.5 - 2	2 - 2.5	2.5 - 3	3+
Portfolio	21.5%	69.6%	8.9%	0.0%	0.0%	0.0%	0.0%	0.0%
Benchmark*	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

*ICE BAML 3-Month US Treasury Bill Index

The duration of the portfolio moderately increased to 0.30 compared to 0.24 at the end of the prior reporting period. The Chandler team continues to utilize the Treasury and Agency sectors to immunize the large forecasted liquidity needs and overlay spread product (i.e. Commercial Paper and Corporates) to enhance the total return strategy of the portfolio.

Orange County Sanitation District Liquid Total Rate of Return Annualized Since Inception 11/30/2014



TOTAL RATE OF RETURN	Annualized						
	3 months	12 months	2 years	3 years	5 years	10 years	Since Inception
Orange County Sanitation District Liquid	0.59%	2.50%	2.06%	1.61%	N/A	N/A	1.12%
ICE BAML 3-Month US Treasury Bill Index	0.56%	2.39%	1.99%	1.54%	N/A	N/A	1.02%

Total rate of return: A measure of a portfolio's performance over time. It is the internal rate of return, which equates the beginning value of the portfolio with the ending value; it includes interest earnings, realized and unrealized gains and losses in the portfolio.

OCS D Lehman Exposure

Assets managed by Chandler Asset Management are in full compliance with state law and with the investment policy

Category	Standard	Comment
Treasury Issues	5 years maximum maturity	Complies
Supranational	"AA" or better by 1 of 3 NRSROs; 30% maximum; 5% max; 5 years maturity; Includes only: IADB, IBRD, and IFC per CGC	Complies
U.S. Agencies	20% max issuer; 5 years maximum maturity	Complies
U.S. Corporate (MTNs)	"A" or better long term rating by 1 of 3 NRSROs; 30% maximum; 5% max issuer; 5 years max maturity	Complies*
Municipal Securities	"A" or higher by 1 of 3 NRSROs; 10% maximum; 5% max issuer; 5 years maximum maturity	Complies
Asset Backed/ CMOs/ Mortgage-backed	"AA" or better by 1 of 3 NRSROs; "A" or higher issuer rating by 1 of 3 NRSROs; 20% maximum; 5% max issuer (excluding MBS/govt agency); 5 years max maturity	Complies
Negotiable CDs	"A" or better on its long term debt by 1 of 3 NRSROs ; "A1/P1" or highest short term ratings by 1 of 3 NRSROs; 30% maximum; 5% max issuer; 5 years max maturity	Complies
CDs/ TDS	5% max issuer; 5 years max maturity	Complies
Banker's Acceptances	A-1, or equivalent highest short term rating by 1 of 3 NRSROs; 40% maximum; 5% max issuer; 180 days max maturity	Complies
Commercial Paper	A-1, or equivalent by 1 of 3 NRSROs; "A" or better by 1 of 3 NRSROs, if long term debt issued; 25% maximum; 5% max issuer; 270 days max maturity	Complies
Money Market Fund	Highest rating by 2 of 3 NRSROs; 20% maximum; 10% max issuer	Complies
Repurchase Agreements	102% collateralization	Complies
Reverse Repurchase Agreements	5% maximum, 90 days max maturity	Complies
LAIF	Not used by investment adviser	Complies
Avg Duration	Not to exceed 60 months - (80% to 120% of the benchmark)	Complies
Maximum Maturity	5 years maximum maturity	Complies

* Account holds \$2 million face value (cusip 525ESC0Y6) and \$600,000 face value (cusip 525ESC1B7) of defaulted Lehman Bros Holdings that were purchased by the previous manager. Complied at time of purchase.

OCSD Lehman Exposure

	9/30/2019 Portfolio	6/30/2019 Portfolio
Average Maturity (yrs)	13.55	14.73
Modified Duration	0.00	0.00
Average Purchase Yield	0.00%	0.00%
Average Market Yield	0.00%	0.00%
Average Quality*	NR/NR	NR/NR
Total Market Value	61,941	69,161

**Portfolio is S&P and Moody's, respectively.*



Section 3 | Consolidated Information

Portfolio Characteristics

As of September 30, 2019

Orange County Sanitation District Consolidated

	9/30/2019 Portfolio	6/30/2019 Portfolio
Average Maturity (yrs)	2.54	2.20
Modified Duration	2.22	1.93
Average Purchase Yield	2.35%	2.39%
Average Market Yield	1.81%	2.04%
Average Quality*	AA/Aa1	AA/Aa1
Total Market Value	616,393,490	722,760,566

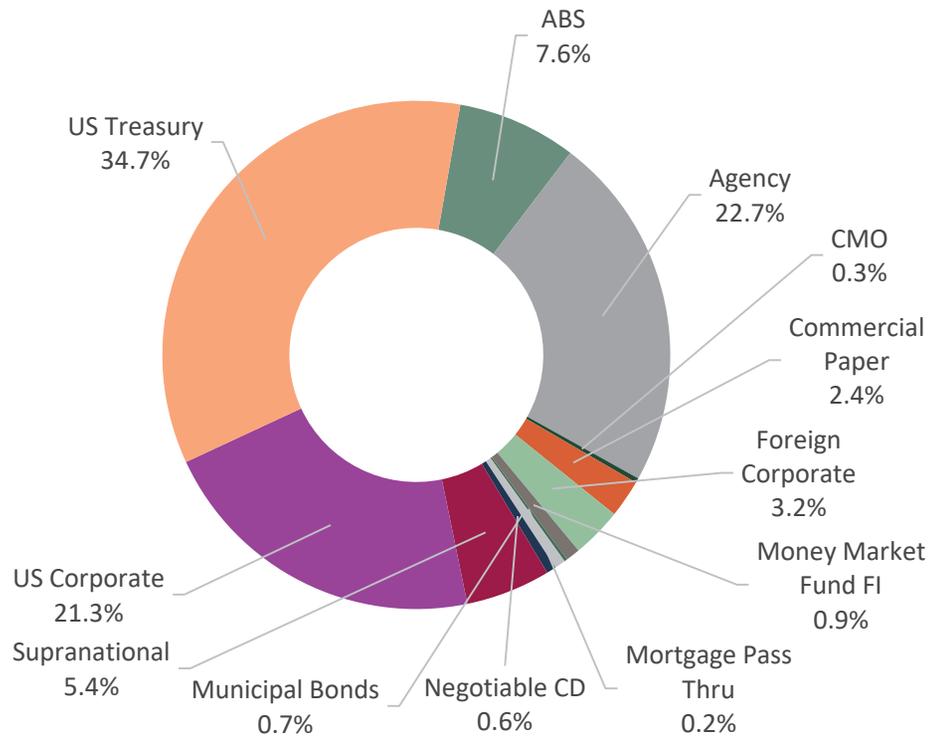
* Portfolio is S&P and Moody's respectively.

Sector Distribution

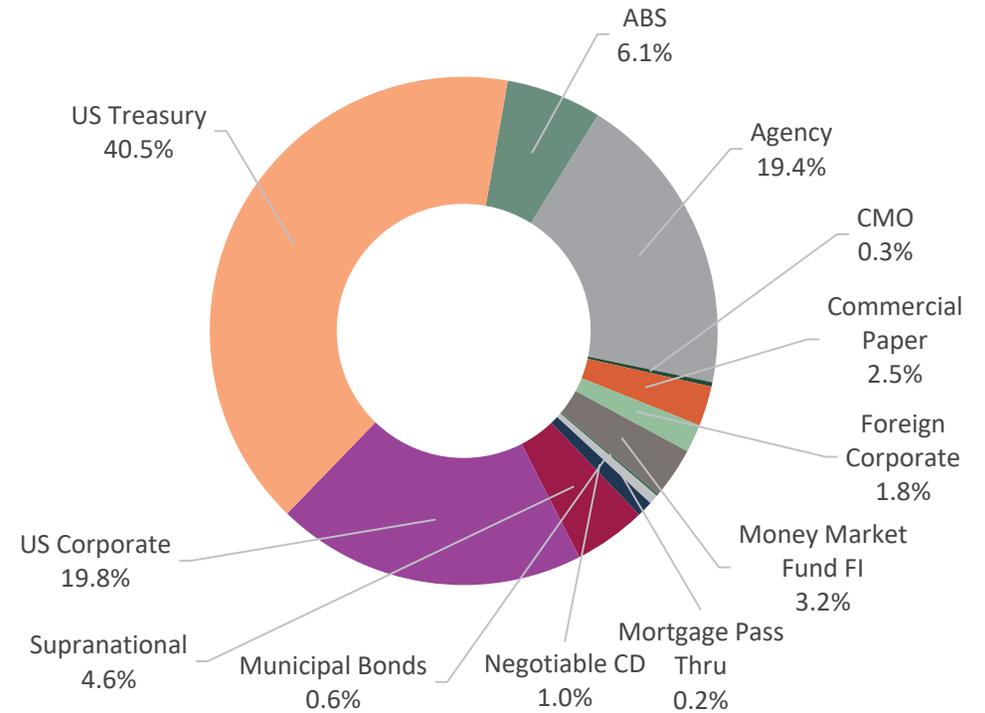
As of September 30, 2019

Orange County Sanitation District Consolidated

September 30, 2019



June 30, 2019





Section 4 | Portfolio Holdings

Orange County Sanitation District Long Term - Account #10268

CUSIP	Security Description	Par Value/Units	Purchase Date Book Yield	Cost Value Book Value	Mkt Price Mkt YTM	Market Value Accrued Int.	% of Port. Gain/Loss	Moody/S&P Fitch	Maturity Duration
ABS									
89238BAB8	Toyota Auto Receivables Owner 2018-A A2A 2.100% Due 10/15/2020	683,639.44	01/23/2018 2.12%	683,569.57 683,612.57	100.00 2.14%	683,622.21 638.06	0.12% 9.64	Aaa / AAA NR	1.04 0.07
47788CAB8	John Deere Owner Trust 2018-A A2 2.420% Due 10/15/2020	180,610.31	03/16/2018 2.59%	180,243.45 180,462.00	100.01 2.29%	180,623.78 194.26	0.03% 161.78	Aaa / NR AAA	1.04 0.05
43814RAC0	Honda Auto Receivables 2016-4 A3 1.210% Due 12/18/2020	563,719.94	02/07/2018 2.58%	557,532.23 561,085.86	99.81 2.17%	562,647.16 246.31	0.10% 1,561.30	NR / AAA AAA	1.22 0.20
65478VAD9	NAROT 2016-B A3 1.320% Due 01/15/2021	252,050.02	02/12/2018 1.87%	250,031.65 251,156.33	99.90 2.14%	251,800.82 36.97	0.05% 644.49	Aaa / NR AAA	1.30 0.12
83162CLI0	Small Business Administration 2001-20C 6.340% Due 03/01/2021	11,184.56	03/06/2001 6.34%	11,184.56 11,184.56	101.50 4.10%	11,352.18 59.09	0.00% 167.62	Aaa / AA+ AAA	1.42 0.87
43814PAC4	Honda Auto Receivables Owner T 17-3 A3 1.790% Due 09/20/2021	2,115,225.60	06/28/2018 2.78%	2,081,679.44 2,094,739.40	99.92 1.96%	2,113,452.98 1,367.26	0.39% 18,713.58	NR / AAA AAA	1.98 0.53
43814WAB1	HAROT 2019-1 A2 2.750% Due 09/20/2021	4,395,000.00	02/19/2019 2.77%	4,394,716.96 4,394,782.28	100.42 2.11%	4,413,379.89 4,364.48	0.81% 18,597.61	NR / AAA AAA	1.98 0.63
47788BAD6	John Deere Owner Trust 2017-B A3 1.820% Due 10/15/2021	441,393.78	07/11/2017 1.83%	441,361.46 441,378.25	99.84 2.16%	440,709.33 357.04	0.08% (668.92)	Aaa / NR AAA	2.04 0.46
65478GAD2	Nissan Auto Receivables Owner 2017-B A3 1.750% Due 10/15/2021	2,063,703.33	11/06/2018 3.10%	2,031,699.81 2,041,462.08	99.87 2.03%	2,060,954.09 1,605.10	0.38% 19,492.01	Aaa / NR AAA	2.04 0.49
89239AAB9	Toyota Auto Receivables 2019-A A2A 2.830% Due 10/15/2021	3,615,000.00	02/05/2019 2.85%	3,614,671.76 3,614,749.19	100.35 2.13%	3,627,645.27 4,546.87	0.66% 12,896.08	Aaa / AAA NR	2.04 0.49
47789JAB2	John Deere Owner Trust 2019-A A2 2.850% Due 12/15/2021	3,265,000.00	03/05/2019 2.87%	3,264,851.12 3,264,880.96	100.46 2.09%	3,280,045.12 4,135.67	0.60% 15,164.16	Aaa / NR AAA	2.21 0.59
43815NAB0	HAROT 2019-3 A2 1.900% Due 04/15/2022	3,530,000.00	08/20/2019 1.92%	3,529,752.90 3,529,767.39	99.90 1.99%	3,526,547.66 2,980.89	0.64% (3,219.73)	Aaa / AAA NR	2.54 1.14
47788CAC6	John Deere Owner Trust 2018-A A3 2.660% Due 04/18/2022	1,340,000.00	02/21/2018 2.68%	1,339,903.65 1,339,940.66	100.41 2.12%	1,345,476.58 1,584.18	0.25% 5,535.92	Aaa / NR AAA	2.55 0.73
477870AB5	JDOT 2019-B A2 2.280% Due 05/16/2022	2,800,000.00	07/16/2019 2.29%	2,799,989.36 2,799,990.07	100.23 2.06%	2,806,445.60 2,837.33	0.51% 6,455.53	Aaa / NR AAA	2.63 0.99
43814UAG4	Honda Auto Receivables 2018-2 A3 3.010% Due 05/18/2022	1,710,000.00	05/22/2018 3.03%	1,709,962.72 1,709,975.30	101.00 2.10%	1,727,089.74 1,858.68	0.32% 17,114.44	NR / AAA AAA	2.63 1.07
43815HAC1	Honda Auto Receivables Owner 2018-3 A3 2.950% Due 08/22/2022	3,970,000.00	08/21/2018 2.98%	3,969,455.32 3,969,604.69	101.16 1.99%	4,015,905.07 3,253.19	0.73% 46,300.38	Aaa / NR AAA	2.90 1.18
02587AAJ3	American Express Credit 2017-1 1.930% Due 09/15/2022	6,270,000.00	Various 2.91%	6,174,085.15 6,202,803.05	99.92 2.16%	6,265,034.10 5,378.27	1.14% 62,231.05	Aaa / NR AAA	2.96 0.36

Holdings Report

As of September 30, 2019

Orange County Sanitation District Long Term - Account #10268

CUSIP	Security Description	Par Value/Units	Purchase Date Book Yield	Cost Value Book Value	Mkt Price Mkt YTM	Market Value Accrued Int.	% of Port. Gain/Loss	Moody/S&P Fitch	Maturity Duration
47788EAC2	John Deere Owner Trust 2018-B A3 3.080% Due 11/15/2022	4,630,000.00	07/18/2018 3.10%	4,629,649.05 4,629,745.59	101.31 1.99%	4,690,778.01 6,337.96	0.86% 61,032.42	Aaa / NR AAA	3.13 1.18
65479GAD1	Nissan Auto Receivables Owner 2018-B A3 3.060% Due 03/15/2023	3,560,000.00	07/17/2018 3.08%	3,559,884.66 3,559,914.14	101.45 2.08%	3,611,474.04 4,841.60	0.66% 51,559.90	Aaa / AAA NR	3.46 1.44
78445JAA5	SLMA 2008-9 A 3.820% Due 04/25/2023	13,344.85	08/22/2008 3.90%	13,290.71 13,331.68	100.59 3.36%	13,423.58 96.29	0.00% 91.90	Baa3 / B B	3.57 2.60
47788NADO	John Deere Owner Trust 2016-B A4 1.490% Due 05/15/2023	1,003,712.93	06/27/2018 2.19%	987,088.93 991,373.27	99.97 2.28%	1,003,451.96 664.68	0.18% 12,078.69	Aaa / NR AAA	3.62 0.03
TOTAL ABS		46,413,584.76	2.77%	46,224,604.46 46,285,939.32	2.08%	46,631,859.17 47,384.18	8.52% 345,919.85	Aaa / AAA Aaa	2.57 0.78

Agency									
3137EADM8	FHLMC Note 1.250% Due 10/02/2019	7,500,000.00	Various 1.61%	7,399,650.00 7,499,927.87	100.00 1.78%	7,499,775.00 46,614.58	1.38% (152.87)	Aaa / AA+ AAA	0.01 0.01
313383HU8	FHLB Note 1.750% Due 06/12/2020	5,000,000.00	08/13/2015 1.71%	5,008,950.00 5,001,293.79	99.93 1.85%	4,996,425.00 26,493.06	0.92% (4,868.79)	Aaa / AA+ NR	0.70 0.69
3135G0D75	FNMA Note 1.500% Due 06/22/2020	5,000,000.00	11/16/2015 1.70%	4,955,650.00 4,993,000.15	99.72 1.89%	4,986,065.00 20,625.00	0.91% (6,935.15)	Aaa / AA+ AAA	0.73 0.72
3137EAEK1	FHLMC Note 1.875% Due 11/17/2020	5,000,000.00	Various 1.97%	4,986,225.00 4,994,713.15	100.10 1.78%	5,005,160.00 34,895.83	0.92% 10,446.85	Aaa / AA+ AAA	1.13 1.11
3135G0F73	FNMA Note 1.500% Due 11/30/2020	7,500,000.00	Various 1.87%	7,370,726.00 7,469,583.86	99.65 1.81%	7,473,480.00 37,812.50	1.37% 3,896.14	Aaa / AA+ AAA	1.17 1.15
3137EAEI9	FHLMC Note 2.375% Due 02/16/2021	7,500,000.00	02/26/2018 2.45%	7,484,475.00 7,492,788.39	100.81 1.78%	7,560,637.50 22,265.63	1.38% 67,849.11	Aaa / AA+ AAA	1.38 1.35
3130A7CV5	FHLB Note 1.375% Due 02/18/2021	5,365,000.00	02/17/2016 1.46%	5,343,325.40 5,358,997.07	99.48 1.76%	5,336,935.69 8,811.27	0.98% (22,061.38)	Aaa / AA+ AAA	1.39 1.36
3135G0J20	FNMA Note 1.375% Due 02/26/2021	10,000,000.00	Various 1.28%	10,040,950.00 10,012,560.14	99.46 1.76%	9,946,070.00 13,368.06	1.82% (66,490.14)	Aaa / AA+ AAA	1.41 1.38
313379RB7	FHLB Note 1.875% Due 06/11/2021	4,000,000.00	08/30/2017 1.67%	4,030,160.00 4,013,528.29	100.22 1.74%	4,008,896.00 22,916.67	0.74% (4,632.29)	Aaa / AA+ AAA	1.70 1.66
3135G0U35	FNMA Note 2.750% Due 06/22/2021	7,500,000.00	06/28/2018 2.68%	7,515,225.00 7,508,807.85	101.77 1.70%	7,632,960.00 56,718.75	1.40% 124,152.15	Aaa / AA+ AAA	1.73 1.67
3135G0S38	FNMA Note 2.000% Due 01/05/2022	3,000,000.00	01/30/2017 2.04%	2,994,570.00 2,997,505.22	100.72 1.68%	3,021,465.00 14,333.33	0.55% 23,959.78	Aaa / AA+ AAA	2.27 2.20
3135G0T45	FNMA Note 1.875% Due 04/05/2022	5,000,000.00	05/05/2017 1.99%	4,972,500.00 4,985,935.58	100.68 1.60%	5,034,050.00 45,833.33	0.93% 48,114.42	Aaa / AA+ AAA	2.52 2.43

Holdings Report

As of September 30, 2019

Orange County Sanitation District Long Term - Account #10268

CUSIP	Security Description	Par Value/Units	Purchase Date Book Yield	Cost Value Book Value	Mkt Price Mkt YTM	Market Value Accrued Int.	% of Port. Gain/Loss	Moody/S&P Fitch	Maturity Duration
3135G0T94	FNMA Note 2.375% Due 01/19/2023	5,000,000.00	Various 2.78%	4,910,990.00 4,938,398.90	102.49 1.60%	5,124,270.00 23,750.00	0.94% 185,871.10	Aaa / AA+ AAA	3.31 3.16
313383QR5	FHLB Note 3.250% Due 06/09/2023	5,000,000.00	08/28/2018 2.87%	5,083,350.00 5,064,339.51	105.60 1.68%	5,280,245.00 50,555.56	0.97% 215,905.49	Aaa / AA+ NR	3.69 3.45
3137EAEN5	FHLMC Note 2.750% Due 06/19/2023	10,000,000.00	Various 2.84%	9,956,500.00 9,967,277.08	104.04 1.63%	10,404,280.00 77,916.66	1.91% 437,002.92	Aaa / AA+ AAA	3.72 3.51
313383YJ4	FHLB Note 3.375% Due 09/08/2023	10,000,000.00	Various 2.88%	10,211,831.00 10,179,259.32	106.59 1.64%	10,658,660.00 21,562.50	1.95% 479,400.68	Aaa / AA+ NR	3.94 3.69
3130A0F70	FHLB Note 3.375% Due 12/08/2023	10,000,000.00	Various 2.79%	10,269,043.75 10,228,287.46	106.99 1.64%	10,699,230.01 105,937.50	1.97% 470,942.55	Aaa / AA+ AAA	4.19 3.88
3135G0V34	FNMA Note 2.500% Due 02/05/2024	5,000,000.00	02/27/2019 2.58%	4,980,850.00 4,983,133.56	103.77 1.60%	5,188,510.00 19,444.44	0.95% 205,376.44	Aaa / AA+ AAA	4.35 4.10
3130A1XJ2	FHLB Note 2.875% Due 06/14/2024	11,110,000.00	Various 1.96%	11,589,031.30 11,561,434.66	105.58 1.64%	11,730,160.20 94,936.49	2.16% 168,725.54	Aaa / AA+ NR	4.71 4.37
3133EKWV4	FFCB Note 1.850% Due 07/26/2024	5,000,000.00	08/13/2019 1.65%	5,048,280.00 5,046,998.23	101.07 1.62%	5,053,585.00 16,701.39	0.93% 6,586.77	Aaa / AA+ AAA	4.82 4.59
3130A2UW4	FHLB Note 2.875% Due 09/13/2024	2,500,000.00	09/12/2019 1.73%	2,635,950.00 2,634,610.59	105.72 1.67%	2,643,027.50 3,593.75	0.48% 8,416.91	Aaa / AA+ AAA	4.96 4.62
TOTAL Agency		135,975,000.00	2.18%	136,788,232.45 136,932,380.67	1.70%	139,283,886.90 765,086.30	25.55% 2,351,506.23	Aaa / AA+ Aaa	2.66 2.52
CMO									
31398VJ98	FHLMC FHMS K006 A2 4.251% Due 01/25/2020	659,054.74	11/23/2010 3.54%	696,435.51 660,351.44	100.16 2.36%	660,127.62 2,334.70	0.12% (223.82)	Aaa / AA+ AAA	0.32 0.23
03215PFN4	AMRESKO Residential Securities 1999-1 A 2.994% Due 06/25/2029	123,127.85	05/20/2011 6.75%	92,461.32 106,627.24	98.45 3.31%	121,218.14 61.43	0.02% 14,590.90	NR / A+ BBB	9.74 5.91
3133TCE95	FHLMC FSPC E3 A 4.024% Due 08/15/2032	7,928.50	03/11/1998 3.98%	7,936.80 7,931.61	100.38 2.92%	7,958.80 26.59	0.00% 27.19	Aaa / AA+ AAA	12.88 2.31
31397QRE0	FNMA FNR 2011-3 FA 2.734% Due 02/25/2041	186,495.68	12/20/2010 2.74%	186,437.40 186,454.21	100.55 2.56%	187,530.73 84.97	0.03% 1,076.52	Aaa / AA+ AAA	21.42 4.19
31394JY35	FHLMC FSPC T-58 2A 6.500% Due 09/25/2043	686,785.68	06/09/2011 5.40%	777,784.78 754,392.51	117.31 0.10%	805,633.94 744.02	0.15% 51,241.43	Aaa / AA+ AAA	24.00 2.41
TOTAL CMO		1,663,392.45	4.51%	1,761,055.81 1,715,757.01	1.43%	1,782,469.23 3,251.71	0.33% 66,712.22	Aaa / AA+ Aaa	13.93 2.02

Holdings Report

As of September 30, 2019

Orange County Sanitation District Long Term - Account #10268

CUSIP	Security Description	Par Value/Units	Purchase Date Book Yield	Cost Value Book Value	Mkt Price Mkt YTM	Market Value Accrued Int.	% of Port. Gain/Loss	Moody/S&P Fitch	Maturity Duration
Commercial Paper									
62479MYK3	MUFG Bank Ltd/NY Discount CP 2.120% Due 11/19/2019	11,255,000.00	08/20/2019 2.16%	11,194,685.71 11,222,523.07	99.71 2.16%	11,222,523.07 0.00	2.05% 0.00	P-1 / A-1 NR	0.14 0.14
TOTAL Commercial Paper		11,255,000.00	2.16%	11,194,685.71 11,222,523.07	2.16%	11,222,523.07 0.00	2.05% 0.00	P-1 / A-1 NR	0.14 0.14
Foreign Corporate									
404280BF5	HSBC Holdings PLC Note 2.650% Due 01/05/2022	4,500,000.00	Various 3.08%	4,429,980.00 4,458,948.54	100.71 2.32%	4,532,157.00 28,487.50	0.83% 73,208.46	A2 / A AA-	2.27 2.17
89114QC48	Toronto Dominion Bank Note 3.500% Due 07/19/2023	5,000,000.00	02/26/2019 3.04%	5,094,200.00 5,081,557.68	105.45 2.00%	5,272,615.00 35,000.00	0.97% 191,057.32	Aa1 / AA- AA-	3.80 3.54
89114QCA4	Toronto Dominion Bank Note 2.650% Due 06/12/2024	3,000,000.00	06/12/2019 2.65%	3,000,570.00 3,000,535.96	101.89 2.22%	3,056,553.00 24,070.83	0.56% 56,017.04	Aa3 / A NR	4.70 4.37
78013XZU5	ROYAL BANK OF CANADA Note 2.550% Due 07/16/2024	6,500,000.00	09/10/2019 2.28%	6,581,445.00 6,580,570.24	101.35 2.25%	6,588,036.00 34,531.25	1.21% 7,465.76	A2 / A AA	4.80 4.47
TOTAL Foreign Corporate		19,000,000.00	2.73%	19,106,195.00 19,121,612.42	2.20%	19,449,361.00 122,089.58	3.57% 327,748.58	A1 / A+ AA-	3.92 3.67
Money Market Fund FI									
31846V567	First American Govt Obligation MMKT Class-Z	3,794,924.70	09/30/2019 1.82%	3,794,924.70 3,794,924.70	1.00 1.82%	3,794,924.70 0.00	0.69% 0.00	P-1 / A-1+ F-1	0.00 0.00
TOTAL Money Market Fund FI		3,794,924.70	1.82%	3,794,924.70	1.82%	3,794,924.70 0.00	0.69% 0.00	Aaa / AAA AA	0.00 0.00
Mortgage Pass Thru									
31381PDA3	FNMA FN 466397 3.400% Due 11/01/2020	337,358.02	12/01/2010 3.80%	330,057.40 336,556.93	100.79 2.56%	340,009.32 223.03	0.06% 3,452.39	Aaa / AA+ AAA	1.09 1.10
36225CAZ9	GNMA Pool# G2 80023 4.120% Due 12/20/2026	15,348.40	08/08/1997 4.01%	15,602.60 15,410.99	103.01 2.46%	15,810.11 52.70	0.00% 399.12	Aaa / AA+ AAA	7.23 2.37
36225CC20	GNMA Pool# G2 80088 3.410% Due 06/20/2027	15,097.04	08/11/1997 3.27%	15,427.30 15,182.52	100.99 2.77%	15,247.01 42.90	0.00% 64.49	Aaa / AA+ AAA	7.73 2.52
31348SWZ3	FHLMC FH 786064 4.737% Due 01/01/2028	1,845.51	02/18/2000 4.96%	1,800.57 1,832.20	102.46 3.24%	1,890.88 7.29	0.00% 58.68	Aaa / AA+ AAA	8.26 3.73
31371NUC7	FNMA FN 257179 4.500% Due 04/01/2028	14,717.52	12/05/2011 3.72%	15,565.22 15,159.52	105.49 2.32%	15,525.38 55.19	0.00% 365.86	Aaa / AA+ AAA	8.51 2.76

Holdings Report

As of September 30, 2019

Orange County Sanitation District Long Term - Account #10268

CUSIP	Security Description	Par Value/Units	Purchase Date Book Yield	Cost Value Book Value	Mkt Price Mkt YTM	Market Value Accrued Int.	% of Port. Gain/Loss	Moody/S&P Fitch	Maturity Duration
31417YAY3	FNMA Pool# FN MA0022 4.500% Due 04/01/2029	16,436.77	12/05/2011 3.76%	17,383.50 16,956.57	106.54 2.20%	17,511.77 61.64	0.00% 555.20	Aaa / AA+ AAA	9.51 2.91
3138EG6F6	FNMA FN AL0869 4.500% Due 06/01/2029	10,044.92	12/05/2011 3.77%	10,623.50 10,365.08	106.54 2.24%	10,701.72 8.79	0.00% 336.64	Aaa / AA+ AAA	9.68 2.96
36225CNM4	GNMA Pool# G2 80395 3.410% Due 04/20/2030	6,521.39	03/15/2000 3.49%	6,462.26 6,500.53	103.80 2.61%	6,769.44 18.53	0.00% 268.91	Aaa / AA+ AAA	10.56 3.67
36225CN28	GNMA Pool# G2 80408 3.410% Due 05/20/2030	49,754.80	03/15/2000 3.49%	49,249.47 49,575.61	103.81 2.48%	51,649.11 141.39	0.01% 2,073.50	Aaa / AA+ AAA	10.64 3.09
31403GXF4	FNMA Pool# FN 748678 5.000% Due 10/01/2033	1,781.14	06/10/2013 4.16%	1,914.73 1,873.67	109.27 2.17%	1,946.25 7.42	0.00% 72.58	Aaa / AA+ AAA	14.01 3.52
36225DCB8	GNMA Pool# G2 80965 4.100% Due 07/20/2034	45,340.46	07/19/2004 4.12%	45,312.13 45,326.44	104.34 2.55%	47,308.55 154.91	0.01% 1,982.11	Aaa / AA+ AAA	14.81 3.96
31406XWT5	FNMA Pool# FN 823358 4.724% Due 02/01/2035	109,269.40	01/11/2006 4.81%	108,415.73 108,818.24	104.65 3.15%	114,353.27 430.13	0.02% 5,535.03	Aaa / AA+ AAA	15.35 6.83
31406PQY8	FNMA Pool# FN 815971 5.000% Due 03/01/2035	157,142.80	06/10/2013 4.21%	168,928.52 165,543.05	110.34 2.31%	173,384.14 654.76	0.03% 7,841.09	Aaa / AA+ AAA	15.43 3.75
31407BXH7	FNMA Pool# FN 826080 5.000% Due 07/01/2035	18,677.30	06/10/2013 4.22%	20,078.10 19,681.84	110.45 2.30%	20,628.72 77.82	0.00% 946.88	Aaa / AA+ AAA	15.76 3.74
31376KT22	FNMA FN 357969 5.000% Due 09/01/2035	98,885.27	06/10/2013 4.22%	106,301.66 104,219.79	110.47 2.33%	109,237.27 96.14	0.02% 5,017.48	Aaa / AA+ AAA	15.93 3.77
31403DJZ3	FNMA Pool #745580 5.000% Due 06/01/2036	92,510.26	06/10/2013 4.26%	99,448.53 97,564.73	110.44 2.35%	102,166.11 385.46	0.02% 4,601.38	Aaa / AA+ AAA	16.68 3.80
31410F4V4	FNMA Pool# FN 888336 5.000% Due 07/01/2036	180,164.23	06/10/2013 4.25%	193,676.55 190,020.96	110.41 2.34%	198,927.79 750.68	0.04% 8,906.83	Aaa / AA+ AAA	16.76 3.79
TOTAL Mortgage Pass Thru		1,170,895.23	4.10%	1,206,247.77 1,200,588.67	2.49%	1,243,066.84 3,168.78	0.23% 42,478.17	Aaa / AA+ Aaa	11.19 3.24
Municipal Bonds									
73358WAG9	Port Authority of NY & NJ TE-REV 5.309% Due 12/01/2019	2,440,000.00	Various 4.97%	2,507,633.89 2,441,084.71	100.54 2.07%	2,453,176.00 43,179.87	0.46% 12,091.29	Aa3 / AA- AA-	0.17 0.17
64971M5E8	New York NY TE-REV 4.075% Due 11/01/2020	1,400,000.00	10/27/2010 4.08%	1,400,000.00 1,400,000.00	102.16 2.06%	1,430,170.00 23,770.83	0.27% 30,170.00	Aa1 / AAA AAA	1.09 1.05

Holdings Report

As of September 30, 2019

Orange County Sanitation District Long Term - Account #10268

CUSIP	Security Description	Par Value/Units	Purchase Date Book Yield	Cost Value Book Value	Mkt Price Mkt YTM	Market Value Accrued Int.	% of Port. Gain/Loss	Moody/S&P Fitch	Maturity Duration
913366EJ5	Univ of California Rgts Med TE-REV 5.035% Due 05/15/2021	400,000.00	11/09/2010 5.04%	400,000.00 400,000.00	104.90 1.96%	419,600.00 7,608.44	0.08% 19,600.00	Aa3 / AA- AA-	1.62 1.54
TOTAL Municipal Bonds		4,240,000.00	4.68%	4,307,633.89 4,241,084.71	2.06%	4,302,946.00 74,559.14	0.80% 61,861.29	Aa2 / AA AA	0.62 0.59
Supranational									
4581XOCX4	Inter-American Dev Bank Note 1.625% Due 05/12/2020	3,035,000.00	04/05/2017 1.70%	3,027,807.05 3,033,569.08	99.81 1.94%	3,029,130.31 19,042.52	0.56% (4,438.77)	Aaa / AAA AAA	0.62 0.61
45950KCM0	International Finance Corp Note 2.250% Due 01/25/2021	2,970,000.00	01/18/2018 2.35%	2,961,268.20 2,966,159.92	100.57 1.81%	2,986,958.70 12,251.25	0.55% 20,798.78	Aaa / AAA NR	1.32 1.29
4581XOCS5	Inter-American Dev Bank Note 1.875% Due 03/15/2021	5,000,000.00	Various 1.68%	5,059,610.00 5,013,242.13	100.15 1.77%	5,007,595.00 4,166.67	0.91% (5,647.13)	Aaa / AAA AAA	1.46 1.43
45950KCJ7	International Finance Corp Note 1.125% Due 07/20/2021	2,500,000.00	11/09/2016 1.64%	2,441,600.00 2,477,567.31	98.97 1.71%	2,474,287.50 5,546.88	0.45% (3,279.81)	Aaa / AAA NR	1.81 1.77
4581XOCW6	Inter-American Dev Bank Note 2.125% Due 01/18/2022	3,000,000.00	01/10/2017 2.15%	2,996,310.00 2,998,302.52	101.03 1.67%	3,030,804.00 12,927.08	0.56% 32,501.48	Aaa / NR AAA	2.30 2.23
459058FY4	Intl. Bank Recon & Development Note 2.000% Due 01/26/2022	10,000,000.00	Various 1.99%	10,006,350.00 10,002,227.46	100.79 1.65%	10,078,930.00 36,111.12	1.85% 76,702.54	Aaa / NR AAA	2.33 2.25
4581XOCZ9	Inter-American Dev Bank Note 1.750% Due 09/14/2022	6,500,000.00	Various 2.65%	6,249,655.00 6,338,148.06	100.30 1.65%	6,519,188.00 5,371.52	1.19% 181,039.94	Aaa / AAA AAA	2.96 2.87
TOTAL Supranational		33,005,000.00	2.07%	32,742,600.25 32,829,216.48	1.71%	33,126,893.51 95,417.04	6.06% 297,677.03	Aaa / AAA Aaa	2.03 1.97
US Corporate									
40428HPR7	HSBC USA Inc Note 2.350% Due 03/05/2020	2,500,000.00	Various 2.64%	2,472,287.50 2,497,043.44	100.13 2.03%	2,503,330.00 4,243.06	0.46% 6,286.56	A2 / A AA-	0.43 0.43
747525AD5	Qualcomm Inc Note 2.250% Due 05/20/2020	5,000,000.00	05/19/2015 2.27%	4,995,195.40 4,999,389.22	100.04 2.18%	5,002,085.00 40,937.51	0.92% 2,695.78	A2 / A- NR	0.64 0.63
94974BGM6	Wells Fargo Corp Note 2.600% Due 07/22/2020	5,000,000.00	07/16/2015 2.59%	5,001,650.00 5,000,266.42	100.47 2.01%	5,023,605.00 24,916.67	0.92% 23,338.58	A2 / A- A+	0.81 0.80
037833BS8	Apple Inc Callable Note Cont 1/23/2021 2.250% Due 02/23/2021	4,000,000.00	05/23/2016 1.96%	4,050,840.00 4,014,329.54	100.45 1.90%	4,018,188.00 9,500.00	0.73% 3,858.46	Aa1 / AA+ NR	1.40 1.29
30231GAV4	Exxon Mobil Corp Callable Note Cont 2/1/2021 2.222% Due 03/01/2021	3,000,000.00	Various 2.10%	3,016,097.40 3,004,785.71	100.52 1.85%	3,015,714.00 5,555.01	0.55% 10,928.29	Aaa / AA+ NR	1.42 1.39
369550BE7	General Dynamics Corp Note 3.000% Due 05/11/2021	3,160,000.00	05/08/2018 3.24%	3,138,038.00 3,148,217.47	101.75 1.89%	3,215,334.76 36,866.67	0.59% 67,117.29	A2 / A+ NR	1.61 1.56

Holdings Report

As of September 30, 2019

Orange County Sanitation District Long Term - Account #10268

CUSIP	Security Description	Par Value/Units	Purchase Date Book Yield	Cost Value Book Value	Mkt Price Mkt YTM	Market Value Accrued Int.	% of Port. Gain/Loss	Moody/S&P Fitch	Maturity Duration
166764BG4	Chevron Corp Callable Note Cont 4/15/2021 2.100% Due 05/16/2021	2,500,000.00	05/20/2016 2.23%	2,485,350.00 2,495,218.79	100.39 1.84%	2,509,652.50 19,687.50	0.46% 14,433.71	Aa2 / AA NR	1.63 1.50
61747WAL3	Morgan Stanley Note 5.500% Due 07/28/2021	2,800,000.00	06/06/2014 3.24%	3,200,848.00 2,902,521.03	106.11 2.07%	2,971,144.40 26,950.00	0.55% 68,623.37	A3 / BBB+ A	1.83 1.73
594918BP8	Microsoft Callable Note Cont 7/8/2021 1.550% Due 08/08/2021	3,045,000.00	Various 1.57%	3,041,385.15 3,043,659.78	99.58 1.78%	3,032,244.49 6,948.52	0.55% (11,415.29)	Aaa / AAA AA+	1.86 1.82
68389XBK0	Oracle Corp Callable Note Cont 8/15/2021 1.900% Due 09/15/2021	3,000,000.00	06/28/2018 3.08%	2,892,240.00 2,934,371.04	99.88 1.96%	2,996,463.00 2,533.33	0.55% 62,091.96	A1 / A+ A	1.96 1.91
06406RAA5	Bank of NY Mellon Corp Callable Note Cont 1/7/2022 2.600% Due 02/07/2022	2,500,000.00	02/08/2017 2.56%	2,504,475.00 2,502,073.66	101.41 1.96%	2,535,242.50 9,750.00	0.46% 33,168.84	A1 / A AA-	2.36 2.19
69353RFB9	PNC Bank Callable Note Cont 1/18/2022 2.625% Due 02/17/2022	1,000,000.00	03/26/2018 3.32%	974,940.00 984,667.93	101.39 2.00%	1,013,893.00 3,208.33	0.19% 29,225.07	A2 / A A+	2.39 2.22
084664BT7	Berkshire Hathaway Note 3.000% Due 05/15/2022	4,000,000.00	05/23/2017 2.30%	4,131,120.00 4,069,136.00	102.90 1.86%	4,116,024.00 45,333.33	0.76% 46,888.00	Aa2 / AA A+	2.62 2.50
95000U2B8	Wells Fargo & Company Note 2.625% Due 07/22/2022	3,000,000.00	Various 2.99%	2,954,520.00 2,971,566.74	101.11 2.21%	3,033,306.00 15,093.76	0.56% 61,739.26	A2 / A- A+	2.81 2.69
00440EAU1	Chubb INA Holdings Inc Callable Note Cont 9/3/2022 2.875% Due 11/03/2022	4,169,000.00	Various 2.54%	4,232,453.17 4,207,579.63	102.50 1.99%	4,273,408.44 49,275.26	0.79% 65,828.81	A3 / A A	3.10 2.77
90331HNL3	US Bank NA Callable Note Cont 12/23/22 2.850% Due 01/23/2023	5,000,000.00	01/29/2018 2.93%	4,981,600.00 4,987,753.58	102.29 2.11%	5,114,585.00 26,916.67	0.94% 126,831.42	A1 / AA- AA-	3.32 3.06
808513AT2	Charles Schwab Corp Callable Note Cont 12/25/2022 2.650% Due 01/25/2023	6,750,000.00	05/21/2019 2.74%	6,729,480.00 6,731,481.58	101.80 2.07%	6,871,601.25 32,793.75	1.26% 140,119.67	A2 / A A	3.32 3.08
06406RAE7	Bank of NY Mellon Corp Callable Note Cont 12/29/2022 2.950% Due 01/29/2023	2,500,000.00	Various 3.03%	2,489,555.00 2,493,670.01	102.70 2.09%	2,567,390.00 12,701.39	0.47% 73,719.99	A1 / A AA-	3.33 3.08
44932HAH6	IBM Credit Corp Note 3.000% Due 02/06/2023	5,670,000.00	Various 3.26%	5,603,264.40 5,623,851.42	102.87 2.11%	5,832,672.30 25,987.50	1.07% 208,820.88	A2 / A NR	3.36 3.17
00440EAP2	Chubb INA Holdings Inc Note 2.700% Due 03/13/2023	2,000,000.00	05/24/2018 3.42%	1,937,000.00 1,954,650.09	102.19 2.04%	2,043,726.00 2,700.00	0.37% 89,075.91	A3 / A A	3.45 3.28
084670BR8	Berkshire Hathaway Callable Note Cont 1/15/2023 2.750% Due 03/15/2023	2,500,000.00	04/20/2018 3.28%	2,440,950.00 2,458,307.92	102.51 1.96%	2,562,825.00 3,055.56	0.47% 104,517.08	Aa2 / AA A+	3.46 3.14
58933YAF2	Merck & Co Note 2.800% Due 05/18/2023	2,000,000.00	10/26/2018 3.41%	1,948,640.00 1,959,029.50	102.96 1.95%	2,059,158.00 20,688.89	0.38% 100,128.50	A1 / AA A+	3.63 3.42

Holdings Report

As of September 30, 2019

Orange County Sanitation District Long Term - Account #10268

CUSIP	Security Description	Par Value/Units	Purchase Date Book Yield	Cost Value Book Value	Mkt Price Mkt YTM	Market Value Accrued Int.	% of Port. Gain/Loss	Moody/S&P Fitch	Maturity Duration
46625HRL6	JP Morgan Chase Callable Note Cont 3/18/2023 2.700% Due 05/18/2023	5,000,000.00	Various 3.59%	4,821,910.00 4,852,279.35	101.68 2.19%	5,084,060.00 49,875.00	0.94% 231,780.65	A2 / A- AA-	3.63 3.27
69353RFL7	PNC Bank Callable Note Cont 5/9/2023 3.500% Due 06/08/2023	5,000,000.00	Various 3.53%	4,993,318.05 4,995,067.01	105.00 2.06%	5,249,810.00 54,930.56	0.97% 254,742.99	A2 / A NR	3.69 3.36
166764AH3	Chevron Corp Callable Note Cont 3/24/2023 3.191% Due 06/24/2023	3,500,000.00	11/08/2018 3.59%	3,441,095.00 3,452,358.31	104.26 1.92%	3,648,967.00 30,092.90	0.67% 196,608.69	Aa2 / AA NR	3.73 3.27
931142EK5	Wal-Mart Stores Callable Note Cont 5/26/2023 3.400% Due 06/26/2023	3,880,000.00	Various 3.41%	3,878,991.40 3,879,246.17	105.26 1.90%	4,084,266.48 34,812.22	0.75% 205,020.31	Aa2 / AA AA	3.74 3.41
02665WCJ8	American Honda Finance Note 3.450% Due 07/14/2023	845,000.00	07/11/2018 3.49%	843,538.15 843,892.39	104.88 2.10%	886,275.72 6,235.40	0.16% 42,383.33	A2 / A NR	3.79 3.53
02665WCQ2	American Honda Finance Note 3.625% Due 10/10/2023	2,000,000.00	Various 3.64%	1,998,320.00 1,998,628.05	105.90 2.09%	2,117,962.00 34,437.50	0.39% 119,333.95	A2 / A NR	4.03 3.69
24422EUM9	John Deere Capital Corp Note 3.650% Due 10/12/2023	1,250,000.00	11/28/2018 3.64%	1,250,237.50 1,250,196.74	106.54 1.96%	1,331,751.25 21,418.40	0.25% 81,554.51	A2 / A A	4.04 3.70
06051GHF9	Bank of America Corp Callable Note 1X 3/5/2023 3.550% Due 03/05/2024	6,675,000.00	Various 3.14%	6,770,625.75 6,761,171.09	103.93 2.35%	6,937,087.20 17,113.96	1.27% 175,916.11	A2 / A- A+	4.43 3.22
09247XAL5	Blackrock Inc Note 3.500% Due 03/18/2024	1,000,000.00	05/09/2019 2.69%	1,036,330.00 1,033,437.55	106.78 1.91%	1,067,821.00 1,263.89	0.20% 34,383.45	Aa3 / AA- NR	4.47 4.14
458140BD1	Intel Corp Callable Note Cont 3/11/2024 2.875% Due 05/11/2024	5,000,000.00	05/09/2019 2.76%	5,025,900.00 5,023,829.76	103.92 1.95%	5,196,060.00 55,902.78	0.96% 172,230.24	A1 / A+ A+	4.62 4.13
037833CU2	Apple Inc Callable Note Cont 3/11/2024 2.850% Due 05/11/2024	3,000,000.00	05/17/2019 2.72%	3,017,760.00 3,016,414.85	103.75 1.97%	3,112,458.00 33,250.00	0.57% 96,043.15	Aa1 / AA+ NR	4.62 4.13
02665WCZ2	American Honda Finance Note 2.400% Due 06/27/2024	1,219,000.00	07/10/2019 2.49%	1,213,843.63 1,214,074.13	101.08 2.16%	1,232,142.04 7,639.07	0.23% 18,067.91	A2 / A NR	4.75 4.44
46647PAU0	JP Morgan Chase & Co Callable Note Cont 7/23/2023 3.797% Due 07/23/2024	2,500,000.00	09/12/2019 2.35%	2,632,175.00 2,630,764.88	105.47 2.29%	2,636,682.50 17,930.28	0.48% 5,917.62	A2 / A- AA-	4.82 3.76
				116,145,973.50		118,896,935.83	21.84%	A1 / A+	2.97
TOTAL US Corporate		115,963,000.00	2.89%	115,934,930.78	2.04%	790,544.67	2,962,005.05	A+	2.68
US Treasury									
912828G61	US Treasury Note 1.500% Due 11/30/2019	7,500,000.00	12/19/2014 1.64%	7,449,634.50 7,498,324.87	99.91 2.04%	7,493,130.00 37,807.38	1.37% (5,194.87)	Aaa / AA+ AAA	0.17 0.17
912828XE5	US Treasury Note 1.500% Due 05/31/2020	5,000,000.00	12/21/2016 1.70%	4,966,423.00 4,993,503.81	99.75 1.87%	4,987,695.00 25,204.92	0.91% (5,808.81)	Aaa / AA+ AAA	0.67 0.66

Orange County Sanitation District Long Term - Account #10268

CUSIP	Security Description	Par Value/Units	Purchase Date Book Yield	Cost Value Book Value	Mkt Price Mkt YTM	Market Value Accrued Int.	% of Port. Gain/Loss	Moody/S&P Fitch	Maturity Duration
912828L99	US Treasury Note 1.375% Due 10/31/2020	10,000,000.00	Various 1.81%	9,850,311.40 9,954,972.20	99.54 1.81%	9,953,910.00 57,540.76	1.83% (1,062.20)	Aaa / AA+ AAA	1.09 1.06
912828N89	US Treasury Note 1.375% Due 01/31/2021	6,000,000.00	Various 1.81%	5,895,840.41 5,966,419.39	99.48 1.77%	5,968,596.00 13,899.45	1.09% 2,176.61	Aaa / AA+ AAA	1.34 1.31
912828T34	US Treasury Note 1.125% Due 09/30/2021	7,000,000.00	Various 1.88%	6,757,914.08 6,899,279.35	98.98 1.65%	6,928,362.00 215.16	1.26% 29,082.65	Aaa / AA+ AAA	2.00 1.97
912828T67	US Treasury Note 1.250% Due 10/31/2021	6,000,000.00	12/13/2016 1.92%	5,813,691.98 5,920,437.48	99.19 1.65%	5,951,250.00 31,385.87	1.09% 30,812.52	Aaa / AA+ AAA	2.09 2.04
912828U65	US Treasury Note 1.750% Due 11/30/2021	7,000,000.00	12/28/2016 2.06%	6,900,492.20 6,956,198.85	100.22 1.64%	7,015,589.00 41,168.03	1.29% 59,390.15	Aaa / AA+ AAA	2.17 2.11
912828V72	US Treasury Note 1.875% Due 01/31/2022	3,000,000.00	02/27/2017 1.84%	3,004,814.74 3,002,284.19	100.55 1.63%	3,016,641.00 9,476.90	0.55% 14,356.81	Aaa / AA+ AAA	2.34 2.27
912828J76	US Treasury Note 1.750% Due 03/31/2022	5,000,000.00	04/25/2017 1.85%	4,976,383.94 4,988,034.53	100.38 1.59%	5,019,140.00 239.07	0.92% 31,105.47	Aaa / AA+ AAA	2.50 2.44
912828XW5	US Treasury Note 1.750% Due 06/30/2022	5,000,000.00	07/25/2017 1.86%	4,973,454.25 4,985,208.12	100.44 1.59%	5,021,875.00 22,112.77	0.92% 36,666.88	Aaa / AA+ AAA	2.75 2.66
912828L24	US Treasury Note 1.875% Due 08/31/2022	6,000,000.00	09/27/2017 1.92%	5,987,832.60 5,992,792.95	100.84 1.58%	6,050,388.00 9,581.04	1.11% 57,595.05	Aaa / AA+ AAA	2.92 2.83
912828L57	US Treasury Note 1.750% Due 09/30/2022	13,000,000.00	Various 2.15%	12,763,554.69 12,851,750.09	100.50 1.58%	13,064,493.00 621.58	2.38% 212,742.91	Aaa / AA+ AAA	3.00 2.91
912828M80	US Treasury Note 2.000% Due 11/30/2022	8,000,000.00	12/22/2017 2.25%	7,907,500.00 7,940,594.44	101.26 1.59%	8,100,624.00 53,770.49	1.49% 160,029.56	Aaa / AA+ AAA	3.17 3.04
912828N30	US Treasury Note 2.125% Due 12/31/2022	5,000,000.00	01/24/2018 2.44%	4,926,562.50 4,951,598.94	101.71 1.58%	5,085,350.00 26,851.22	0.93% 133,751.06	Aaa / AA+ AAA	3.25 3.12
9128284D9	US Treasury Note 2.500% Due 03/31/2023	10,000,000.00	Various 2.75%	9,887,265.63 9,920,185.30	103.14 1.57%	10,314,450.00 683.06	1.88% 394,264.70	Aaa / AA+ AAA	3.50 3.35
912828R69	US Treasury Note 1.625% Due 05/31/2023	5,000,000.00	05/30/2018 2.67%	4,757,226.56 4,822,107.96	100.20 1.57%	5,009,765.00 27,305.33	0.92% 187,657.04	Aaa / AA+ AAA	3.67 3.53
912828U57	US Treasury Note 2.125% Due 11/30/2023	15,000,000.00	Various 2.53%	14,723,632.81 14,761,703.80	102.20 1.58%	15,330,465.00 107,120.90	2.82% 568,761.20	Aaa / AA+ AAA	4.17 3.95
912828V80	US Treasury Note 2.250% Due 01/31/2024	7,500,000.00	Various 2.27%	7,491,503.91 7,492,293.08	102.84 1.57%	7,712,692.50 28,430.70	1.41% 220,399.42	Aaa / AA+ AAA	4.34 4.11
912828W48	US Treasury Note 2.125% Due 02/29/2024	10,000,000.00	04/24/2019 2.32%	9,911,718.75 9,919,644.62	102.38 1.57%	10,237,500.00 18,097.53	1.87% 317,855.38	Aaa / AA+ AAA	4.42 4.20
912828WJ5	US Treasury Note 2.500% Due 05/15/2024	7,000,000.00	06/10/2019 1.91%	7,193,046.88 7,181,035.07	104.12 1.57%	7,288,204.00 66,100.54	1.34% 107,168.93	Aaa / AA+ AAA	4.63 4.33

Holdings Report

As of September 30, 2019

Orange County Sanitation District Long Term - Account #10268

CUSIP	Security Description	Par Value/Units	Purchase Date Book Yield	Cost Value Book Value	Mkt Price Mkt YTM	Market Value Accrued Int.	% of Port. Gain/Loss	Moody/S&P Fitch	Maturity Duration
912828XX3	US Treasury Note 2.000% Due 06/30/2024	5,000,000.00	07/12/2019 1.88%	5,028,710.94 5,027,475.04	101.94 1.57%	5,097,070.00 25,271.74	0.93% 69,594.96	Aaa / AA+ AAA	4.75 4.50
912828WU0	US Treasury Inflation Index Note 0.125% Due 07/15/2024	11,236,992.00	Various 0.23%	11,124,068.09 11,182,687.92	99.87 0.15%	11,222,900.78 2,977.21	2.05% 40,212.86	Aaa / AA+ AAA	4.79 4.77
TOTAL US Treasury		164,236,992.00	2.00%	162,291,583.86 163,208,532.00	1.54%	165,870,090.28 605,861.65	30.37% 2,661,558.28	Aaa / AA+ Aaa	3.05 2.94
TOTAL PORTFOLIO		536,717,789.14	2.37%	535,563,737.40 536,487,489.83	1.79%	545,604,956.53 2,507,363.05	100.00% 9,117,466.70	Aa1 / AA Aaa	2.82 2.46
TOTAL MARKET VALUE PLUS ACCRUALS						548,112,319.58			

Holdings Report

As of September 30, 2019

Orange County Sanitation District Liquid - Account #10282

CUSIP	Security Description	Par Value/Units	Purchase Date Book Yield	Cost Value Book Value	Mkt Price Mkt YTM	Market Value Accrued Int.	% of Port. Gain/Loss	Moody/S&P Fitch	Maturity Duration
Commercial Paper									
62479MYK3	MUFG Bank Ltd/NY Discount CP 2.120% Due 11/19/2019	1,860,000.00	08/20/2019 2.16%	1,850,032.47 1,854,632.87	99.71 2.16%	1,854,632.87 0.00	2.72% 0.00	P-1 / A-1 NR	0.14 0.14
89233GAH9	Toyota Motor Credit Discount CP 2.560% Due 01/17/2020	2,000,000.00	04/23/2019 2.63%	1,961,884.44 1,984,640.00	99.23 2.63%	1,984,640.00 0.00	2.91% 0.00	P-1 / A-1+ NR	0.30 0.29
TOTAL Commercial Paper		3,860,000.00	2.41%	3,811,916.91 3,839,272.87	2.41%	3,839,272.87 0.00	5.63% 0.00	P-1 / A-1 NR	0.22 0.22
Money Market Fund FI									
31846V567	First American Govt Obligation MMKT Class-Z	1,740,212.56	Various 1.82%	1,740,212.56 1,740,212.56	1.00 1.82%	1,740,212.56 0.00	2.55% 0.00	P-1 / A-1+ F-1	0.00 0.00
TOTAL Money Market Fund FI		1,740,212.56	1.82%	1,740,212.56	1.82%	1,740,212.56 0.00	2.55% 0.00	Aaa / AAA AA	0.00 0.00
Negotiable CD									
96130AAK4	Westpac Banking Corp NY Yankee CD 2.970% Due 10/18/2019	1,500,000.00	06/25/2019 2.23%	1,503,302.80 1,500,488.24	100.03 2.23%	1,500,488.24 42,941.25	2.26% 0.00	P-1 / A-1+ F-1+	0.05 0.05
06417G5Q7	Bank of Nova Scotia Yankee CD 2.610% Due 12/23/2019	2,300,000.00	04/05/2019 2.57%	2,300,614.40 2,300,194.64	100.01 2.57%	2,300,194.64 32,182.75	3.42% 0.00	P-1 / A-1 F-1+	0.23 0.23
TOTAL Negotiable CD		3,800,000.00	2.43%	3,803,917.20 3,800,682.88	2.43%	3,800,682.88 75,124.00	5.68% 0.00	Aaa / AA+ Aaa	0.16 0.16
US Corporate									
94988J5G8	Wells Fargo Bank Note 2.150% Due 12/06/2019	500,000.00	04/18/2019 2.66%	498,425.00 499,542.07	99.99 2.17%	499,966.50 3,434.03	0.74% 424.43	Aa2 / A+ AA-	0.18 0.18
94974BGF1	Wells Fargo Corp Note 2.150% Due 01/30/2020	1,000,000.00	05/21/2019 2.65%	996,600.00 998,367.46	99.97 2.23%	999,698.00 3,643.06	1.47% 1,330.54	A2 / A- A+	0.33 0.33
06406HCZ0	Bank of New York Callable Note Cont 1/24/2020 2.150% Due 02/24/2020	1,500,000.00	04/23/2019 2.64%	1,493,925.00 1,497,091.97	100.03 2.07%	1,500,390.00 3,314.58	2.20% 3,298.03	A1 / A AA-	0.40 0.31
40428HPR7	HSBC USA Inc Note 2.350% Due 03/05/2020	2,500,000.00	05/10/2019 2.69%	2,493,300.00 2,496,468.92	100.13 2.03%	2,503,330.00 4,243.06	3.68% 6,861.08	A2 / A AA-	0.43 0.43
06051GFN4	Bank of America Corp Note 2.250% Due 04/21/2020	2,000,000.00	08/07/2019 2.11%	2,001,960.00 2,001,554.22	100.11 2.06%	2,002,132.00 20,000.00	2.96% 577.78	A2 / A- A+	0.56 0.55
369550BA5	General Dynamics Corp Note 2.875% Due 05/11/2020	2,000,000.00	08/13/2019 2.10%	2,011,340.00 2,009,366.00	100.52 2.01%	2,010,418.00 22,361.11	2.98% 1,052.00	A2 / A+ NR	0.61 0.60

Holdings Report

As of September 30, 2019

Orange County Sanitation District Liquid - Account #10282

CUSIP	Security Description	Par Value/Units	Purchase Date Book Yield	Cost Value Book Value	Mkt Price Mkt YTM	Market Value Accrued Int.	% of Port. Gain/Loss	Moody/S&P Fitch	Maturity Duration
747525AD5	Qualcomm Inc Note 2.250% Due 05/20/2020	2,000,000.00	08/07/2019 2.07%	2,002,700.00 2,002,197.89	100.04 2.18%	2,000,834.00 16,375.00	2.96% (1,363.89)	A2 / A- NR	0.64 0.63
TOTAL US Corporate		11,500,000.00	2.36%	11,504,588.53	2.09%	73,370.84	12,179.97	AA-	0.48
US Treasury									
912796SL4	US Treasury Bill 2.007% Due 10/03/2019	1,650,000.00	08/27/2019 2.04%	1,646,687.63 1,649,815.98	99.99 2.04%	1,649,815.98 0.00	2.42% 0.00	P-1 / A-1+ F-1+	0.01 0.01
912796VY2	US Treasury Bill 1.737% Due 10/08/2019	1,250,000.00	09/27/2019 1.76%	1,249,517.42 1,249,577.74	99.97 1.76%	1,249,577.74 0.00	1.83% 0.00	P-1 / A-1+ F-1+	0.02 0.02
912796VZ9	US Treasury Bill 1.805% Due 10/15/2019	1,250,000.00	09/27/2019 1.83%	1,249,059.90 1,249,122.57	99.93 1.83%	1,249,122.57 0.00	1.83% 0.00	P-1 / A-1+ F-1+	0.04 0.04
912828F62	US Treasury Note 1.500% Due 10/31/2019	2,500,000.00	04/04/2019 2.44%	2,486,718.75 2,498,093.60	99.95 2.07%	2,498,775.00 15,692.93	3.69% 681.40	Aaa / AA+ AAA	0.08 0.08
912796RY7	US Treasury Bill 1.887% Due 01/30/2020	7,000,000.00	Various 1.93%	6,950,415.19 6,955,601.40	99.36 1.93%	6,955,601.40 0.00	10.20% 0.00	P-1 / A-1+ F-1+	0.33 0.33
9128283S7	US Treasury Note 2.000% Due 01/31/2020	15,000,000.00	05/06/2019 2.41%	14,955,468.75 14,979,803.67	100.03 1.91%	15,004,095.00 50,543.48	22.07% 24,291.33	Aaa / AA+ AAA	0.34 0.33
912828H52	US Treasury Note 1.250% Due 01/31/2020	13,500,000.00	Various 2.35%	13,396,542.97 13,451,311.72	99.78 1.92%	13,469,935.50 28,430.70	19.79% 18,623.78	Aaa / AA+ AAA	0.34 0.33
912828UL2	US Treasury Note 1.375% Due 01/31/2020	5,000,000.00	08/27/2019 1.91%	4,988,671.88 4,991,140.83	99.81 1.94%	4,990,625.00 11,582.88	7.33% (515.83)	Aaa / AA+ AAA	0.34 0.33
TOTAL US Treasury		47,150,000.00	2.22%	47,024,467.51	1.92%	106,249.99	43,080.68	Aaa	0.29
TOTAL PORTFOLIO		68,050,212.56	2.26%	67,777,379.16	2.01%	67,964,485.00	55,260.65	Aa1 / AA+	0.31
TOTAL MARKET VALUE PLUS ACCRUALS						68,219,229.83			

Holdings Report

As of September 30, 2019

OCS D Lehman Exposure - Account #10284

CUSIP	Security Description	Par Value/Units	Purchase Date Book Yield	Cost Value Book Value	Mkt Price Mkt YTM	Market Value Accrued Int.	% of Port. Gain/Loss	Moody/S&P Fitch	Maturity Duration
Common Stock									
SLHOPNTA4	Lehman Brothers, Inc Open Position Long Exposure 0.000% Due 09/30/2019	60,641.49	11/21/2014 0.00%	57,842.64 57,842.64	0.42 0.00%	25,621.03 0.00	41.36% (32,221.61)	NR / NR NR	0.00 0.00
TOTAL Common Stock		60,641.49	0.00%	57,842.64	0.00%	25,621.03 0.00	41.36% (32,221.61)	NR / NR NR	0.00 0.00
US Corporate									
525ESCIB7	Lehman Brothers Note-Defaulted 0.000% Due 01/24/2020	600,000.00	09/19/2008 0.00%	320,227.27 320,227.27	1.42 0.00%	8,520.00 0.00	13.76% (311,707.27)	NR / NR NR	0.32 0.00
525ESCOY6	Lehman Brothers Note-Defaulted 0.000% Due 10/22/2049	2,000,000.00	09/18/2008 0.00%	1,031,998.65 1,031,998.65	1.39 0.00%	27,800.00 0.00	44.88% (1,004,198.65)	NR / NR NR	30.08 0.00
TOTAL US Corporate		2,600,000.00	0.00%	1,352,225.92 1,352,225.92	0.00%	36,320.00 0.00	58.64% (1,315,905.92)	NR / NR NR	23.10 0.00
TOTAL PORTFOLIO		2,660,641.49	0.00%	1,410,068.56 1,410,068.56	0.00%	61,941.03 0.00	100.00% (1,348,127.53)	NR / NR NR	13.55 0.00
TOTAL MARKET VALUE PLUS ACCRUALS						61,941.03			



Section 5 | Transactions

Transaction Ledger

As of September 30, 2019

Orange County Sanitation District Long Term - Account #10268

June 30, 2019 through September 30, 2019

Transaction Type	Settlement Date	CUSIP	Quantity	Security Description	Price	Acq/Disp Yield	Amount	Interest Pur/Sold	Total Amount	Gain/Loss
ACQUISITIONS										
Purchase	07/12/2019	02665WCZ2	1,219,000.00	American Honda Finance Note 2.4% Due: 06/27/2024	99.577	2.49%	1,213,843.63	1,219.00	1,215,062.63	0.00
Purchase	07/15/2019	912828XX3	5,000,000.00	US Treasury Note 2% Due: 06/30/2024	100.574	1.88%	5,028,710.94	4,076.09	5,032,787.03	0.00
Purchase	07/24/2019	477870AB5	2,800,000.00	JDOT 2019-B A2 2.28% Due: 05/16/2022	100.000	2.29%	2,799,989.36	0.00	2,799,989.36	0.00
Purchase	08/14/2019	3133EKWV4	5,000,000.00	FFCB Note 1.85% Due: 07/26/2024	100.966	1.65%	5,048,280.00	4,625.00	5,052,905.00	0.00
Purchase	08/20/2019	62479MYK3	11,255,000.00	MUFG Bank Ltd/NY Discount CP 2.12% Due: 11/19/2019	99.464	2.16%	11,194,685.71	0.00	11,194,685.71	0.00
Purchase	08/27/2019	43815NAB0	3,530,000.00	HAROT 2019-3 A2 1.9% Due: 04/15/2022	99.993	1.92%	3,529,752.90	0.00	3,529,752.90	0.00
Purchase	09/12/2019	78013XZU5	6,500,000.00	ROYAL BANK OF CANADA Note 2.55% Due: 07/16/2024	101.253	2.28%	6,581,445.00	25,783.33	6,607,228.33	0.00
Purchase	09/13/2019	3130A2UW4	2,500,000.00	FHLB Note 2.875% Due: 09/13/2024	105.438	1.73%	2,635,950.00	0.00	2,635,950.00	0.00
Purchase	09/16/2019	46647PAU0	2,500,000.00	JP Morgan Chase & Co Callable Note Cont 7/23/2023 3.797% Due: 07/23/2024	105.287	2.47%	2,632,175.00	13,975.07	2,646,150.07	0.00
Subtotal			40,304,000.00				40,664,832.54	49,678.49	40,714,511.03	0.00
Security Contribution	07/31/2019	912828WU0	24,960.00	US Treasury Inflation Index Note 0.125% Due: 07/15/2024	100.000		24,960.00	1.36	24,961.36	0.00
Security Contribution	08/31/2019	912828WU0	3,016.00	US Treasury Inflation Index Note 0.125% Due: 07/15/2024	100.000		3,016.00	0.48	3,016.48	0.00

Transaction Ledger

As of September 30, 2019

Orange County Sanitation District Long Term - Account #10268

June 30, 2019 through September 30, 2019

Transaction Type	Settlement Date	CUSIP	Quantity	Security Description	Price	Acq/Disp Yield	Amount	Interest Pur/Sold	Total Amount	Gain/Loss
Security Contribution	09/30/2019	912828WU0	18,096.00	US Treasury Inflation Index Note 0.125% Due: 07/15/2024	100.000		18,096.00	4.73	18,100.73	0.00
Subtotal			46,072.00				46,072.00	6.57	46,078.57	0.00
TOTAL ACQUISITIONS			40,350,072.00				40,710,904.54	49,685.06	40,760,589.60	0.00
DISPOSITIONS										
Sale	07/12/2019	02665WAH4	1,500,000.00	American Honda Finance Note 2.25% Due: 08/15/2019	99.984	2.40%	1,499,760.00	13,781.25	1,513,541.25	-667.58
Subtotal			1,500,000.00				1,499,760.00	13,781.25	1,513,541.25	-667.58
Redemption	08/27/2019	46625HKA7	2,000,000.00	JP Morgan Chase Callable Note Cont 12/23/2019 2.25% Due: 01/23/2020	100.055	2.08%	2,001,100.00	4,250.00	2,005,350.00	1,522.18
Subtotal			2,000,000.00				2,001,100.00	4,250.00	2,005,350.00	1,522.18
Maturity	07/31/2019	912828WW6	5,000,000.00	US Treasury Note 1.625% Due: 07/31/2019	100.000		5,000,000.00	0.00	5,000,000.00	0.00
Maturity	08/15/2019	02665WAH4	2,500,000.00	American Honda Finance Note 2.25% Due: 08/15/2019	100.000		2,500,000.00	0.00	2,500,000.00	0.00
Maturity	08/19/2019	62479MVK6	11,125,000.00	MUFG Bank Ltd/NY Discount CP 2.35% Due: 08/19/2019	99.608		11,125,000.00	0.00	11,125,000.00	0.00
Maturity	09/11/2019	06406HCW7	2,120,000.00	Bank of New York Callable Note Cont 8/11/2019 2.3% Due: 09/11/2019	100.000		2,120,000.00	0.00	2,120,000.00	0.00
Maturity	09/16/2019	24422ESS9	5,000,000.00	John Deere Capital Corp Note 2.3% Due: 09/16/2019	100.000		5,000,000.00	0.00	5,000,000.00	0.00

Transaction Ledger

As of September 30, 2019

Orange County Sanitation District Long Term - Account #10268

June 30, 2019 through September 30, 2019

Transaction Type	Settlement Date	CUSIP	Quantity	Security Description	Price	Acq/Disp Yield	Amount	Interest Pur/Sold	Total Amount	Gain/Loss
Maturity	09/30/2019	912828F39	5,800,000.00	US Treasury Note 1.75% Due: 09/30/2019	100.000		5,800,000.00	0.00	5,800,000.00	0.00
Subtotal			31,545,000.00				31,545,000.00	0.00	31,545,000.00	0.00
TOTAL DISPOSITIONS			35,045,000.00				35,045,860.00	18,031.25	35,063,891.25	854.60

Transaction Ledger

As of September 30, 2019

Orange County Sanitation District Liquid - Account #10282

June 30, 2019 through September 30, 2019

Transaction Type	Settlement Date	CUSIP	Quantity	Security Description	Price	Acq/Disp Yield	Amount	Interest Pur/Sold	Total Amount	Gain/Loss
ACQUISITIONS										
Purchase	07/31/2019	313384MD8	2,500,000.00	FHLB Discount Note 2.12% Due: 09/25/2019	99.670	2.16%	2,491,755.56	0.00	2,491,755.56	0.00
Purchase	08/09/2019	06051GFN4	2,000,000.00	Bank of America Corp Note 2.25% Due: 04/21/2020	100.098	2.11%	2,001,960.00	13,500.00	2,015,460.00	0.00
Purchase	08/09/2019	747525AD5	2,000,000.00	Qualcomm Inc Note 2.25% Due: 05/20/2020	100.135	2.07%	2,002,700.00	9,875.00	2,012,575.00	0.00
Purchase	08/15/2019	369550BA5	2,000,000.00	General Dynamics Corp Note 2.875% Due: 05/11/2020	100.567	2.10%	2,011,340.00	15,013.89	2,026,353.89	0.00
Purchase	08/20/2019	62479MYK3	1,860,000.00	MUFG Bank Ltd/NY Discount CP 2.12% Due: 11/19/2019	99.464	2.16%	1,850,032.47	0.00	1,850,032.47	0.00
Purchase	08/28/2019	912796SL4	1,650,000.00	US Treasury Bill 2.007% Due: 10/03/2019	99.799	2.04%	1,646,687.63	0.00	1,646,687.63	0.00
Purchase	08/28/2019	912796VW6	1,650,000.00	US Treasury Bill 2.042% Due: 09/24/2019	99.847	2.07%	1,647,472.41	0.00	1,647,472.41	0.00
Purchase	08/28/2019	912828UL2	5,000,000.00	US Treasury Note 1.375% Due: 01/31/2020	99.773	1.91%	4,988,671.88	5,230.98	4,993,902.86	0.00
Purchase	09/16/2019	912796RY7	4,000,000.00	US Treasury Bill 1.873% Due: 01/30/2020	99.293	1.91%	3,971,704.44	0.00	3,971,704.44	0.00
Purchase	09/18/2019	912796RY7	3,000,000.00	US Treasury Bill 1.907% Due: 01/30/2020	99.290	1.95%	2,978,710.75	0.00	2,978,710.75	0.00
Purchase	09/24/2019	912828TR1	1,650,000.00	US Treasury Note 1% Due: 09/30/2019	99.984	1.94%	1,649,742.19	7,979.51	1,657,721.70	0.00
Purchase	09/26/2019	912828F39	1,350,000.00	US Treasury Note 1.75% Due: 09/30/2019	99.996	2.09%	1,349,947.27	11,554.30	1,361,501.57	0.00
Purchase	09/30/2019	912796VY2	1,250,000.00	US Treasury Bill 1.737% Due: 10/08/2019	99.961	1.76%	1,249,517.42	0.00	1,249,517.42	0.00

Transaction Ledger

As of September 30, 2019

Orange County Sanitation District Liquid - Account #10282

June 30, 2019 through September 30, 2019

Transaction Type	Settlement Date	CUSIP	Quantity	Security Description	Price	Acq/Disp Yield	Amount	Interest Pur/Sold	Total Amount	Gain/Loss
Purchase	09/30/2019	912796VZ9	1,250,000.00	US Treasury Bill 1.805% Due: 10/15/2019	99.925	1.83%	1,249,059.90	0.00	1,249,059.90	0.00
Subtotal			31,160,000.00				31,089,301.92	63,153.68	31,152,455.60	0.00
TOTAL ACQUISITIONS			31,160,000.00				31,089,301.92	63,153.68	31,152,455.60	0.00
DISPOSITIONS										
Call	09/18/2019	69353RDZ8	1,000,000.00	PNC Bank Callable Note Cont 9/18/2019 2.4% Due: 10/18/2019	100.000	2.40%	1,000,000.00	10,000.00	1,010,000.00	171.43
Subtotal			1,000,000.00				1,000,000.00	10,000.00	1,010,000.00	171.43
Redemption	08/27/2019	46625HKA7	1,500,000.00	JP Morgan Chase Callable Note Cont 12/23/2019 2.25% Due: 01/23/2020	100.055	2.08%	1,500,825.00	3,187.50	1,504,012.50	4,749.24
Subtotal			1,500,000.00				1,500,825.00	3,187.50	1,504,012.50	4,749.24
Maturity	07/12/2019	25468PDL7	1,130,000.00	TWDC Enterprises 18 Corp Note 0.875% Due: 07/12/2019	100.000		1,130,000.00	0.00	1,130,000.00	0.00
Maturity	07/29/2019	69353REX2	1,890,000.00	PNC Bank Callable Note Cont 6/29/2019 1.45% Due: 07/29/2019	100.000		1,890,000.00	0.00	1,890,000.00	0.00
Maturity	07/31/2019	313384JV2	5,500,000.00	FHLB Discount Note 2.395% Due: 07/31/2019	100.000		5,500,000.00	0.00	5,500,000.00	0.00
Maturity	07/31/2019	912828K5	35,000,000.00	US Treasury Note 1.375% Due: 07/31/2019	100.000		35,000,000.00	0.00	35,000,000.00	0.00
Maturity	07/31/2019	912828TH3	15,000,000.00	US Treasury Note 0.875% Due: 07/31/2019	100.000		15,000,000.00	0.00	15,000,000.00	0.00
Maturity	07/31/2019	912828WW6	20,000,000.00	US Treasury Note 1.625% Due: 07/31/2019	100.000		20,000,000.00	0.00	20,000,000.00	0.00
Maturity	08/12/2019	69371RN36	1,083,000.00	Paccar Financial Corp Note 1.2% Due: 08/12/2019	100.000		1,083,000.00	0.00	1,083,000.00	0.00
Maturity	08/15/2019	02665WAH4	1,977,000.00	American Honda Finance Note 2.25% Due: 08/15/2019	100.000		1,977,000.00	0.00	1,977,000.00	0.00

Transaction Ledger

As of September 30, 2019

Orange County Sanitation District Liquid - Account #10282

June 30, 2019 through September 30, 2019

Transaction Type	Settlement Date	CUSIP	Quantity	Security Description	Price	Acq/Disp Yield	Amount	Interest Pur/Sold	Total Amount	Gain/Loss
Maturity	08/19/2019	62479MVK6	3,290,000.00	MUFG Bank Ltd/NY Discount CP 2.35% Due: 08/19/2019	99.608		3,290,000.00	0.00	3,290,000.00	0.00
Maturity	09/13/2019	21687BWD9	2,000,000.00	Rabobank Nederland NV NY Discount CP 2.83% Due: 09/13/2019	97.893		2,000,000.00	0.00	2,000,000.00	0.00
Maturity	09/13/2019	96130ABJ6	1,500,000.00	Westpac Banking Corp NY Yankee CD 2.97% Due: 09/13/2019	100.000		1,500,000.00	33,783.75	1,533,783.75	0.00
Maturity	09/18/2019	313384LW7	2,850,000.00	FHLB Discount Note 2.2% Due: 09/18/2019	100.000		2,850,000.00	0.00	2,850,000.00	0.00
Maturity	09/24/2019	912796VW6	1,650,000.00	US Treasury Bill 2.042% Due: 09/24/2019	100.000		1,650,000.00	0.00	1,650,000.00	0.00
Maturity	09/25/2019	313384MD8	2,500,000.00	FHLB Discount Note 2.12% Due: 09/25/2019	100.000		2,500,000.00	0.00	2,500,000.00	0.00
Maturity	09/30/2019	89114MM20	2,000,000.00	Toronto Dominion Bank Yankee CD 2.47% Due: 09/30/2019	100.000		2,000,000.00	17,015.56	2,017,015.56	0.00
Maturity	09/30/2019	9128282X7	10,000,000.00	US Treasury Note 1.375% Due: 09/30/2019	100.000		10,000,000.00	0.00	10,000,000.00	0.00
Maturity	09/30/2019	912828F39	1,350,000.00	US Treasury Note 1.75% Due: 09/30/2019	100.000		1,350,000.00	0.00	1,350,000.00	0.00
Maturity	09/30/2019	912828TR1	11,650,000.00	US Treasury Note 1% Due: 09/30/2019	100.000		11,650,000.00	0.00	11,650,000.00	0.00
Subtotal			120,370,000.00				120,370,000.00	50,799.31	120,420,799.31	0.00
TOTAL DISPOSITIONS			122,870,000.00				122,870,825.00	63,986.81	122,934,811.81	4,920.67



Transaction Ledger

As of September 30, 2019

OCSD Lehman Exposure - Account #10284

June 30, 2019 through September 30, 2019

Transaction Type	Settlement Date	CUSIP	Quantity	Security Description	Price	Acq/Disp Yield	Amount	Interest Pur/Sold	Total Amount	Gain/Loss
Other Transactions										
Cash Capital Distribution	07/18/2019	525ESCOY6	0.00	Lehman Brothers Note-Defaulted Due: 10/22/2049	0.000		5,744.23	0.00	5,744.23	0.00
Cash Capital Distribution	07/18/2019	525ESCIB7	0.00	Lehman Brothers Note-Defaulted Due: 01/24/2020	0.000		1,729.39	0.00	1,729.39	0.00
Subtotal			0.00				7,473.62	0.00	7,473.62	0.00
TOTAL Other Transactions			0.00				7,473.62	0.00	7,473.62	0.00

Important Disclosures

As of September 30, 2019

2019 Chandler Asset Management, Inc, An Independent Registered Investment Adviser.

Information contained herein is confidential. Prices are provided by IDC, an independent pricing source. In the event IDC does not provide a price or if the price provided is not reflective of fair market value, Chandler will obtain pricing from an alternative approved third party pricing source in accordance with our written valuation policy and procedures. Our valuation procedures are also disclosed in Item 5 of our Form ADV Part 2A.

Performance results are presented gross-of-advisory fees and represent the client's Total Return. The deduction of advisory fees lowers performance results. These results include the reinvestment of dividends and other earnings. Past performance may not be indicative of future results. Therefore, clients should not assume that future performance of any specific investment or investment strategy will be profitable or equal to past performance levels. All investment strategies have the potential for profit or loss. Economic factors, market conditions or changes in investment strategies, contributions or withdrawals may materially alter the performance and results of your portfolio.

Index returns assume reinvestment of all distributions. Historical performance results for investment indexes generally do not reflect the deduction of transaction and/or custodial charges or the deduction of an investment management fee, the incurrence of which would have the effect of decreasing historical performance results. It is not possible to invest directly in an index.

Source ice Data Indices, LLC ("ICE"), used with permission. ICE permits use of the ICE indices and related data on an "as is" basis; ICE, its affiliates and their respective third party suppliers disclaim any and all warranties and representations, express and/or implied, including any warranties of merchantability or fitness for a particular purpose or use, including the indices, index data and any data included in, related to, or derived therefrom. Neither ICE data, its affiliates or their respective third party providers guarantee the quality, adequacy, accuracy, timeliness or completeness of the indices or the index data or any component thereof, and the indices and index data and all components thereof are provided on an "as is" basis and licensee's use it at licensee's own risk. ICE data, its affiliates and their respective third party do not sponsor, endorse, or recommend chandler asset management, or any of its products or services.

This report is provided for informational purposes only and should not be construed as a specific investment or legal advice. The information contained herein was obtained from sources believed to be reliable as of the date of publication, but may become outdated or superseded at any time without notice. Any opinions or views expressed are based on current market conditions and are subject to change. This report may contain forecasts and forward-looking statements which are inherently limited and should not be relied upon as indicator of future results. Past performance is not indicative of future results. This report is not intended to constitute an offer, solicitation, recommendation or advice regarding any securities or investment strategy and should not be regarded by recipients as a substitute for the exercise of their own judgment.

Fixed income investments are subject to interest, credit and market risk. Interest rate risk: the value of fixed income investments will decline as interest rates rise. Credit risk: the possibility that the borrower may not be able to repay interest and principal. Low rated bonds generally have to pay higher interest rates to attract investors willing to take on greater risk. Market risk: the bond market in general could decline due to economic conditions, especially during periods of rising interest rates.

Ratings information have been provided by Moody's, S&P and Fitch through data feeds we believe to be reliable as of the date of this statement, however we cannot guarantee its accuracy.

Security level ratings for U.S. Agency issued mortgage-backed securities ("MBS") reflect the issuer rating because the securities themselves are not rated. The issuing U.S. Agency guarantees the full and timely payment of both principal and interest and carries a AA+/Aaa/AAA by S&P, Moody's and Fitch respectively.

ICE BAML 3-Month US Treasury Bill Index

The ICE BAML US 3-Month Treasury Bill Index is comprised of a single issue purchased at the beginning of the month and held for a full month. At the end of the month that issue is sold and rolled into a newly selected issue. The issue selected at each month-end rebalancing is the outstanding Treasury Bill that matures closest to, but not beyond, three months from the rebalancing date. (Index: GOO1. Please visit www.mlindex.ml.com for more information)

ICE BAML 1-5 Yr US Corp/Govt Rated AAA-A Index

The ICE BAML US Issuers 1-5 Year AAA-A US Corporate & Government Index tracks the performance of US dollar denominated investment grade debt publicly issued in the US domestic market, including US Treasury, US agency, foreign government, supranational and corporate securities. Qualifying securities must be issued from US issuers and be rated AAA through A3 (based on an average of Moody's, S&P and Fitch). In addition, qualifying securities must have at least one year remaining term to final maturity and less than five years remaining term to final maturity, at least 18 months to final maturity at point of issuance, a fixed coupon schedule and a minimum amount outstanding of \$1 billion for US Treasuries and \$250 million for all other securities. (Index: BV10. Please visit www.mlindex.ml.com for more information)

ICE BAML US 1-5 Yr US Corp/Govt Rated AAA-BBB Index

The ICE BAML 1-5 Year US Corporate & Government Index tracks the performance of US dollar denominated investment grade debt publicly issued in the US domestic market, including US Treasury, US agency, foreign government, supranational and corporate securities. Qualifying securities must have an investment grade rating (based on an average of Moody's, S&P and Fitch). In addition, qualifying securities must have at least one year remaining term to final maturity and less than five years remaining term to final maturity, at least 18 months to final maturity at point of issuance, a fixed coupon schedule and a minimum amount outstanding of \$1 billion for US Treasuries and \$250 million for all other securities. (Index: BVA0. Please visit www.mlindex.ml.com for more information)

Rating Agency Comparisons

A summary of investment grade ratings are listed below. More complete descriptions of Moody's and Standard & Poor's ratings are included in the following pages.

Quality/Grade	Moody's	Standard & Poor's	Fitch
Best Quality	Aaa	AAA	AAA
High Quality	Aa1 Aa2 Aa3	AA+ AA AA-	AA+ AA AA-
Upper Medium Grade	A1 A2 A3	A+ A A-	A+ A A-
Medium Grade	Baa1 Baa2 Baa3	BBB+ BBB BBB-	BBB+ BBB BBB1

Moody's - Investment Grade

"Aaa" - Bonds rated Aaa are judged to be of the best quality. They carry the smallest degree of investment risk. Interest payments are protected by a large or by an exceptionally stable margin and principal is secure. While the various protective elements are likely to change, such changes as can be visualized are most unlikely to impair the fundamentally strong position of such issues.

"Aa" - Bonds which are rated Aa are judged to be of high quality by all standards. Together with the Aaa group they comprise what are generally known as high grade bonds. They are rated lower than the best bonds because margins of protection may not be as large as in Aaa securities or fluctuation of protective elements may be of greater amplitude or there may be other elements present which make the long-term risks appear somewhat larger than in Aaa securities.

"A" - Bonds which are rated A possess many favorable investment attributes and are to be considered as upper medium grade obligations. Factors giving security to principal and interest are considered adequate, but elements may be present which suggest a susceptibility to impairment sometime in the future.

"Baa" - Bonds which are rated Baa are considered as medium grade obligations; i.e., they are neither highly protected nor poorly secured. Interest payments and principal security appear adequate for the present but certain protective elements may be lacking or may be characteristically unreliable over any great length of time. Such bonds lack outstanding investment characteristics and in fact have speculative characteristics as well.

Bonds in the Aa, A, and Baa are also assigned "1", "2", or "3" based on the strength of the issue within each category. Accordingly, "A1" would be the strongest group of A securities and "A3" would be the weakest A securities.

Ba, B, Caa, Ca, and C - Bonds that possess one of these ratings provide questionable protection of interest and principal ("Ba" indicates some speculative elements; "B" indicates a general lack of characteristics of desirable investment; "Caa" represents a poor standing; "Ca" represents obligations which are speculative in a high degree; and "C" represents the lowest rated class of bonds). "Caa", "Ca" and "C" bonds may be in default.

Standard and Poor's - Investment Grade

AAA - Debt rated "AAA" has the highest rating assigned by S&P. Capacity to pay interest and repay principal is extremely strong.

AA - Debt rated "AA" has a very strong capacity to pay interest and repay principal and differs from the highest rated issues only in small degree.

A - Debt rated "A" has a strong capacity to pay interest and repay principal although it is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than debt in higher rated categories.

BBB - Debt rated "BBB" is regarded as having an adequate capacity to pay interest and repay principal. Whereas it normally exhibits adequate protection parameters, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity to pay interest and repay principal for debt in this category than in higher rated categories.

Standard and Poor's - Speculative Grade Rating

Debt rated "BB", "B", "CCC", "CC" and "C" is regarded as having predominantly speculative characteristics with respect to capacity to pay interest and repay principal. "BB" indicates the least degree of speculation and "C" the highest. While such debt will likely have some quality and protective characteristics these are outweighed by major uncertainties or major exposures to adverse conditions.

BB - Debt rated "BB" has less near-term vulnerability to default than other speculative issues. However, it faces major ongoing uncertainties or exposure to adverse business, financial, or economic conditions which could lead to inadequate capacity to meet timely interest and principal payments. The "BB" rating category is also used for debt subordinated to senior debt that is assigned an actual or implied "BBB" rating.

B - Debt rated "B" has a greater vulnerability to default but currently has the capacity to meet interest payments and principal repayments. Adverse business, financial, or economic conditions will likely impair capacity or willingness to pay interest and repay principal. The "B" rating category is also used for debt subordinated to senior debt that is assigned an actual or implied "BB" or "BB" rating.

CCC - Debt rated "CCC" has a currently identifiable vulnerability to default, and is dependent upon favorable business, financial, and economic conditions to meet timely payment of interest and repayment of principal. In the event of adverse business, financial, or economic conditions, it is not likely to have the capacity to pay interest and repay principal. The "CCC" rating category is also used for debt subordinated to senior debt that is assigned an actual or implied "B" or "B" rating.

CC - The rating "CC" typically is applied to debt subordinated to senior debt that is assigned an actual or implied "CCC" debt rating.

C - The rating "C" typically is applied to debt subordinated to senior debt which is assigned an actual or implied "CCC" debt rating. The "C" rating may be used to cover a situation where a bankruptcy petition has been filed, but debt service payments are continued.

CI - The rating "CI" is reserved for income bonds on which no interest is being paid.

D - Debt rated "D" is in payment default. The "D" rating category is used when interest payments or principal payments are not made on the date due even if the applicable grace period has not expired, unless S&P believes that such payments will be made during such grace period. The "D" rating also will be used upon the filing of a bankruptcy petition if debt service payments are jeopardized.

Plus (+) or Minus (-) - The ratings from "AA" to "CCC" may be modified by the addition of a plus or minus sign to show relative standing within the major rating categories.

NR - Indicates no rating has been requested, that there is insufficient information on which to base a rating, or that S&P does not rate a particular type of obligation as a matter of policy.



October 31, 2019

STAFF REPORT

Certificates of Participation (COP) Quarterly Report for the Period Ended September 30, 2019

Summary

The District began issuing Certificates of Participation (COPs) in 1990. These COPs were a part of our long-term financing plan that included both variable interest rate and traditional fixed rate borrowing. Following are the current outstanding debt issues of the District:

In May 2010, the District issued \$80 million of fixed rate BABs, Series 2010A at a true interest cost of 3.68 percent for the issue.

In December 2010, the District issued \$157 million of fixed rate BABs, Series 2010C at a true interest cost of 4.11 percent for the issue.

In October 2011, the District issued \$147.595 million of fixed rate COPs, Series 2011A refunding a portion of the Series 2000 variable rate debt and a portion of the Series 2003 fixed rate debt. The true interest cost for the issue is 2.61 percent.

In March 2012, the District issued \$100.645 million of fixed rate COPs, Series 2012A refunding the Series 2003 fixed rate debt. The true interest cost for the issue is 3.54 percent.

In August 2012, the District issued \$66.395 million of fixed rate COPs, Series 2012B refunding the Series 2000 variable rate debt. The true interest cost for the issue is 1.50 percent.

With the issuance of Series 2012B, there remains no variable interest rate COPs at the District.

In August 2014, the District issued \$85.09 million of fixed rate COPs, Series 2014A, refunding a portion of Series 2007B debt. The true interest cost for the issue is 2.34 percent.

In February 2015, the District issued \$127.51 million of fixed rate COPs, Series 2015A, refunding \$152.99 million of the Series 2007B debt. The true interest cost for the issue is 3.30 percent.

In March 2016, the District issued \$145.88 million of fixed rate CANs, Series 2016A, refunding \$162.78 million of the Series 2009A fixed rate debt. The true interest cost for the issue is 3.02 percent.

In February 2017, the District issued \$66.37 million of fixed rate COPs, Series 2017A, refunding \$91.885 million of the Series 2007A debt. The true interest cost for the issue is 2.55 percent.

In November 2018, the District issued \$102.2 million of fixed rate CANs, Series 2018A, refunding the Series 2016B CANs. The true interest cost for the issue is 2.02 percent.

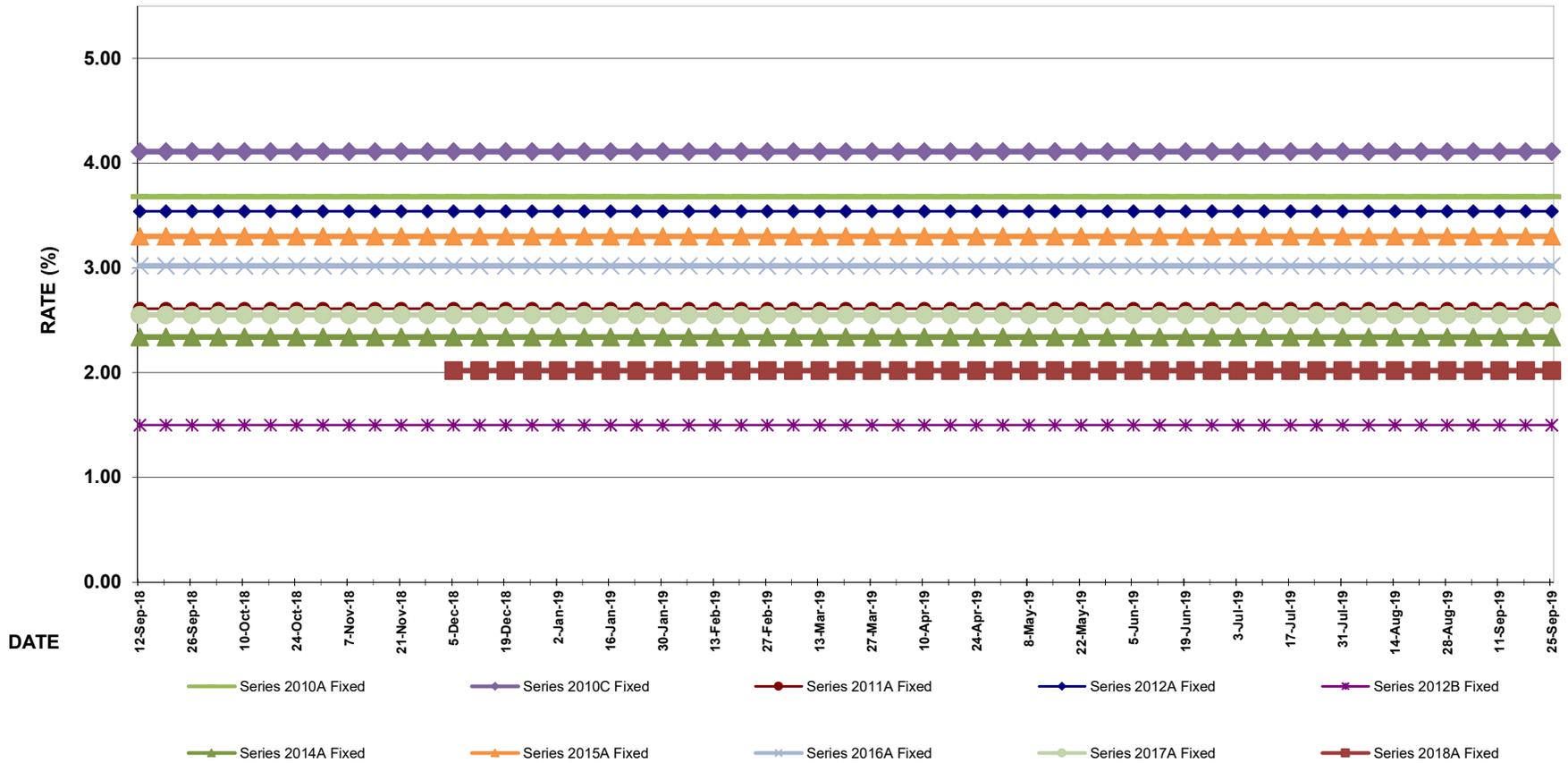
Additional Information

The graph entitled, "OCSD COP Rate History Report," shows the various fixed interest rates of the District's eleven debt issues.

Attachments

1. Graph - OCSD COP Rate History Report

OCSD COP RATE HISTORY REPORT SEPTEMBER 2019



FY 2019-20 First Quarter Financial Report

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

09/30/19



Orange County Sanitation District

ADMINISTRATION COMMITTEE

Administration Building
10844 Ellis Avenue
Fountain Valley, CA 92708
(714) 593-7433

Agenda Report

File #: 2019-702

Agenda Date: 11/13/2019

Agenda Item No: 6.

FROM: James D. Herberg, General Manager
Originator: Lorenzo Tyner, Assistant General Manager

SUBJECT:

LEASE AGREEMENT WITH MEGDAL GREEN, LLC PROVIDING ORANGE COUNTY SANITATION DISTRICT PARCEL FOR PARKING AND/OR RELATED ACTIVITIES

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION: Recommend to the Board of Directors to:

Approve a five-year lease agreement with Megdal Green, LLC, a California limited liability company, to allow paving, striping, parking, and related improvements over a 4-foot wide portion of the Orange County Sanitation District's 50-foot wide utility corridor which abuts 21532 South Brookhurst Street in Huntington Beach owned by Megdal Green, LLC, at an annual cost of \$250, for a term of five-years.

BACKGROUND

The Orange County Sanitation District (Sanitation District) has leased a 4-foot wide strip of its 50-foot wide parcel to Carl Karcher Enterprises since 1993 for the purpose of creating additional parking spaces in this congested commercial center. The Carl's Jr. restaurant has moved out of this center and Megdal Green, LLC has now leased its property to Starbucks Coffee Company. With parking in this center still a concern, Megdal Green contacted the Sanitation District and requested the opportunity to lease the same strip of land for the same purpose.

The agreement is for a five-year period and provides for Megdal Green, LLC and its tenants to utilize the Sanitation District land, classified as an Interplant Pipeline and Utility Corridor, for the purpose of parking, outdoor seating, or related activities for the sum of \$250 per year. Improvements such as paving, striping, etc. are to be maintained in good condition by Megdal Green, LLC for the term of the lease. This lease may be terminated by either party with 60-day written notice.

RELEVANT STANDARDS

- Maintain collaborative and cooperative relationships with regulators, stakeholders, and neighboring communities

PROBLEM

The Sanitation District's property is adjacent to a busy commercial center. A shortage of parking spaces, litter, and vagrancy can be a problem in this area.

PROPOSED SOLUTION

By leasing this strip of land to Megdal Green, LLC, the lessee becomes responsible for keeping the area clean, maintained, and free from loitering.

TIMING CONCERNS

Starbucks is due to open December 2019.

RAMIFICATIONS OF NOT TAKING ACTION

The Sanitation District would not have an agreement with Megdal Green, LLC to maintain the area and Sanitation District staff or contractors would then have to monitor litter and loitering.

PRIOR COMMITTEE/BOARD ACTIONS

July 2018 - Board approved a one-year and five-month lease agreement with CKE.

April 2008 - Board approved 5-year Lease extension with CKE, which included an additional 5-year extension option.

August 2003 - Board approved 5-year Lease extension with CKE.

August 1993 - Board approved Lease Agreement with Carl Karcher Enterprises (CKE).

ADDITIONAL INFORMATION

N/A

CEQA

N/A

FINANCIAL CONSIDERATIONS

N/A

ATTACHMENT

The following attachment(s) is included in hard copy and may also be viewed on-line at the OCSD website (www.ocsd.com) with the complete agenda package:

- Lease Agreement with Megdal Green, LLC

LEASE AGREEMENT

THIS LEASE AGREEMENT (“Agreement”), is made and entered into, to be effective this ____ day of _____, 2019, by and between:

ORANGE COUNTY SANITATION DISTRICT, a public agency (“DISTRICT”);

AND

MEGDAL GREEN, LLC, a California limited liability company (“MEGDAL”)

RECITALS

A. DISTRICT owns a parcel of land approximately fifty (50) feet wide (hereinafter, the “Property”), which abuts the easterly property line of those certain premises located at 21532 South Brookhurst Street, Huntington Beach, California (hereinafter, the “Brookhurst Premises”), and the westerly right-of-way line of the Santa Ana River Channel.

B. The Brookhurst Premises are owned by MEGDAL and leased to Starbucks Coffee Company.

C. DISTRICT owns certain utility improvements, including an Outfall Sewer, which is presently located in the subsurface of the Property. DISTRICT previously constructed additional improvements on the Property, including a permanent retaining wall. There remains a strip of the Property, approximately four (4) feet wide, that lies between the retaining wall and the Brookhurst Premises (hereinafter referred to as “Parcel A”). Parcel A is more particularly described and shown on Exhibits “A” and “B,” attached hereto and incorporated herein by this reference.

D. The Parties now desire to enter into an agreement wherein the DISTRICT would lease Parcel A to MEGDAL to allow MEGDAL to install and maintain paving, striping, parking, and related improvements within Parcel A pursuant to the terms and conditions stated herein.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and pursuant to the terms and conditions contained herein, the Parties hereby agree as follows:

Section 1 – Recitals: The Recitals set forth above are incorporated herein as part of this Agreement.

Section 2 – Rent: DISTRICT hereby leases Parcel A to MEGDAL for an annual sum of two hundred and fifty dollars (\$250.00). MEGDAL shall pay the first year's rent within five (5) business days following execution of this Agreement, and shall make all subsequent annual rent payments on or before November 1st of each year.

Section 3 – Term: This Agreement shall have a term of five (5) years beginning on the date this Agreement is executed by the Parties.

Section 4 – Early Termination: Notwithstanding Section 3 of this Agreement, either Party may terminate this Agreement for any reason by providing at least sixty (60) days advance written notice to the other Party.

Section 5 – Maintenance: MEGDAL agrees to maintain Parcel A in good and fair condition, free of trash, and generally in a manner consistent with cleanliness standards for similar commercial properties in the area.

Section 6 – Authorized Uses: MEGDAL shall make use of Parcel A only for vehicular traffic, parking, outdoor seating, and any related activities, or for the use of MEGDAL and its employees, invitees, and customers. MEGDAL shall not use Parcel A

for any other use or purpose. MEGDAL agrees, during the term of its leasehold interest, to pave, maintain, and keep in good condition and repair the paving and improvements to be installed by MEGDAL within Parcel A. Such maintenance shall include, but is not limited to, repairs, resurfacing, restriping, cleaning, and sweeping.

Section 7 – DISTRICT Access: In consideration of this Lease, MEGDAL hereby grants to DISTRICT a license to enter Parcel A at any time during the term of this Agreement. Further, upon prior written notice to MEGDAL, DISTRICT may remove the retaining wall or any paving or parking area improvements for the purpose of accessing, maintaining, altering, or relocating DISTRICT’s Outfall Sewer, which is located on DISTRICT’s land and beneath the surface of Parcel A.

Section 8 – DISTRICT Work: If DISTRICT exercises its license to enter and remove any improvements to the lease area, it agrees to act expeditiously to undertake and conclude all work affecting Parcel A. MEGDAL shall have the option to terminate this Lease (in accordance with Section 4 above) in the event of DISTRICT’s removal of improvements, but shall replace the improvements at its own expense if MEGDAL chooses to continue the Lease.

Section 9 – Indemnity & Duty to Defend: MEGDAL shall indemnify, assume the defense of, and hold free and harmless, DISTRICT, its agents, employees, successors, and assigns, from any and all obligations, liabilities, liens, claims, demands, losses, damages, costs, or causes of action (hereinafter “liability”) arising out of or in any way connected to MEGDAL’s use of Parcel A, or any act or omission to act by MEGDAL, including its agents, servants, employees, invitees, or guests, including but not limited to any liability arising from bodily injury (including death), personal property damage, damage to any of DISTRICT’s property, and reasonable attorneys’ fees, sustained at any

time by any person or persons arising out of or in consequence of MEGDAL's use of Parcel A, whether or not such bodily injury or property damage is claimed to be due to the negligence, gross negligence, or willful misconduct of MEGDAL, its agents, servants, employees, invitees, or guests, excepting only liability arising from the sole negligence or willful misconduct of DISTRICT.

Section 10 – No Assignment: No assignment or sublease of MEGDAL's interest hereunder may be made without the written consent of DISTRICT, which may be withheld in its sole discretion.

Section 11 – Insurance: MEGDAL agrees that it will, at its sole expense, maintain a policy or policies of insurance, written by one or more qualified and rated insurance carriers, and insuring DISTRICT and its employees against liability for injury, death of persons, or loss or damage to property in or about the lease area. This insurance requirement may be met by the naming of DISTRICT, its employees, officers and directors, as additional insureds to MEGDAL's general liability insurance policy. The general liability coverage shall not be less than \$1,000,000 per occurrence for bodily injury, including death, and \$500,000 for property damage.

Section 12 – Arbitration: Any controversy or claim between the Parties to this Agreement, including but not limited to, any claims, disputes, demands, differences, controversies, or misunderstandings arising under, out of, or in relation to this Lease, or any alleged breach thereof, shall be submitted to and determined by arbitration. The Rules of the American Arbitration Association shall apply. The prevailing party shall be entitled to recover reasonable attorneys' fees and costs, as fixed by the Arbitrator.

Section 13 – Entire Agreement: This instrument contains the entire agreement between the Parties relating to the rights herein granted and the obligations herein assumed.

Any oral representations or modifications concerning this instrument shall be of no force and effect, excepting a subsequent modification in writing, signed by the Party to be charged.

Section 14 – Counterparts: This Agreement may be executed in counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same Agreement.

IN WITNESS WHEREOF, DISTRICT and MEGDAL have executed this Lease Agreement on the day and year first above written.

“DISTRICT”

ORANGE COUNTY SANITATION DISTRICT,
a public agency

By _____
David John Shawver, Chair, Board of Directors

ATTEST:

Kelly A. Lore, Clerk of the Board

APPROVED AS TO FORM:

Bradley R. Hogin, General Counsel

“MEGDAL”

MEGDAL GREEN, LLC,
a California Limited Liability Company

By _____

Its: _____

By _____

Its: _____



Orange County Sanitation District

ADMINISTRATION COMMITTEE

Administration Building
10844 Ellis Avenue
Fountain Valley, CA 92708
(714) 593-7433

Agenda Report

File #: 2019-705

Agenda Date: 11/13/2019

Agenda Item No: 7.

FROM: James D. Herberg, General Manager
Originator: Lorenzo Tyner, Assistant General Manager

SUBJECT:

ORANGE COUNTY SANITATION DISTRICT COMPREHENSIVE ANNUAL FINANCIAL REPORT (CAFR) FOR THE YEAR END JUNE 30, 2019

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION: Recommend to the Board of Directors to:

Receive and file the Orange County Sanitation District's Comprehensive Annual Financial Report for the year ended June 30, 2019, prepared by staff and audited by Macias Gini & O'Connell LLP (MGO), Certified Public Accountants, along with the following reports prepared by MGO:

1. Report to the Board of Directors; and
2. Independent Accountants' Report on Agreed-Upon Procedures Applied to Appropriations Limit Worksheets.

BACKGROUND

The CAFR for the year ended June 30, 2019 is enclosed for the Committee's consideration. Included within the report are the Orange County Sanitation District's financial statements for the year ended June 30, 2019, along with the Independent Auditor's Report that includes the unmodified opinion.

RELEVANT STANDARDS

- Produce appropriate financial reporting - annual financial report & audit letter

ATTACHMENT

The following attachment(s) are included in hard copy and may also be viewed on-line at the OCSD website (www.ocsd.com) with the complete agenda package:

- Report to the Board of Directors
- Independent Accountant's Report on Applying Agreed-Upon Procedures Related to Appropriations Limit Calculation
- Comprehensive Annual Financial Report for the Year Ended June 30, 2019 (*separately bound document*)
- Single Audit Reports



October 25, 2019

To the Board of Directors
Orange County Sanitation District
10844 Ellis Avenue
Fountain Valley, California

We have audited the basic financial statements of the Orange County Sanitation District (OCSD) for the year ended June 30, 2019. Professional standards require that we provide you with information about our responsibilities under generally accepted auditing standards and *Government Auditing Standards*, as well as certain information related to the planned scope and timing of our audit. We have communicated such information in our letter to you dated April 30, 2019. Professional standards also require that we communicate to you the following information related to our audit.

Significant Audit Matters

Qualitative Aspects of Accounting Practices

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by OCSD are described in Note 1 to the basic financial statements. As described in Note 1 to the basic financial statements, OCSD implemented Governmental Accounting Standard Board (GASB) Statement No. 83, *Certain Asset Retirement Obligations* and also GASB Statement No. 88, *Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements*. However, implementation of these Standards did not materially impact OCSD. The application of existing policies was not changed during 2019.

We noted no transactions entered into by OCSD during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected. The most sensitive estimates affecting OCSD's financial statements were:

- Valuations of actuarially determined contributions, deferred outflows of resources, deferred inflows of resources, and net pension liability for OCSD's employee pension plan and additional retiree benefit account plan are based on actuarial calculations, which incorporate actuarial methods and assumptions adopted by the Board of Directors.
- Valuations of actuarially determined contributions, deferred outflows of resources, deferred inflows of resources, and net OPEB liability for OCSD's employee OPEB plan are based on actuarial calculations, which incorporate actuarial methods and assumptions adopted by the Board of Directors.

- Management's estimates of workers' compensation and general liability are based on reports prepared by third party actuarial valuations. We evaluated the key factors and assumptions used to develop the estimate liability in determining that they are reasonable in relation to the financial statements taken as a whole.
- Management's estimate of the allowance for uncollectible accounts receivable is based on evaluating individual customer accounts receivable at least one year past due and considering the customer's financial condition, credit history and current economic conditions. We evaluated the key factors and assumptions used to assess the collectability of the receivables in determining that they are reasonable in relation to the financial statements taken as a whole.
- Management's estimate of depreciation is based on the useful-lives of the capital assets. We evaluated the key factors and assumptions used to develop the useful-lives of the capital assets in determining that it is reasonable in relation to the financial statements taken as a whole.
- Fair values of investments are based on quoted market prices or significant other observable inputs from independent published sources. We evaluated the key factors and assumptions used to develop the fair value of investments in determining that it is reasonable in relation to the financial statements taken as a whole.

Certain financial statement disclosures are particularly sensitive because of their significance to financial statement users. The most sensitive disclosures affecting the financial statements were:

- The disclosure of net pension liability and OPEB benefits in Note 5 and 6 to the financial statements, respectively, are based on actuarial valuations.
- Transactions with Irvine Ranch Water District – Revenue Area No. 14 as disclosed in Note 7.
- Commitments and contingencies that will impact future resources of OCSD as disclosed in Note 9.

The financial statement disclosures are neutral, consistent, and clear.

Difficulties Encountered in Performing the Audit

We encountered no difficulties in dealing with management in performing and completing our audit.

Corrected and Uncorrected Misstatements

Professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those that are trivial, and communicate them to the appropriate level of management. There were no misstatements detected as a result of audit procedures and corrected by management which were material, either individually or in the aggregate, to the financial statements taken as a whole.

Disagreements with Management

For purposes of this letter, a disagreement with management is a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditor's report. We are pleased to report that no such disagreements arose during the course of our audit.

Management Representations

We have requested certain representations from management that are included in the management representation letter dated October 25, 2019.

Management Consultations with Other Independent Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a “second opinion” on certain situations. If a consultation involves application of an accounting principle to OCSD’s financial statements or a determination of the type of auditor’s opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

Other Audit Findings or Issues

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as OCSD’s auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

Other Matters

We applied certain limited procedures to the Management’s Discussion and Analysis, Schedule of Proportionate Share of Net Pension Liability (Asset) – OCERS Pension Plan, Schedule of District Contributions – OCERS Pension Plan, Schedule of Total Pension Liability – Additional Retiree Benefit Plan, Schedule of Changes in Total Pension Liability - Additional Retiree Benefit Plan, Schedule of Total OPEB Liability – Post Employment Medical Benefits Plan, and Schedule of Changes in Total OPEB Liability – Post Employment Medical Benefits Plan, which are required supplementary information (RSI) that supplement the basic financial statements. Our procedures consisted of inquiries of management regarding 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 did not audit the RSI and do not express an opinion or provide any assurance on the RSI.

We were engaged to report on the “Combining Area” financial statements, which accompany the financial statements but are not RSI. With respect to this supplementary information, we made certain inquiries of management and evaluated the form, content, and methods of preparing the information to determine that the information complies with accounting principles generally accepted in the United States of America, the method of preparing it has not changed from the prior period, and the information is appropriate and complete in relation to our audit of the financial statements. We compared and reconciled the supplementary information to the underlying accounting records used to prepare the financial statements or to the financial statements themselves.

We were not engaged to report on the introductory and statistical sections, which accompany the financial statements but are not RSI. Such information has not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

Restriction on Use

This information is intended solely for the information and use of the Board of Directors and management of OCSD and is not intended to be, and should not be, used by anyone other than these specified parties.

Very truly yours,

Macias Gini & O'Connell LLP

Newport Beach, California
October 25, 2019

ORANGE COUNTY SANITATION DISTRICT

Independent Accountant's Report on Applying
Agreed-Upon Procedures Related to
Appropriations Limit Calculation

Year Ended June 30, 2019



Certified
Public
Accountants



Independent Accountant's Report on Applying Agreed-Upon Procedures

To the Board of Directors
Orange County Sanitation District

We have performed the procedures enumerated below to the accompanying Appropriations Limit Worksheet of the Orange County Sanitation District (OCSD) for the year ended June 30, 2019. These procedures, which were agreed to by OCSD and the League of California Cities (as presented in the publication titled Agreed-Upon Procedures Applied to the Appropriations Limitation Prescribed by Article XIII-B of the California Constitution), were performed solely to assist OCSD in meeting the requirements of Section 1.5 of Article XIII-B of the California Constitution. OCSD's management is responsible for the Appropriations Limit Worksheet. The sufficiency of these procedures is solely the responsibility of those parties specified in this report. Consequently, we make no representation regarding the sufficiency of the procedures described below either for the purpose for which this report has been requested or for any other purpose.

The procedures performed and our findings are as follows:

1. We obtained the completed worksheets setting forth the calculations necessary to establish OCSD's appropriations limit and compared the limit and annual adjustment factors included in those worksheets to the limit and annual adjustment factors that were adopted by resolution of OCSD's Board of Directors. We also compared the population and inflation options included in the aforementioned worksheets to those that were selected by a recorded vote of OCSD's Board of Directors.

Finding: No exceptions were noted as a result of our procedures.

2. For the accompanying Appropriations Limit Calculation, we added Line A, last year's limit, to Line E, total adjustments, and compared the resulting amount to Line F, current year's limit.

Finding: No exceptions were noted as a result of our procedures.

3. We compared the current year information presented in the accompanying Appropriations Limit Calculation to the appropriate supporting calculations described in item 1 above.

Finding: No exceptions were noted as a result of our procedures.

4. We compared the prior year Appropriations Limit presented in the accompanying Appropriations Limit Calculation to the prior year Appropriations Limit adopted by the Board of Directors for the prior year.

Finding: No exceptions were noted as a result of our procedures.

This agreed-upon procedures engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. We were not engaged to and did not conduct an examination or review, the objective of which would be the expression of an opinion or conclusion, respectively, on the accompanying Appropriations Limit Calculation of OCSD. Accordingly, we do not express such an opinion or conclusion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you. No procedures have been performed with respect to the determination of the appropriations limit for the base year, as defined by Article XIII-B of the California Constitution.

This report is intended solely for the information and use of the Board of Directors and management of OCSD, and is not intended to be, and should not be, used by anyone other than these specified parties. However, this report is a matter of public record and its distribution is not limited.

Macias Gini & O'Connell LLP

Newport Beach, California
October 25, 2019

ORANGE COUNTY SANITATION DISTRICT

Appropriations Limit Calculation

Year Ended June 30, 2019

	Amount	Source
A. Last year's limit	\$ 105,998,787	
B. Adjustment factors:		
1. Population change	1.00310000	State Finance
2. Per capita change	<u>1.03670000</u>	State Finance
Total adjustments [(B.1 x B.2)-1.0]	<u>0.03991377</u>	
C. Annual adjustment	<u>4,230,811</u>	(BxA)
D. Other adjustments:		
1. Lost responsibility (-)	-	
2. Transfer to private (-)	-	
3. Transfer to fees (-)	-	
4. Assumed responsibility (+)	<u>-</u>	
Subtotal	<u>-</u>	
E. Total adjustments	<u>4,230,811</u>	(C+D)
F. This year's limit	<u><u>\$ 110,229,598</u></u>	(A+E)

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



Orange County, California

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

COMPREHENSIVE ANNUAL FINANCIAL REPORT

FOR THE YEAR ENDED JUNE 30, 2019

Prepared By:
Administrative Services Department
Financial Management Division

Wally Ritchie
Controller

(THIS PAGE LEFT INTENTIONALLY BLANK)

ORANGE COUNTY SANITATION DISTRICT
 Comprehensive Annual Financial Report
 Table of Contents
 For the Year Ended June 30, 2019

	<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 – Current 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
Ratios of Outstanding Debt – Last Ten Fiscal Years	72
Comparison of the Volume of Wastewater Treated – Last Ten Fiscal Years	73
Authorized Full-time Equivalents by Function – Last Ten Fiscal Years	74
Biosolids Produced – Last Ten Fiscal Years.....	75
Capital Asset Statistics – Last Ten Fiscal Years.....	76
Demographic Statistics – Last Ten Fiscal Years.....	77
Estimated Population Served by Orange County Sanitation District	78
Principal Orange County Employers – Current Fiscal Year and Nine Years Ago.....	79
Operating Indicators	80
OTHER DATA & TRENDS:	
Cash and Investment Portfolio	82
Property Tax Rates – Direct and Overlapping Governments – Last Ten Fiscal Years.....	83
Assessed and Estimated Actual Value of Taxable Property – Last Ten Fiscal Years	84
Property Tax and User Fee Levies and Collections – Last Ten Fiscal Years.....	85
Property Value and Construction – Last Ten Fiscal Years	86
Insurance in Force.....	87

(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 25, 2019

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

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

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

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

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

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

GOVERNMENTAL STRUCTURE

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

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



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

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

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

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

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

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

ECONOMIC CONDITIONS AND OUTLOOK

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

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

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

MAJOR INITIATIVES

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

1. **Safety and Security**

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

2. **Succession Planning**

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

3. **Resource Recovery**

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

4. **Reliability**

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

5. Operational Optimization

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

Strategic Planning

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

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

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

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

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

SERVICE EFFORTS AND ACCOMPLISHMENTS

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

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

ACCOUNTING AND BUDGETARY CONTROLS

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

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

ACCUMULATED FUNDS AND RESERVES POLICY

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

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

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

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

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

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

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

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

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

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

Designated Cash and Investments

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

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

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

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

ACKNOWLEDGMENTS

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

Respectfully submitted,



Wally Ritchie
Controller



Government Finance Officers Association

Certificate of
Achievement
for Excellence
in Financial
Reporting

Presented to

**Orange County Sanitation District
California**

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

June 30, 2018

Christopher P. Morill

Executive Director/CEO

ORANGE COUNTY SANITATION DISTRICT

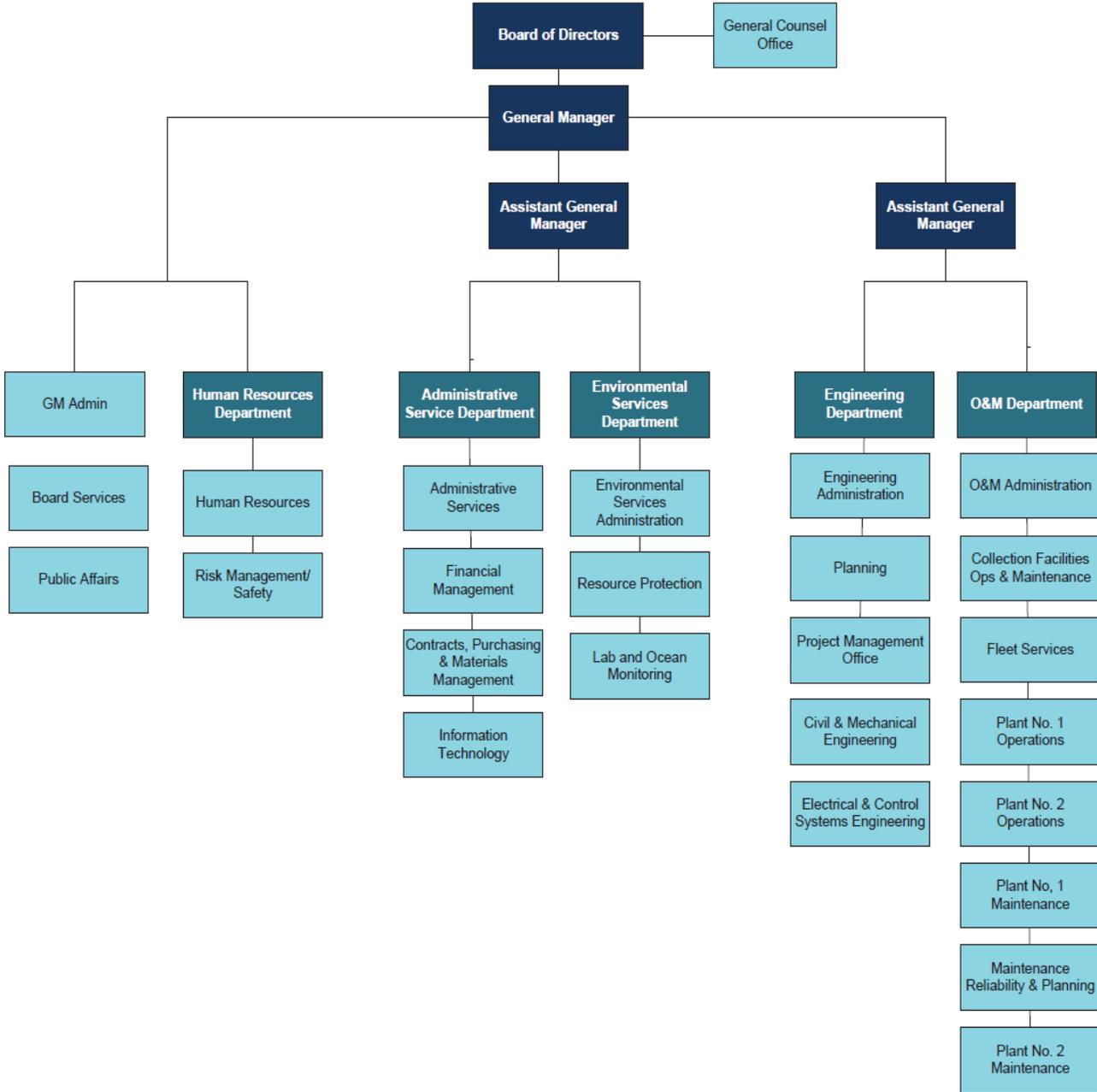
Board of Directors
As of June 30, 2019

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

ORANGE COUNTY SANITATION DISTRICT

Organizational Chart

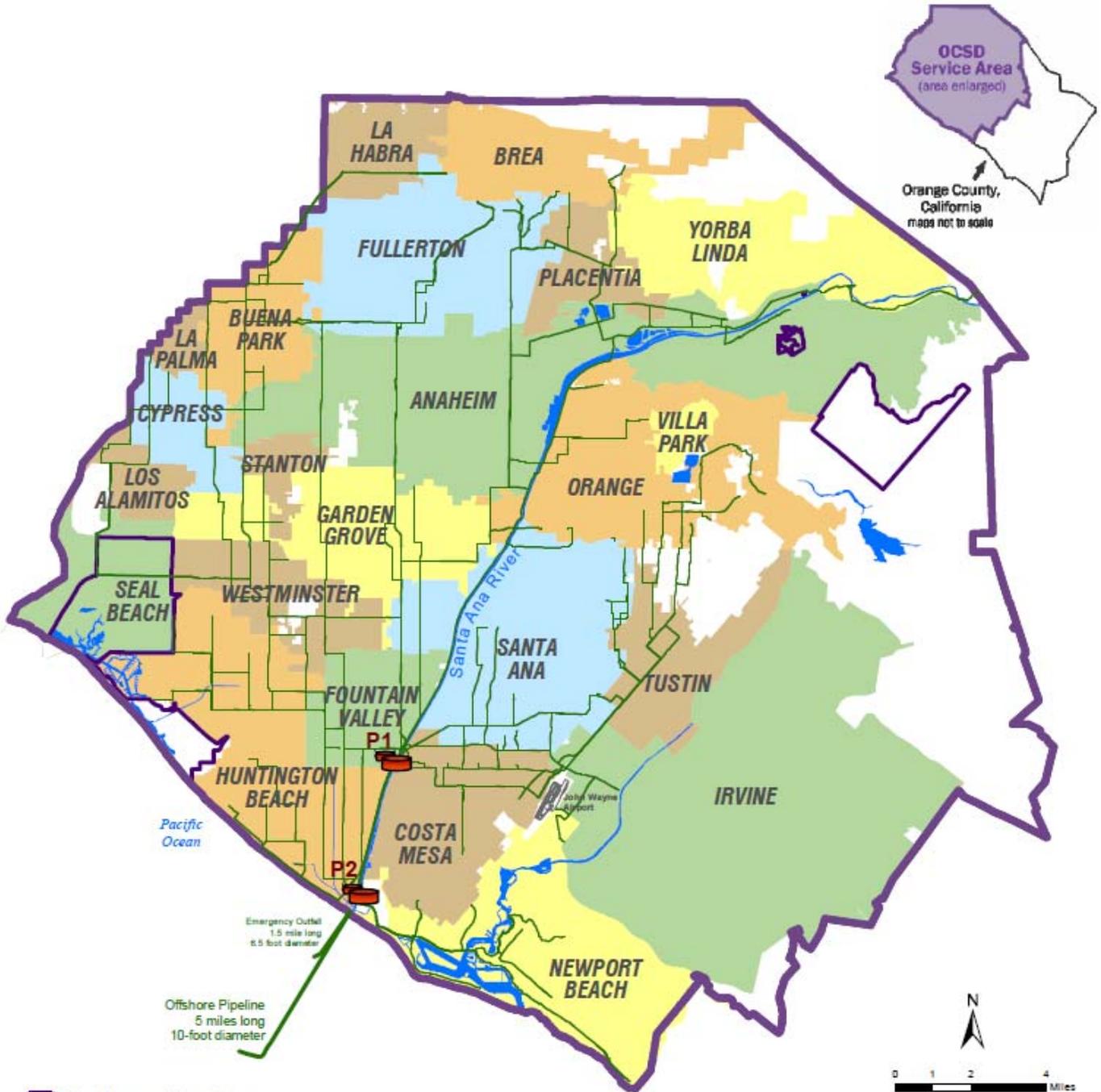
As of June 30, 2019



ORANGE COUNTY SANITATION DISTRICT

Map of Service Area

As of June 30, 2019



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



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

Revised August 2019

(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 (OCSD) as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise OCSD's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

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

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Orange County Sanitation District, as of June 30, 2019, and the changes in its financial position and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

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

Other Information

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

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

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

Macias Gini & O'Connell LLP

Newport Beach, California
October 25, 2019

Management Discussion and Analysis June 30, 2019

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

Financial Highlights

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

Overview of the Basic Financial Statements

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

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

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

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

Net Position

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

(Dollars in thousands)

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

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

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

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

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

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

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

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

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

Changes in Net Position

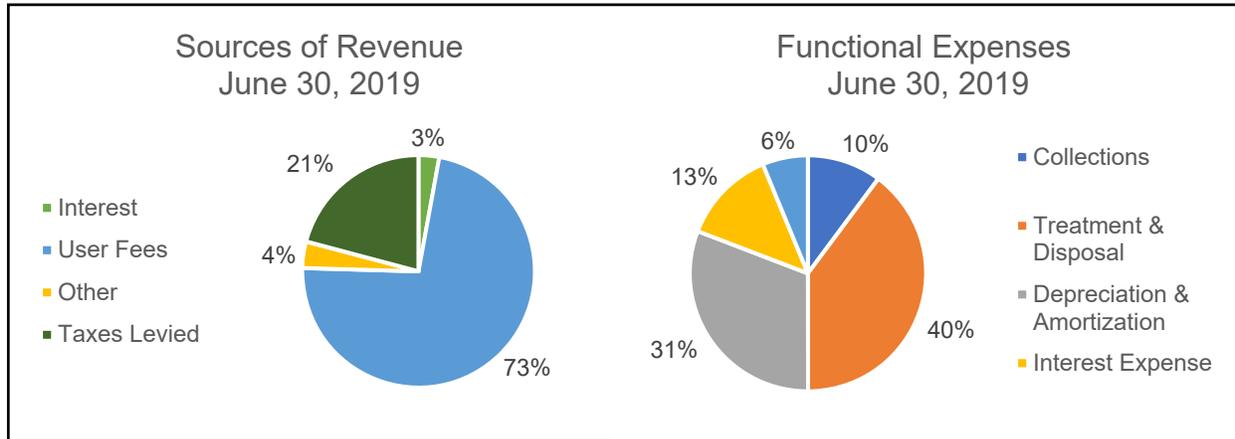
Net position increased \$4.6 million in FY 2018-19, or 2.8 percent over the prior year's increase in net position.

(Dollars in thousands)

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

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

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



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

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

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

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

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

Capital Assets

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

Schedule of Capital Assets (Net of Depreciation and Amortization)

(Dollars in thousands)

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

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

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

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

Debt Administration

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

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

Economic Factors and Next Year's Budgets and Rates

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

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

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

Requests for Information

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

(THIS PAGE LEFT INTENTIONALLY BLANK)

**ORANGE COUNTY SANITATION DISTRICT
BASIC FINANCIAL STATEMENTS**

ORANGE COUNTY SANITATION DISTRICT

Statement of Net Position

June 30, 2019

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

See Accompanying Notes to Basic Financial Statements.

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

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

See Accompanying Notes to Basic Financial Statements.

ORANGE COUNTY SANITATION DISTRICT

Statement of Cash Flows

For the Year Ended June 30, 2019

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

See Accompanying Notes to Basic Financial Statements.

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

(1) Summary of Significant Accounting Policies

Reporting Entity

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

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

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

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

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

ORANGE COUNTY SANITATION DISTRICT

Notes to Basic Financial Statements

For the Year Ended June 30, 2019

Measurement Focus and Basis of Accounting

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

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

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

Operating Plans

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

Cash and Cash Equivalents

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

Investments

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

Accounts Receivable

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

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

Inventories

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

Capital Assets

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

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

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

Restricted Assets

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

Amortization

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

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

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

Deferred Charges on Defeasances

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

Net Position

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

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

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

Compensated Absences

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

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

Claims and Judgments

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

ORANGE COUNTY SANITATION DISTRICT

Notes to Basic Financial Statements
For the Year Ended June 30, 2019

Pensions

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

Property Taxes

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

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

Capital Facilities Capacity Charges

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

Operating and Non-operating Revenues and Expenses

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

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

Self-Insurance Plans

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

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

Deferred Compensation Plan

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

New Accounting Pronouncements

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

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

(2) Cash and Investments

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

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

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

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

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

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

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

Investment Type - Authorized by the California Government Code	Authorized by OCSD's Investment Policy?	Maximum Maturity ⁽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, 2019

Investments Authorized by Debt Agreements

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

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

Disclosures Relating to Interest Rate Risk

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Generally, the longer an investment has before maturity, the greater the sensitivity of its fair value to changes in market interest rates. One of the ways that OCSD manages its exposure to interest rate risk is by purchasing a combination of shorter term and longer term investments and by timing cash flows from maturities so that a portion of the portfolio is maturing or coming close to maturity evenly over time, as necessary to provide the cash flow and liquidity needed for operations.

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

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

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

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

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

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

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

Investments with Fair Values Highly Sensitive to Interest Rate Fluctuations

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

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

Fair Value of Investments

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

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

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

At June 30, 2019, OCSD had the following fair value measurements for its managed investment portfolio:

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

* 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, 2019

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

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

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

Concentration of Credit Risk

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

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

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

Custodial Credit Risk

Custodial credit risk for deposits is the risk that in the event of the failure of a depository financial institution, a government will not be able to recover its deposits or will not be able to recover collateral securities that are in the possession of an outside party. The California Government Code and OCSD’s investment policy contain legal requirements that limit the exposure to custodial credit risk for deposits as follows: a financial institution must secure deposits made by state or local governmental units by pledging securities in an undivided collateral pool held by a depository regulated under state law (unless so waived by the governmental unit). The fair value of the pledged securities in the collateral pool must equal at least 110% of the total amount deposited by the public agencies. California law also allows financial institutions to secure deposits by pledging first trust deed mortgage notes having a value of 150% of the secured public deposits.

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

Investment in State Investment Pool

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

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

(3) Capital Assets

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

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

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

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

(4) Long-Term Liabilities

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

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

Compensated Absences

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

Claims and Judgments Payable

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

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

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

Certificates of Participation/ Revenue Obligations and Notes

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

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

Outstanding Certificates of Participation / Revenue Obligations and Notes

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

May 2010 Wastewater Revenue Obligations, Series 2010A

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

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

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

December 2010 Wastewater Revenue Obligations, Series 2010C

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

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

October 2011 Wastewater Refunding Revenue Obligations, Series 2011A

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

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

March 2012 Wastewater Refunding Revenue Obligations, Series 2012A

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

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

August 2012 Wastewater Refunding Revenue Obligations, Series 2012B

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

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

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

August 2014 Wastewater Refunding Revenue Obligations, Series 2014A

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

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

February 2015 Wastewater Refunding Revenue Obligations, Series 2015A

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

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

March 2016 Wastewater Refunding Revenue Obligations, Series 2016A

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

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

February 2017 Wastewater Refunding Revenue Obligations, Series 2017A

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

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

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

November 2018 Revenue Refunding Certificate Anticipation Notes, Series 2018A

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

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

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

Annual Amortization Requirements

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

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

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

(5) Pension Benefits

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

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

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

A. Orange County Employees' Retirement System (OCERS)

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

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

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

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

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

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

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

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

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

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

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

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

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

Contributions: Participating employers and active members are required by statute to contribute a percentage of covered salary to the Plan. CERL requires that the employer contribution rates for all public employers be determined on an annual basis by the actuary and be effective on the July 1 following notice of a change in rate. Funding contributions are determined annually on an actuarial basis as of December 31 by OCERS. The actuarially determined rate is the estimated amount necessary to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Detail for these changes is available in the Segal Actuarial Valuation for December 31, 2018, Section 3. This report is available on the OCERS website at www.ocers.org.

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

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

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

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

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

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

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

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

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

Further details of the experience study can be found in the OCERS CAFR, available on their website at www.ocers.org.

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, 2019

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

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

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

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

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

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

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 357 retirees. The ARBA plan is not subject to the reporting requirements of GASB 68 and 71 because a trust has not been set up for the plan. However, GASB 73 has been implemented for the ARBA plan in the fiscal year ended June 30, 2016. The plan is a funded on a pay-as-you-go plan from general funds and is administered by OCSD. Stand-alone financial statements are not issued for the plan.

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

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

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

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

No cost of living adjustment is provided to benefit recipients.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(6) Other Postemployment Benefits (OPEB)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Annual Transactions

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

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

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

Annual Cash Reserve Requirement

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

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

(8) Commitments and Contingencies

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

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

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

(9) Local Sewer Facilities Transfer

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

**ORANGE COUNTY SANITATION DISTRICT
REQUIRED SUPPLEMENTARY INFORMATION**

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

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

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

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

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

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

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

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

ORANGE COUNTY SANITATION DISTRICT

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

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

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

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

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

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

ORANGE COUNTY SANITATION DISTRICT

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

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

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

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

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

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

(THIS PAGE INTENTIONALLY LEFT BLANK)

**ORANGE COUNTY SANITATION DISTRICT
SUPPLEMENTARY INFORMATION**

ORANGE COUNTY SANITATION DISTRICT

Combining Area Schedule of Net Position

June 30, 2019

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

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

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

ORANGE COUNTY SANITATION DISTRICT

Combining Area Schedule of Cash Flows

For the Year Ended June 30, 2019

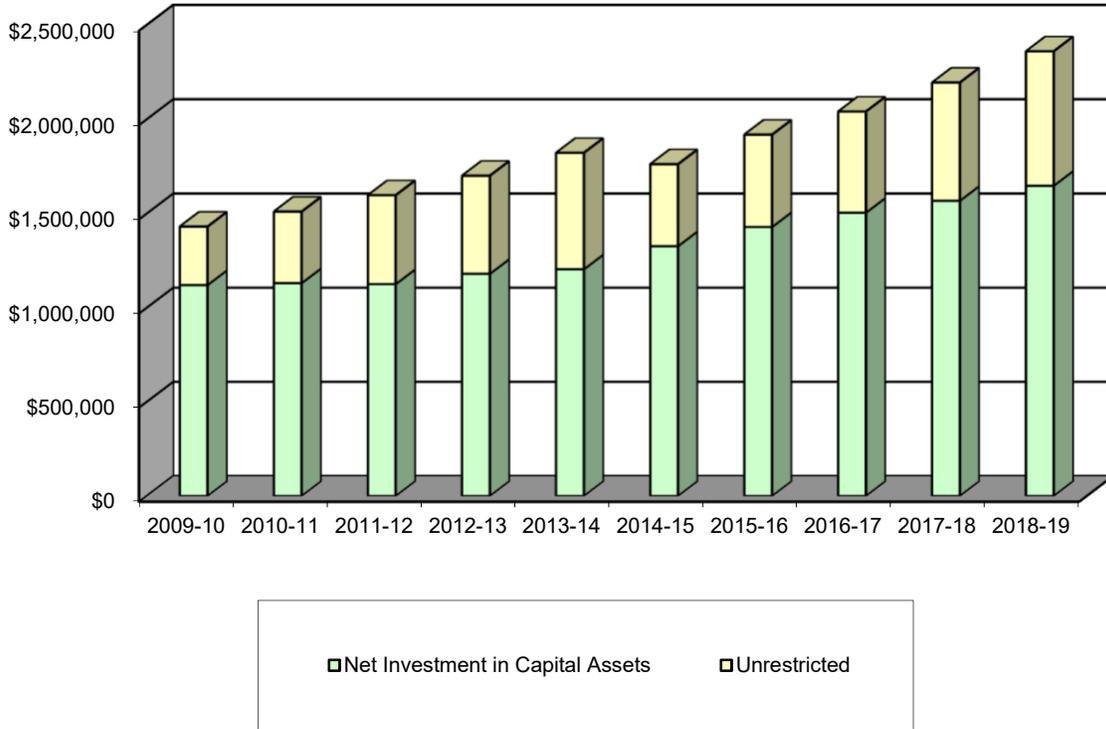
	Revenue Area No. 14	Consolidated Revenue Area	Eliminations	Totals
Cash flows from operating activities:				
Receipts from (refunds to) customers and users	\$ (9,562,055)	\$ 308,306,154	\$ -	\$ 298,744,099
Payments to employees	(2,806,581)	(75,291,515)	-	(78,098,096)
Payments to suppliers	(10,145,544)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

**ORANGE COUNTY SANITATION DISTRICT
STATISTICAL SECTION**

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

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

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



<u>Fiscal Year</u>	<u>Net Investment in Capital Assets</u>	<u>Unrestricted</u>	<u>Total Net Position</u>
2009-10	\$1,121,057	\$ 310,016	\$ 1,431,073
2010-11	1,131,063	379,423	1,510,486
2011-12	1,125,966	471,652	1,597,618 ⁽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⁾
2018-19	1,647,723	712,779	2,360,502

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

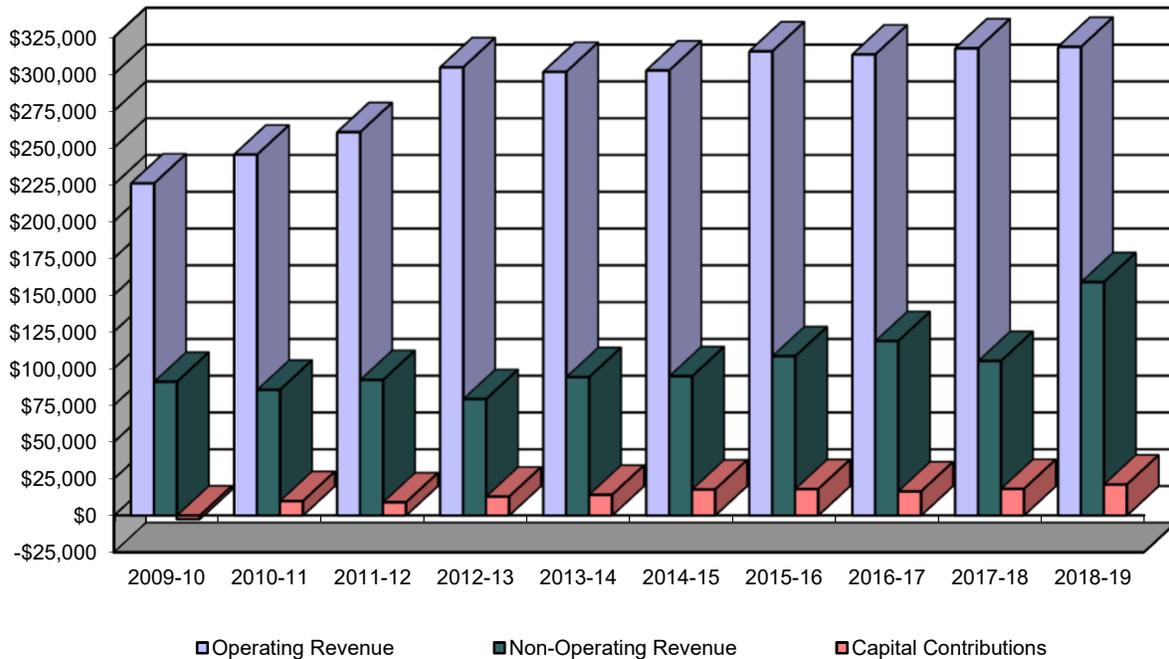
⁽²⁾ Beginning net position restated due to implementation of GASB 68.

⁽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

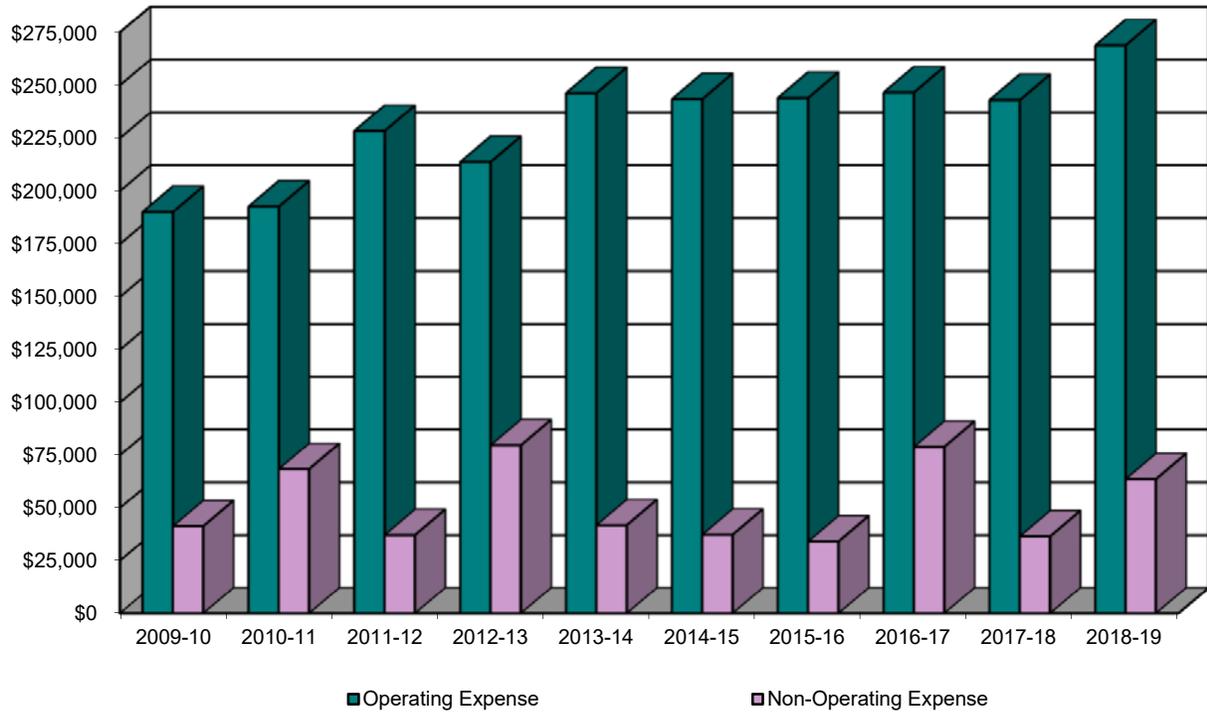


Fiscal Year	Operating Revenue			Non-Operating Revenue			Total Non-Operating	Capital Contributions
	Service Charges	Permit & Inspection Fees	Total Operating	Property Taxes	Interest	Other		
2009-10	\$ 225,059	\$ 629	\$ 225,688	\$ 64,759	\$ 19,166	\$ 6,939	\$ 90,864	(\$2,406)
2010-11	244,465	784	245,249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

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

ORANGE COUNTY SANITATION DISTRICT

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

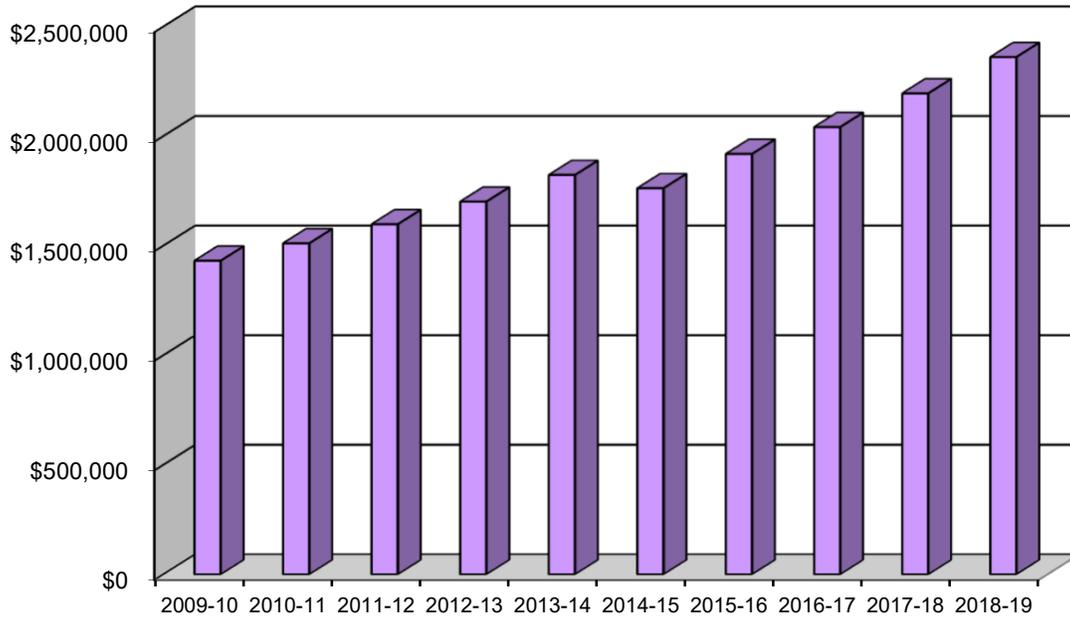


Fiscal Year	Operating Expense				Non - Operating Expense			
	Salaries & Benefits	Utilities	Maint & Other	Depr & Amort	Total Operating	Interest Expense	Other	Total Non-Operating
2009-10	\$ 69,652	\$ 6,934	\$ 61,499	\$ 52,036	\$ 190,121	\$ 27,537	\$ 13,736	\$ 41,273
2010-11	73,112	6,948	63,328	49,288	192,676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

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

ORANGE COUNTY SANITATION DISTRICT

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



Ending Net Position by Fiscal Year

Fiscal Year	Total Revenues	Total Expenses	Change in Net Position	Beginning Net Position	Ending Net Position
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
2018-19	498,120	332,407	165,713	2,194,789	2,360,502

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

Notes:

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

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

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

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

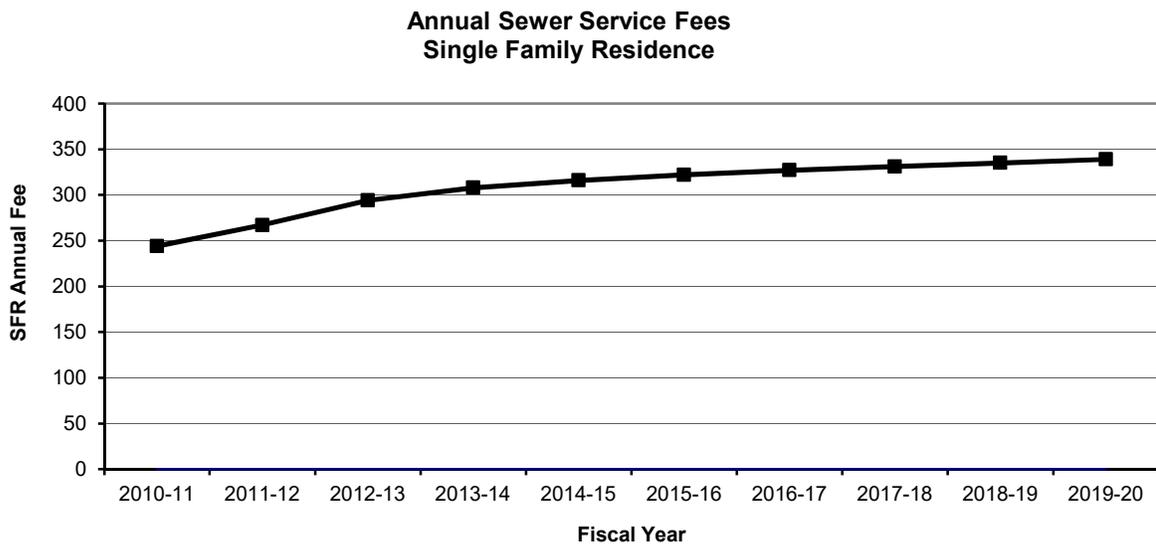
The Debt Service Required Reserves are monies held and controlled by a trustee pursuant to the provisions of certificates of participation issues, and the monies are not available for the general needs of the District.

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

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

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

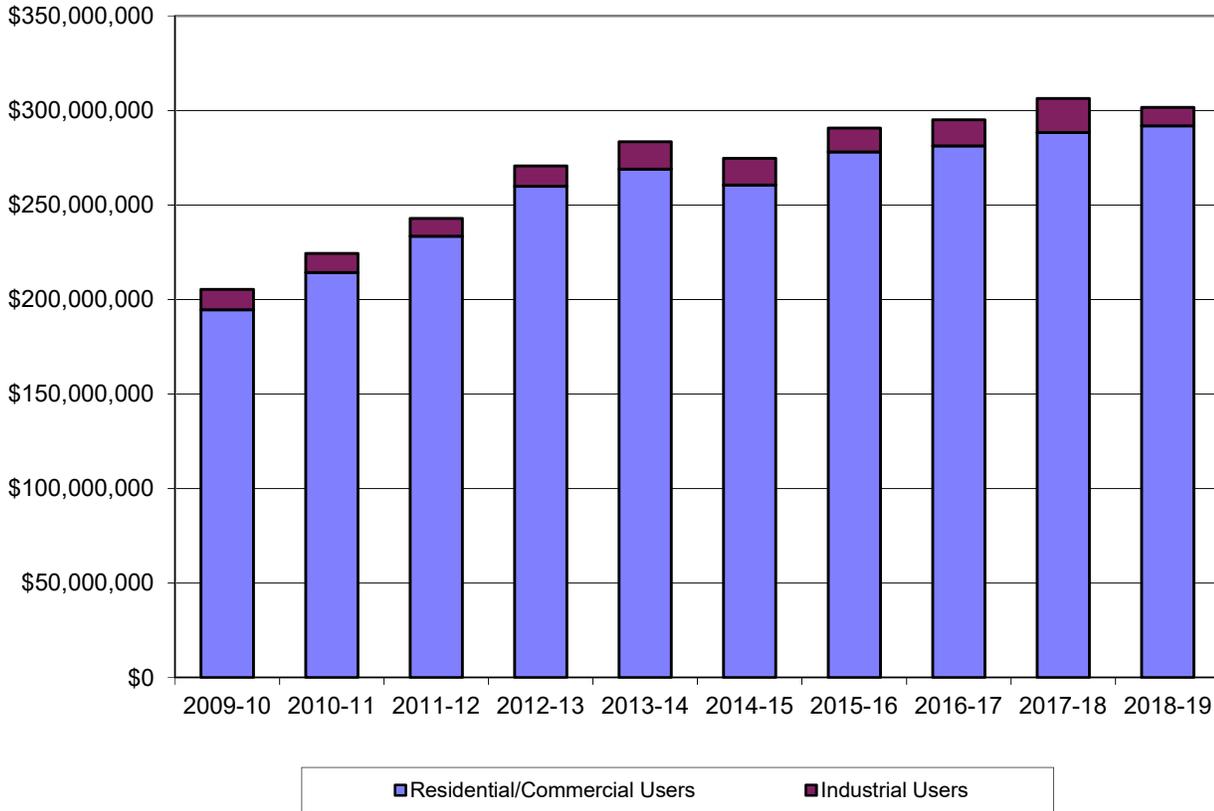
<u>Fiscal Year</u>	<u>Sewer Service Charge</u>
2010-11	\$ 244.00
2011-12	267.00
2012-13	294.00
2013-14	308.00
2014-15	316.00
2015-16	322.00
2016-17	327.00
2017-18	331.00
2018-19	335.00
2019-20	339.00



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

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

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



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

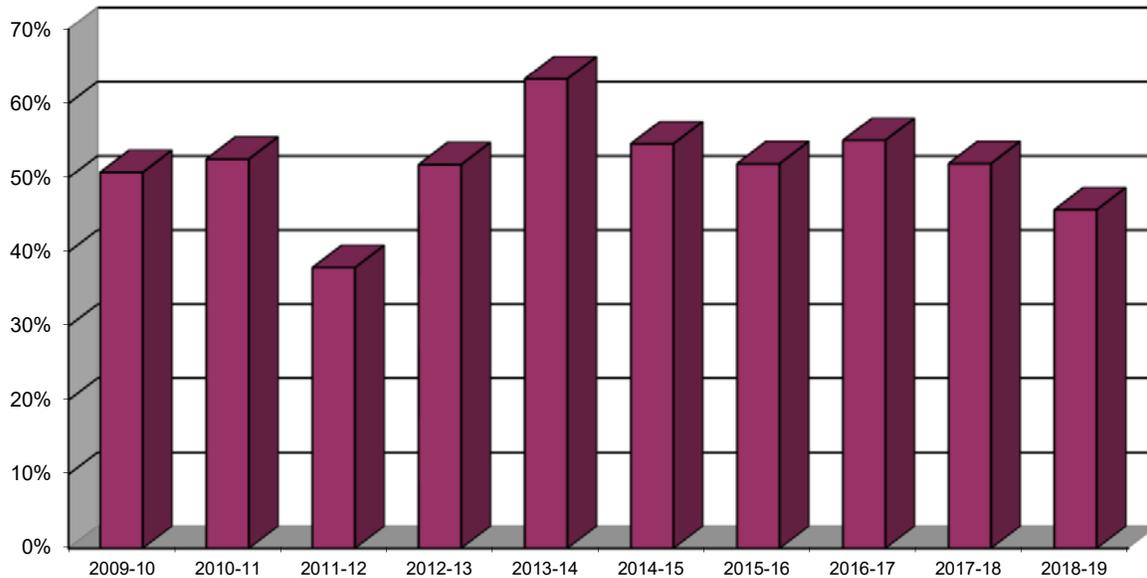
ORANGE COUNTY SANITATION DISTRICT
Principal Sewer Service Customers
For the Current Fiscal Year and Nine Years Ago

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

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

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

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



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

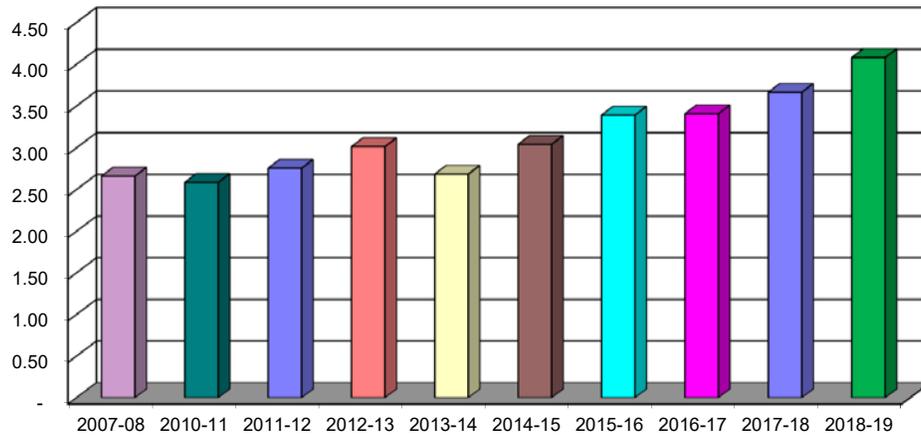
Notes

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

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

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

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



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

Notes

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

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

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

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

Notes & Data Sources

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

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

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

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

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

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

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

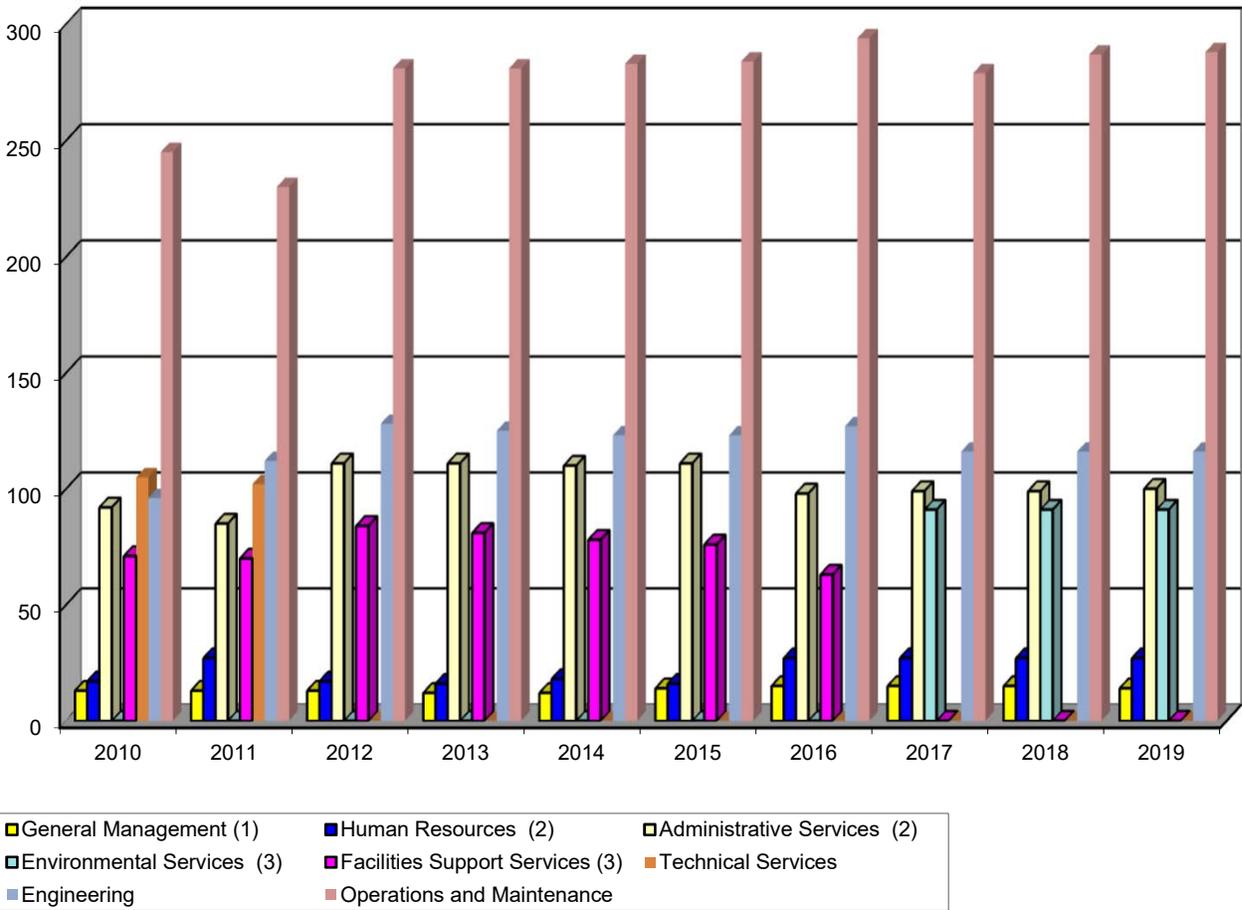
Total expenses in FY 2018-19 increased \$101 million, or 43.7 percent since FY 2009-10, primarily as a result of expansion of the Capital Improvement Program (CIP) and increase in operational services levels with OCSD's decision beginning in FY 2002-03 to maximize existing secondary treatment facilities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

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

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

Source: Orange County Sanitation District.

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



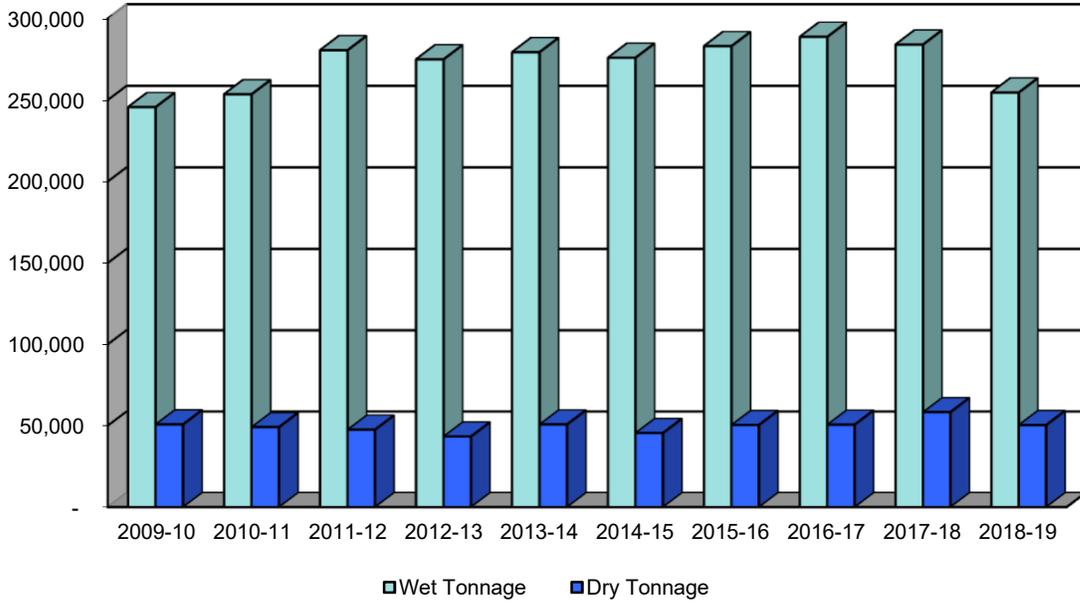
	Fiscal Year Ending June 30,									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
General Management (1)	13	13	13	12	12	14	15	15	15	14
Human Resources (2)	17	27	17	16	18	16	27	27	27	27
Administrative Services (2)	92	85	111	111	110	111	98	99	99	100
Environmental Services (3)	-	-	-	-	-	-	-	91	91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

Notes

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

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

ORANGE COUNTY SANITATION DISTRICT
 Biosolids Produced
 Last Ten Fiscal Years



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

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

ORANGE COUNTY SANITATION DISTRICT

Capital Asset Statistics

Last Ten Fiscal Years

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

Notes

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

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

Source: Orange County Sanitation District

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

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

Notes and Data Sources

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

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

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

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

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

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

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

(8) - Forecasted number.

ORANGE COUNTY SANITATION DISTRICT

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

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

Data Sources:

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

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

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

Notes & Data Sources

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

ORANGE COUNTY SANITATION DISTRICT

Operating Indicators

June 30, 2019

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

Consolidated Revenue Area

County of Orange (unincorporated areas)

Cities:

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

Special Districts:

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

Revenue Area No. 14

County of Orange (unincorporated areas)

Cities:

- Irvine
- Orange
- Tustin

Special District:

- Irvine Ranch Water District

Governing Body:	25-member Board of Directors
Authorized Full-Time Equivalent Employees:	636
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):	389 miles
Number of Pumping Stations:	17

Wastewater System Treatment Capacities (Million Gallons per Day)

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

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

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

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

ORANGE COUNTY SANITATION DISTRICT

Cash and Investment Portfolio

As of June 30, 2019

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

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

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

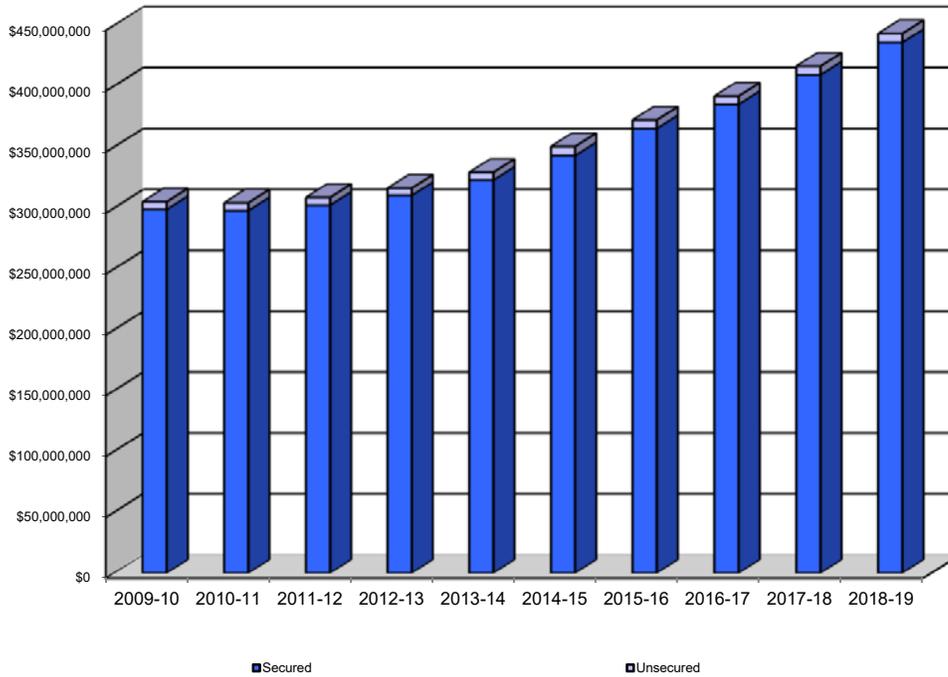
Fiscal Year	Tax Rate			OCSD's Average Share of Basic Levy
	Basic Levy	OCSD 1958 General Obligation Bonds	Total Tax Rate	
2009-10	1.00%	0.00%	1.00%	1.63%
2010-11	1.00%	0.00%	1.00%	1.64%
2011-12	1.00%	0.00%	1.00%	1.64%
2012-13	1.00%	0.00%	1.00%	1.64%
2013-14	1.00%	0.00%	1.00%	1.65%
2014-15	1.00%	0.00%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

Notes

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

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

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

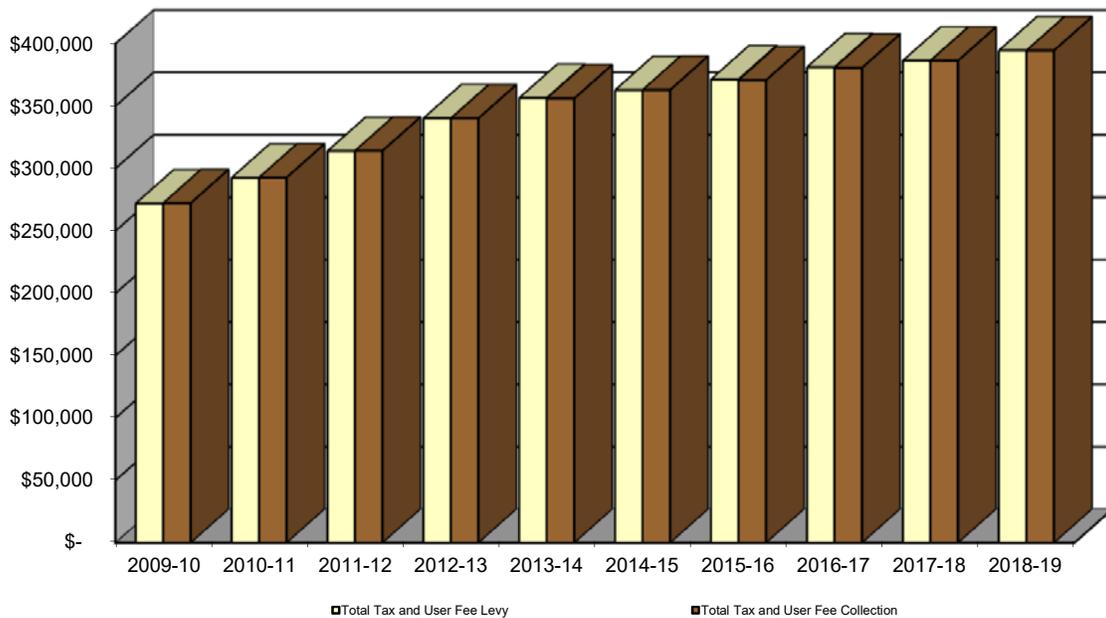


Fiscal Year	Secured	Unsecured	Total	Percent Change in Assessed Value
2009-10	\$ 299,038,654	\$ 6,116,530	\$ 305,155,184	5.08%
2010-11	298,099,034	6,238,834	304,337,868	-0.27%
2011-12	302,526,970	6,163,979	308,690,949	1.43%
2012-13	310,451,986	5,901,040	316,353,026	2.48%
2013-14	323,064,994	6,220,505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

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

Source: Orange County Auditor - Controller's Office.

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



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

Notes

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

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

Source: Orange County Auditor - Controller's Office.

ORANGE COUNTY SANITATION DISTRICT

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

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

Notes and Data Sources

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

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

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

(4) - Forecasted numbers.

ORANGE COUNTY SANITATION DISTRICT

Insurance in Force
As of June 30, 2019

<u>Type</u>	<u>Insurer</u>	<u>Deductible</u>	<u>Limit</u>
<u>All-Risk Property</u>			
Fire and Other Perils	Public Entity Property Insurance Program (multiple insurers)	\$500,000 per occurrence	\$1 billion/occurrence
Flood	Public Entity Property Insurance Program	\$2500,000 per occurrence	\$300 million/occurrence
Earthquake (certain structures only)	Two insurers	5% per structure, min. \$5,000,000	\$25 million
<u>Boiler & Machinery</u>			
	Public Entity Property Insurance Program (multiple insurers)	\$25,000 to \$350,000	\$100 million/occurrence
<u>Crime Insurance</u>			
	National Union Fire	\$25,000	\$5 million
<u>Cyber Insurance</u>			
	Lloyd's of London (Beazley)	\$100,000	\$2 million
<u>Excess General Liability</u>			
	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
<u>Travel & Accident</u>			
	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.
<u>Excess Workers' Compensation</u>			
	CSAC Excess Insurance Authority Program	\$1,000,000 Each Accident	Unlimited statutory coverage each accident, each employee \$4 million employer's liability
<u>Pollution Liability</u>			
	CSAC Excess Insurance Authority Program	\$75,000	\$10,000,000 per loss
<u>Watercraft Liability</u>			
	Atlantic Specialty	\$2,500 BI / \$10,000 All other	\$10 million
Hull & Machinery	Atlantic Specialty	\$10,000	\$600,000
Pollution Liability	Great American Ins. Co,	None	\$5 million

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

(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

06/30/19

ORANGE COUNTY SANITATION DISTRICT

Single Audit Reports

For the Year Ended June 30, 2019



Certified
Public
Accountants

ORANGE COUNTY SANITATION DISTRICT

Single Audit Reports

For the Year Ended June 30, 2019

Table of Contents

	<i>Page</i>
Independent Auditor's Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with <i>Government Auditing Standards</i>	1
Independent Auditor's Report on Compliance for the Major Federal Program; Report on Internal Control Over Compliance; and Report on Schedule of Expenditures of Federal Awards Required by the Uniform Guidance	3
Schedule of Expenditures of Federal Awards	6
Notes to the Schedule of Expenditures of Federal Awards	7
Schedule of Findings and Questioned Costs	8



**Independent Auditor's Report on Internal Control Over Financial Reporting and on
Compliance and Other Matters Based on an Audit of Financial Statements
Performed in Accordance With *Government Auditing Standards***

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

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Orange County Sanitation District (OCSD), as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise OCSD's basic financial statements, and have issued our report thereon dated October 25, 2019.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered OCSD's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of OCSD's internal control. Accordingly, we do not express an opinion on the effectiveness of OCSD's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of OCSD's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether OCSD's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of OCSD's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering OCSD's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Macias Gini & O'Connell LLP

Newport Beach, California
October 25, 2019



**Independent Auditor's Report on Compliance for the Major Federal Program;
Report on Internal Control Over Compliance; and Report on Schedule of
Expenditures of Federal Awards Required by the Uniform Guidance**

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

Report on Compliance for the Major Federal Program

We have audited the Orange County Sanitation District's (OCSD) compliance with the types of compliance requirements described in the *OMB Compliance Supplement* that could have a direct and material effect on OCSD's major federal program for the year ended June 30, 2019. OCSD's major federal program is identified in the summary of auditor's results section of the accompanying schedule of findings and questioned costs.

Management's Responsibility

Management is responsible for compliance with federal statutes, regulations, and the terms and conditions of its federal awards applicable to its federal programs.

Auditor's Responsibility

Our responsibility is to express an opinion on compliance for OCSD's major federal program based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the audit requirements of Title 2 U.S. *Code of Federal Regulations* Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Those standards and the Uniform Guidance require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about OCSD's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for the major federal program. However, our audit does not provide a legal determination of OCSD's compliance.

Opinion on the Major Federal Program

In our opinion, OCSD complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on its major federal program for the year ended June 30, 2019.

Report on Internal Control Over Compliance

Management of OCSD is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered OCSD's internal control over compliance with the types of requirements that could have a direct and material effect on the major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for the major federal program and to test and report on internal control over compliance in accordance with the Uniform Guidance, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of OCSD's internal control over compliance.

A deficiency in internal control over compliance exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. *A material weakness in internal control over compliance* is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. *A significant deficiency in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Accordingly, this report is not suitable for any other purpose.

Report on Schedule of Expenditures of Federal Awards Required by the Uniform Guidance

We have audited the financial statements of OCSD as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise OCSD's basic financial statements. We issued our report thereon dated October 25, 2019, which contained an unmodified opinion on those financial statements. Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the basic financial statements. The accompanying schedule of expenditures of federal awards is presented for purposes of additional analysis as required by the Uniform Guidance and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements.

The 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 schedule of expenditures of federal awards is fairly stated in all material respects in relation to the basic financial statements as a whole.

Macias Gini & O'Connell LLP

Newport Beach, California
October 25, 2019

ORANGE COUNTY SANITATION DISTRICT
Notes to the Schedule of Expenditures of Federal Awards
For the Year Ended June 30, 2019

(1) BASIS OF PRESENTATION

The accompanying Schedule of Expenditures of Federal Awards (the Schedule) includes the federal award activity of the Orange County Sanitation District (OCSD), under programs of the federal government for the year ended June 30, 2019. The information in this Schedule is presented in accordance with the requirements of Title 2 U.S. *Code of Federal Regulations* Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Because the Schedule presents only a selected portion of the operations of OCSD, it is not intended to and does not present the financial position, changes in financial position or cash flows of OCSD.

(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Expenditures reported on the Schedule are reported on the accrual basis of accounting. Such expenditures are recognized following the cost principles contained in the Uniform Guidance, wherein certain types of expenditures are not allowable or are limited as to reimbursement. Under the accrual basis of accounting expenditures are recognized when incurred, regardless of the timing of cash flows.

(3) PASS-THROUGH AMOUNTS TO SUB-RECIPIENTS

OCSD did not pass through any federal awards to subrecipients during the year ended June 30, 2019.

(4) INDIRECT COST RATES

OCSD has elected not to use the 10 percent de minimis indirect cost rate allowed under the Uniform Guidance. There were no indirect costs charged to any of OCSD's Federal programs during the year ended June 30, 2019.

ORANGE COUNTY SANITATION DISTRICT
 Schedule of Findings and Questioned Costs
 For the Year Ended June 30, 2019

Section I - Summary of Auditor's Results

Financial Statements:

Type of report the auditor issued on whether the financial statements were prepared in accordance with GAAP:	Unmodified
Internal control over financial reporting:	
• Material weakness(es) identified?	No
• Significant deficiency(ies) identified?	None reported
Noncompliance material to financial statements noted?	No

Federal Awards:

Internal control over major federal programs:	
• Material weakness(es) identified?	No
• Significant deficiency(ies) identified?	No
Type of auditor's report issued on compliance for the major federal program:	Unmodified
Any audit findings disclosed that are required to be reported in accordance with 2 CFR 200.516(a)?	No

Identification of major federal program:

CFDA Number	Name of Federal Program
15.504	Title XVI Water Reclamation and Reuse Program

Dollar threshold used to distinguish between Type A and Type B programs:	\$750,000
--	-----------

Auditee qualified as a low-risk auditee?	No
--	----

ORANGE COUNTY SANITATION DISTRICT
Schedule of Findings and Questioned Costs (Continued)
For the Year Ended June 30, 2019

Section II - Financial Statement Findings

A. Internal Control Matters

None reported.

B. Compliance Findings

None reported.

Section III – Federal Award Findings and Questioned Costs

A. Internal Control Matters

None reported.

B. Compliance Findings

None reported.



Orange County Sanitation District

ADMINISTRATION COMMITTEE

Administration Building
10844 Ellis Avenue
Fountain Valley, CA 92708
(714) 593-7433

Agenda Report

File #: 2019-708

Agenda Date: 11/13/2019

Agenda Item No: 8.

FROM: James D. Herberg, General Manager
Originator: Lorenzo Tyner, Assistant General Manager

SUBJECT:

PROFESSIONAL RISK MANAGEMENT CONSULTANT AGREEMENT

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION:

Approve a sole source Professional Consultant Services Agreement with John J. Preston, Specification No. SSJ 2174, to perform professional risk management consulting services for the Orange County Sanitation District, which includes overseeing property and general liability loss control and setting loss control requirements on public bids and contracts, risk transfer, loss prevention, and risk reduction in an amount not to exceed \$150,000 per year, for a term of one year beginning December 1, 2019 - November 30, 2020; with a one-year renewal option.

BACKGROUND

The Orange County Sanitation District (Sanitation District) entered into an agreement with Keenan and Associates (Keenan) in August 2019 to provide risk management consulting services through December 31, 2019. The Sanitation District has an existing relationship with John J. Preston through Keenan providing risk management consulting services. Entering into a separate agreement with John J. Preston will provide a cost savings compared to the contract with Keenan and allow the Sanitation District to have greater direction and control of the services provided. Mr. Preston is familiar with the Sanitation District, has exhibited a clear understanding of Sanitation District processes, and is well-versed in Sanitation District operations. It would be in the best interest of the Sanitation District to retain John J. Preston's services for immediate risk management consulting needs to ensure business continuity while giving the Sanitation District the opportunity to evaluate the program and its management. Staff previously contacted risk management firms including Bickmore Risk Management Consulting (Bickmore) and Marsh Risk Consulting (Marsh) to inquire about their risk management services; however, Bickmore was unresponsive and Marsh does not provide the requested services.

RELEVANT STANDARDS

- Commitment to safety & reducing risk in all operations

PROBLEM

The agreement with Keenan ends on December 31, 2019. The Sanitation District will be without professional risk management personnel during the evaluation of the program and its management as of this date. This scenario will expose the Sanitation District to greater risk and potential liability.

PROPOSED SOLUTION

Approve a sole source Professional Consultant Services Agreement with John J. Preston in accordance with Purchasing Ordinance No. OCSD-52, Section 107 A (Sole Source Procurement).

TIMING CONCERNS

The existing agreement ends on December 31, 2019.

RAMIFICATIONS OF NOT TAKING ACTION

Potentially exposing the Sanitation District to risk and liability.

FINANCIAL CONSIDERATIONS

It is estimated that the cost for professional risk management consulting services will not exceed \$150,000. This request complies with authority levels of the Sanitation District's Purchasing Ordinance. Funding for this agreement is available from an open budgeted risk management position. This position is currently vacant following the retirement of a long-term employee and attempts to find a permanent replacement.

ATTACHMENT

The following attachment(s) are included in hard copy and may also be viewed on-line at the OCSD website (www.ocsd.com) with the complete agenda package:

- Professional Consultant Services Agreement

**PROFESSIONAL CONSULTANT SERVICES AGREEMENT
RISK MANAGEMENT LOSS CONTROL SERVICES AGREEMENT
Specification No. SSJ 2174**

THIS AGREEMENT is made and entered into as of the date fully executed below, by and between Orange County Sanitation District, with a principal place of business at 10844 Ellis Avenue, Fountain Valley, CA 92708 (hereinafter referred to as "OCSD") and **John J. Preston** with a principal place of business at **166 Fox Ln, Calimesa, CA 92320** (hereinafter referred to as "Consultant") collectively referred to as the "Parties".

WITNESSETH

WHEREAS, based on Consultant's expertise and experience, OCSD desires to temporarily engage Consultant to provide **Risk Management Consulting Services** "Services" as described in Exhibit "B"; and

WHEREAS, Consultant submitted its Proposal, and

WHEREAS, on **November 13, 2019**, the **Administration Committee** of OCSD, by minute order, authorized execution of this Agreement between OCSD and Consultant; and

WHEREAS, OCSD has chosen Consultant to conduct Services in accordance with Ordinance No. OCSD-52; and

NOW, THEREFORE, in consideration of the mutual promises and mutual benefits exchanged between the Parties, the Parties mutually agree as follows:

1. Introduction

1.1 This Agreement and all exhibits hereto (called the "Agreement") is made by OCSD and the Consultant. The terms and conditions herein exclusively govern the purchase of Services as described in Exhibit "B".

1.2 Exhibits to this Agreement are incorporated by reference and made a part of this Agreement as though fully set forth at length herein.

Exhibit "A" NOT USED
Exhibit "B" Proposal
Exhibit "C" Acknowledgement of Insurance Requirements
Exhibit "D" OCSD Safety Standards
Exhibit "E" Human Resources Policies
Exhibit "F" NOT USED

1.3 In the event of any conflict or inconsistency between the provisions of this Agreement and any of the provisions of the exhibits hereto, the provisions of this Agreement shall in all respects govern and control.

1.4 This Agreement may not be modified, changed, or supplemented, nor may any obligations hereunder be waived or extensions of time for performance granted, except by written instrument signed by both Parties.

1.5 The various headings in this Agreement are inserted for convenience only and shall not affect the meaning or interpretation of this Agreement or any section or provision hereof.

- 1.6 The term “days”, when used in the Agreement, shall mean calendar days, unless otherwise noted as workdays.
- 1.7 The term “workday”. Workdays are defined as all days that are not Saturday, Sunday, or OCSD observed holidays. Meetings with OCSD staff shall be scheduled from Monday through Thursday between the hours of 8 a.m. and 4 p.m. (exception is Operations staff who maintain plant operations 24/7 and work a rotated 12-hour shift) and shall conform to OCSD work schedules. OCSD review periods shall not include OCSD observed holidays.
- 1.8 OCSD holidays (non-working days) are as follows: New Year’s Day, Lincoln’s Birthday, Presidents’ Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, Day after Thanksgiving, Christmas Eve, and Christmas Day.
- 1.9 Work Hours: All work shall be scheduled Monday through Friday, between the hours of 7:30 a.m. and 5:30 p.m. OCSD will not pay for travel time.
- 1.10 Consultant shall provide OCSD with all required premiums and/or overtime work at no charge beyond the total amount of the Agreement.
- 1.11 Except as expressly provided otherwise, OCSD accepts no liability for any expenses, losses, or action incurred or undertaken by Consultant as a result of work performed in anticipation of purchases of said services by OCSD.
2. **Scope of Work** - Subject to the terms of this Agreement, Consultant shall perform the Services identified in Exhibit “B”. Consultant warrants that all of its Services shall be performed in a competent, professional, and satisfactory manner.
3. **Modifications to Scope of Work** Requests for modifications to the Scope of Work hereunder can be made by OCSD at any time. All modifications must be made in writing and signed by both Parties. A review of the time required for the modification will be made by OCSD and Consultant and the Agreement period adjusted accordingly.
4. **Compensation** Compensation to be paid by OCSD to Consultant for the Services provided under this Agreement shall be a total amount not to exceed **One Hundred Fifty Thousand Dollars (\$150,000.00)**.
5. **California Department of Industrial Relations (DIR) Registration and Record of Wages**
 - 5.1 To the extent Consultant’s employees and/or subconsultants who will perform work for which Prevailing Wage Determinations have been issued by the DIR and as more specifically defined under Labor Code Section 1720 et seq, Consultant and subconsultants shall comply with the registration requirements of Labor Code Section 1725.5. Pursuant to Labor Code Section 1771.4, the work is subject to compliance monitoring and enforcement by the DIR.
 - 5.2 The Consultant and subconsultants shall maintain accurate payroll records and shall comply with all the provisions of Labor Code Section 1776, and shall submit payroll records to the Labor Commissioner pursuant to Labor Code 1771.4(a)(3). Penalties for non-compliance with the requirements of Section 1776 may be deducted from progress payments per Section 1776.
 - 5.3 Pursuant to Labor Code Section 1776, the Consultant and subconsultants shall furnish a copy of all certified payroll records to OCSD and/or general public upon request, provided

the public request is made through OCSD, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement of the Department of Industrial Relations.

- 5.4 The Consultant and subconsultants shall comply with the job site notices posting requirements established by the Labor Commissioner per Title 8, California Code of Regulation Section 16461(e).

6. Payment and Invoicing

- 6.1 OCSD shall pay, net thirty (30) days, upon receipt and approval, by OCSD's Project Manager or designee, of itemized invoices submitted monthly for Services rendered in accordance with Exhibit "B". OCSD, at its sole discretion, shall be the determining party as to whether the Services have been satisfactorily completed.

- 6.2 Invoices shall be emailed by Consultant to OCSD Accounts Payable at APStaff@OCSD.com and "INVOICE" with the Purchase Order Number shall be referenced in the subject line.

7. **Audit Rights** Consultant agrees that, during the term of this Agreement and for a period of three (3) years after its termination, OCSD shall have access to and the right to examine any directly pertinent books, documents, and records of Consultant relating to the invoices submitted by Consultant pursuant to this Agreement.

8. Commencement and Term

The Services provided under this Agreement shall be for the period of one (1) year commencing on **December 1, 2019** and continuing through **November 30, 2020**.

9. Renewals

- 9.1 OCSD may exercise the option to renew this Agreement for (1) one-year period based upon the criteria set forth in Exhibit "B", under the terms and conditions contained herein. OCSD shall make no obligation to renew nor give reason if it elects not to renew.

- 9.2 This Agreement may be renewed by OCSD Purchase Order.

10. **Extensions** The term of this Agreement may be extended only by written instrument signed by both Parties.

11. **Performance** Time is of the essence in the performance of the provisions hereof.

12. Termination

- 12.1 OCSD reserves the right to terminate this Agreement for its convenience, with or without cause, in whole or in part, at any time, by written notice from OCSD. Upon receipt of a termination notice, Consultant shall immediately discontinue all work under this Agreement (unless the notice directs otherwise). OCSD shall thereafter, within thirty (30) days, pay Consultant for work performed (cost and fee) to the date of termination. Consultant expressly waives any claim to receive anticipated profits to be earned during the uncompleted portion of this Agreement. Such notice of termination shall terminate this Agreement and release OCSD from any further fee, cost or claim hereunder by Consultant other than for work performed to the date of termination.

- 12.2 OCSD reserves the right to terminate this Agreement immediately upon OCSD's determination that Consultant is not complying with the Scope of Work requirements, if the level of service is inadequate, or any other default of this Agreement.

12.3 OCSD may also immediately terminate for default of this Agreement in whole or in part by written notice to Consultant:

- if Consultant becomes insolvent or files a petition under the Bankruptcy Act; or
- if Consultant sells its business; or
- if Consultant breaches any of the terms of this Agreement; or
- if total amount of compensation exceeds the amount authorized under this Agreement.

12.4 All OCSD property in the possession or control of Consultant shall be returned by Consultant to OCSD on demand, or at the termination of this Agreement, whichever occurs first.

13. Indemnification and Hold Harmless Provision Consultant shall assume all responsibility for damages to property and/or injuries to persons, including accidental death, which may arise out of or be caused by Consultant's services under this Agreement, or by its subconsultant(s) or by anyone directly or indirectly employed by Consultant, and whether such damage or injury shall accrue or be discovered before or after the termination of the Agreement. Except as to the sole active negligence of or willful misconduct of OCSD, Consultant shall indemnify, protect, defend and hold harmless OCSD, its elected and appointed officials, officers, agents and employees, from and against any and all claims, liabilities, damages or expenses of any nature, including attorneys' fees: (a) for injury to or death of any person or damage to property or interference with the use of property, arising out of or in connection with Consultant's performance under the Agreement, and/or (b) on account of use of any copyrighted or uncopyrighted material, composition, or process, or any patented or unpatented invention, article or appliance, furnished or used under the Agreement, and/or (c) on account of any goods and services provided under this Agreement. This indemnification provision shall apply to any acts or omissions, willful misconduct, or negligent misconduct, whether active or passive, on the part of Consultant or anyone employed by or working under Consultant. To the maximum extent permitted by law, Consultant's duty to defend shall apply whether or not such claims, allegations, lawsuits, or proceedings have merit or are meritless, or which involve claims or allegations that any of the parties to be defended were actively, passively, or concurrently negligent, or which otherwise assert that the parties to be defended are responsible, in whole or in part, for any loss, damage, or injury. Consultant agrees to provide this defense immediately upon written notice from OCSD, and with well qualified, adequately insured, and experienced legal counsel acceptable to OCSD. This section shall survive the expiration or early termination of the Agreement.

14. Insurance Consultant and all subconsultants shall purchase and maintain, throughout the life of this Agreement and any periods of warranty or extensions, insurance in amounts equal to the requirements set forth in the signed Acknowledgement of Insurance Requirements, Exhibit "C". Consultant shall not commence work under this Agreement until all required insurance is obtained in a form acceptable to OCSD, nor shall Consultant allow any subconsultant to commence service pursuant to a subcontract until all insurance required of the subconsultant has been obtained. Failure to maintain required insurance coverage shall result in termination of this Agreement.

15. Key Personnel Personnel, as provided in Exhibit "B", are considered "key" to the work under this Agreement and will be available for the term of the Agreement. No person designated as key under this Agreement shall be removed or replaced without prior written consent of OCSD. If OCSD asks Consultant to remove a person designated as key under this Agreement, Consultant agrees to do so immediately regardless of the reason, or the

lack of reason, for OCSD's request. Consultant shall assign only competent personnel to perform services pursuant to this Agreement.

16. Confidentiality and Non-Disclosure

16.1 Consultant acknowledges that in performing the Services hereunder, OCSD may have to disclose to Consultant orally and in writing certain confidential information that OCSD considers proprietary and has developed at great expense and effort.

16.2 Consultant agrees to maintain in confidence and not disclose to any person, firm, or corporation, without OCSD's prior written consent, any trade secret or confidential information, knowledge or data relating to the products, process, or operation of OCSD.

16.3 Consultant further agrees to maintain in confidence and not to disclose to any person, firm, or corporation any data, information, technology, or material developed or obtained by Consultant during the term of this Agreement.

16.4 Consultant agrees as follows:

- To use the confidential information only for the purposes described herein; to not reproduce the confidential information; to hold in confidence and protect the confidential information from dissemination to and use by anyone not a party to this Agreement; and to not use the confidential information to benefit itself or others.
- To restrict access to the confidential information to its Consultant or personnel of Consultant who (1) have a need to have such access and (2) have been advised of and have agreed in writing to treat such information in accordance with the terms of this Agreement.
- To return all confidential information in Consultant's possession upon termination of this Agreement or upon OCSD's request, whichever occurs first.
- To hold in confidence information and materials, if any, developed pursuant to the Services hereunder.

16.5 The provisions of this section shall survive termination or expiration of this Agreement and shall continue for so long as the material remains confidential.

17. Ownership of Documents All drawings, specifications, reports, records, documents, memoranda, correspondence, computations, and other materials prepared by Consultant, its employees, subconsultants, and agents in the performance of this Agreement shall be the property of OCSD and shall be promptly delivered to OCSD upon request of OCSD's Project Manager or designee, or upon the termination of this Agreement, and Consultant shall have no claim for further employment or additional compensation as a result of the exercise by OCSD of its full rights of ownership of the documents and materials hereunder. Any use of such completed documents for other projects and/or use of incomplete documents without specific written authorization by the Consultant will be at OCSD's sole risk and without liability to Consultant. Consultant shall ensure that all its subconsultants shall provide for assignment to OCSD of any documents or materials prepared by them.

18. Ownership of Intellectual Property

18.1 Consultant agrees that all designs, plans, reports, specifications, drawings, schematics, prototypes, models, inventions, and all other information and items made during the course of this Agreement and arising from the Services (hereinafter referred to as "New Developments") shall be and are assigned to OCSD as its sole and exclusive property.

18.2 Consultant agrees to promptly disclose to OCSD all such New Developments. Upon

OCSD's request, Consultant agrees to assist OCSD, at OCSD's expense, to obtain patents or copyrights for such New Developments, including the disclosure of all pertinent information and data with respect thereto, the execution of all applications, specifications, assignments, and all other instruments and papers which OCSD shall deem necessary to apply for and to assign or convey to OCSD, its successors and assigns, the sole and exclusive right, title and interest in such New Developments. Consultant agrees to obtain or has obtained written assurances from its employees and contract personnel of their agreement to the terms hereof with regard to New Developments and confidential information.

18.3 Consultant warrants that Consultant has good title to any New Developments, and the right to assign New Developments to OCSD free of any proprietary rights of any other party or any other encumbrance whatever.

18.4 The originals of all computations, drawings, designs, graphics, studies, reports, manuals, photographs, videotapes, data, computer files, and other documents prepared or caused to be prepared by Consultant or its subconsultants in connection with these Services shall be delivered to and shall become the exclusive property of OCSD. OCSD may utilize these documents for OCSD applications on other projects or extensions of this project, at its own risk.

19. No Solicitation of Employees

19.1 Consultant agrees that it shall not, during the term of this Agreement and for a period of one (1) year immediately following termination of this Agreement, or any extension hereof, call on, solicit, or take away any of the employees whom Consultant became aware of as a result of Consultant's Services to OCSD.

19.2 Consultant acknowledges that OCSD's employees are critical to its business and OCSD expends significant resources to hire, employ, and train employees. Should Consultant employ or otherwise engage OCSD's employees during the term of this Agreement and for a period of one (1) year following termination of this Agreement, Consultant will pay OCSD fifty percent (50%) of the former employee's most recent annual salary earned at OCSD to accurately reflect the reasonable value of OCSD's time and costs. This payment is in addition to any other rights and remedies OCSD may have at law.

20. Independent Contractor Capacity

20.1 The relationship of Consultant to OCSD is that of an independent contractor and nothing herein shall be construed as creating an employment or agency relationship.

20.2 Consultant shall act independently and not as an officer or employee of OCSD. OCSD assumes no liability for Consultant's action and performance, nor assumes responsibility for taxes, funds, payments or other commitments, implied or expressed, by or for Consultant.

20.3 Consultant shall not be considered an agent of OCSD for any purpose whatsoever, nor shall Consultant have the right to, and shall not, commit OCSD to any agreement, contract or undertaking. Consultant shall not use OCSD's name in its promotional material or for any advertising or publicity purposes without expressed written consent.

20.4 Consultant shall not be entitled to any benefits accorded to those individuals listed on OCSD's payroll as regular employees including, without limitation, worker's compensation, disability insurance, vacation, holiday or sick pay. Consultant shall be responsible for providing, at Consultant's expense, disability, worker's compensation or other insurance as well as licenses and permits usual or necessary for conducting the Services hereunder.

- 20.5 Consultant shall be obligated to pay any and all applicable Federal, State and local payroll and other taxes incurred as a result of fees hereunder. Consultant hereby indemnifies OCSD for any claims, losses, costs, fees, liabilities, damages or penalties suffered by OCSD arising out of Consultant's breach of this provision.
- 20.6 Consultant shall not be eligible to join or participate in any benefit plans offered to those individuals listed on OCSD's payroll as regular employees. Consultant shall remain ineligible for such benefits or participation in such benefit plans even if a court later decides that OCSD misclassified Consultant for tax purposes.
- 21. Licenses, Permits** Consultant represents and warrants to OCSD that it has obtained all licenses, permits, qualification and approvals of whatever nature that are legally required to engage in this work. Any and all fees required by Federal, State, County, City and/or municipal laws, codes and/or tariffs that pertain to work performed under the terms of this Agreement will be paid by Consultant.
- 22. Consultant's Representations** In the performance of duties under this Agreement, Consultant shall adhere to the highest fiduciary standards, ethical practices and standards of care and competence for their trade/profession. Consultant agrees to comply with all applicable Federal, State and local laws and regulations.
- 23. Familiarity with Work** By executing this Agreement, Consultant warrants that: 1) it has investigated the work to be performed; 2) it has investigated the site of the work and is aware of all conditions there; and 3) it understands the facilities, difficulties and restrictions of the work under this Agreement. Should Consultant discover any latent or unknown conditions materially differing from those inherent in the work or as represented by OCSD, it shall immediately inform OCSD of this and shall not proceed, except at Consultant's risk, until written instructions are received from OCSD.
- 24. Right to Review Services, Facilities, and Records**
- 24.1 OCSD reserves the right to review any portion of the Services performed by Consultant under this Agreement, and Consultant agrees to cooperate to the fullest extent possible.
- 24.2 Consultant shall furnish to OCSD such reports, statistical data, and other information pertaining to Consultant's Services as shall be reasonably required by OCSD to carry out its rights and responsibilities under its agreements with its bondholders or noteholders and any other agreement relating to the development of the project(s) and in connection with the issuance of its official statements and other prospectuses with respect to the offering, sale, and issuance of its bonds and other obligations.
- 24.3 The right of OCSD to review or approve drawings, specifications, procedures, instructions, reports, test results, calculations, schedules, or other data that are developed by Consultant shall not relieve Consultant of any obligation set forth herein.
- 25. Force Majeure** Neither party shall be liable for delays caused by accident, flood, acts of God, fire, labor trouble, war, acts of government or any other cause beyond its control, but said party shall use reasonable efforts to minimize the extent of the delay. Work affected by a Force Majeure condition may be rescheduled by mutual consent or may be eliminated from the Agreement.
- 26. Severability** If any section, subsection, or provision of this Agreement, or any agreement or instrument contemplated hereby, or the application of such section, subsection, or

provision is held invalid, the remainder of this Agreement or instrument in the application of such section, subsection or provision to persons or circumstances other than those to which it is held invalid, shall not be affected thereby, unless the effect of such invalidity shall be to substantially frustrate the expectations of the Parties.

27. **Waiver** The waiver of either party of any breach or violation of, or default under, any provision of this Agreement, shall not be deemed a continuing waiver by such party of any other provision or of any subsequent breach or violation of this Agreement or default thereunder. Any breach by Consultant to which OCSD does not object shall not operate as a waiver of OCSD's rights to seek remedies available to it for any subsequent breach.
28. **Remedies** In addition to other remedies available in law or equity, if the Consultant fails to make delivery of the goods or Services or repudiates its obligations under this Agreement, or if OCSD rejects the goods or Services or revokes acceptance of the goods or Services, OCSD may (1) terminate the Agreement; (2) recover whatever amount of the purchase price OCSD has paid, and/or (3) "cover" by purchasing, or contracting to purchase, substitute goods or Services for those due from Consultant. In the event OCSD elects to "cover" as described in (3), OCSD shall be entitled to recover from Consultant as damages the difference between the cost of the substitute goods or Services and the Agreement price, together with any incidental or consequential damages.
29. **Governing Law** This Agreement shall be governed by and interpreted under the laws of the State of California and the Parties submit to jurisdiction in Orange County, in the event any action is brought in connection with this Agreement or the performance thereof.
30. **Environmental Compliance** Consultant shall, at its own cost and expense, comply with all Federal, State, and local environmental laws, regulations, and policies which apply to the Consultant, its sub-consultants, and the Services, including, but not limited to, all applicable Federal, State, and local air pollution control laws and regulations.
31. **Attorney's Fees** If any action at law or inequity or if any proceeding in the form of an Alternative Dispute Resolution (ADR) is necessary to enforce or interpret the terms of this Agreement, the prevailing party shall be entitled to reasonable attorney's fees, costs and necessary disbursements in addition to any other relief to which it may be entitled.
32. **Dispute Resolution**
 - 32.1 In the event of a dispute as to the construction or interpretation of this Agreement, or any rights or obligations hereunder, the Parties shall first attempt, in good faith, to resolve the dispute by mediation. The Parties shall mutually select a mediator to facilitate the resolution of the dispute. If the Parties are unable to agree on a mediator, the mediation shall be conducted in accordance with the Commercial Mediation Rules of the American Arbitration Agreement, through the alternate dispute resolution procedures of Judicial Arbitration through Mediation Services of Orange County ("JAMS"), or any similar organization or entity conducting an alternate dispute resolution process.
 - 32.2 In the event the Parties are unable to timely resolve the dispute through mediation, the issues in dispute shall be submitted to arbitration pursuant to California Code of Civil Procedure, Part 3, Title 9, Sections 1280 et seq. For such purpose, an agreed arbitrator shall be selected, or in the absence of agreement, each party shall select an arbitrator, and those two (2) arbitrators shall select a third. Discovery may be conducted in connection with the arbitration proceeding pursuant to California Code of Civil Procedure Section 1283.05. The arbitrator, or three (3) arbitrators acting as a board, shall take such evidence and make such investigation as deemed appropriate and shall render a written decision on the matter

in question. The arbitrator shall decide each and every dispute in accordance with the laws of the State of California. The arbitrator's decision and award shall be subject to review for errors of fact or law in the Superior Court for the County of Orange, with a right of appeal from any judgment issued therein.

33. **Damage to OCSD's Property** Any OCSD property damaged by Consultant will be subject to repair or replacement by Consultant at no cost to OCSD.
34. **OCSD Safety Standards** OCSD requires Consultant and its subconsultants to follow and ensure their employees follow all Federal, State and local regulations as well as OCSD Safety Standards while working at OCSD locations. If during the course of the Agreement it is discovered that OCSD Safety Standards do not comply with Federal, State or local regulations, then the Consultant is required to follow the most stringent regulatory requirement at no additional cost to OCSD. Consultant and all of its employees and subconsultants, shall adhere to all applicable OCSD Safety Standards attached hereto in Exhibit "D" and the Human Resources Policies in Exhibit "E".
35. **Freight (F.O.B. Destination)** Consultant assumes full responsibility for all transportation, transportation scheduling, packing, handling, insurance, and other services associated with delivery of all products deemed necessary under this Agreement.
36. **Assignments** Consultant shall not delegate any duties nor assign any rights under this Agreement without the prior written consent of OCSD. Any such attempted delegation or assignment shall be void.
37. **Conflict of Interest and Reporting**
 - 37.1 Consultant shall at all times avoid conflicts of interest or appearance of conflicts of interest in performance of this Agreement.
 - 37.2 Consultant affirms that to the best of its knowledge there exists no actual or potential conflict between Consultant's families, business or financial interest or its Services under this Agreement, and in the event of change in either its private interests or Services under this Agreement, it will raise with OCSD any question regarding possible conflict of interest which may arise as a result of such change.
38. **Third Party Rights** Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than OCSD and Consultant.
39. **Non-Liability of OCSD Officers and Employees** No officer or employee of OCSD shall be personally liable to Consultant, or any successor-in-interest, in the event of any default or breach by OCSD or for any amount which may become due to Consultant or to its successor, or for breach of any obligation of the terms of this Agreement.
40. **Authority to Execute** The persons executing this Agreement on behalf of the Parties warrant that they are duly authorized to execute this Agreement and that by executing this Agreement, the Parties are formally bound.
41. **Read and Understood** By signing this Agreement, Consultant represents that it has read and understood the terms and conditions of the Agreement.
42. **Entire Agreement** This Agreement constitutes the entire agreement of the Parties and supersedes all prior written or oral and all contemporaneous oral agreements, understandings, and negotiations between the Parties with respect to the subject matter

hereof.

43. Notices All notices under this Agreement must be in writing. Written notice shall be delivered by personal service or sent by registered or certified mail, postage prepaid, return receipt requested, or by any other overnight delivery service which delivers to the noticed destination and provides proof of delivery to the sender. Any facsimile notice must be followed within three (3) days by written notice. Rejection or other refusal to accept or the inability to deliver because of changed address for which no notice was given as provided hereunder shall be deemed to be receipt of the notice, demand or request sent. All notices shall be effective when first received at the following addresses:

OCSD: Darius Ghazi
Senior Buyer
Orange County Sanitation District
10844 Ellis Avenue
Fountain Valley, CA 92708-7018

Consultant: John J. Preston
166 Fox Ln
Calimesa, CA 92320

Each party shall provide the other party written notice of any change in address as soon as practicable.

IN WITNESS WHEREOF, intending to be legally bound, the Parties hereto have caused this Agreement to be signed by the duly authorized representatives.

ORANGE COUNTY SANITATION DISTRICT

Dated: _____

By: _____

Chad Wanke
Chair, Administration Committee

Dated: _____

By: _____

Clerk of the Board

Dated: _____

By: _____

Ruth Zintzun
Purchasing and Contracts Manager

COMPANY

Dated: _____

By: _____

Print Name and Title of Officer



Orange County Sanitation District

ADMINISTRATION COMMITTEE

Administration Building
10844 Ellis Avenue
Fountain Valley, CA 92708
(714) 593-7433

Agenda Report

File #: 2019-711

Agenda Date: 11/13/2019

Agenda Item No: 9.

FROM: James D. Herberg, General Manager
Originator: Celia Chandler, Director of Human Resources

SUBJECT:

POSITION CHANGES FOR FISCAL YEAR 2019-20

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION: Recommend to the Board of Directors to:

Approve a position exchange and corresponding salary upgrade from a vacant Senior Mechanic (Salary Grade LOC67) position to Maintenance Specialist (Salary Grade PRO80).

BACKGROUND

Orange County Sanitation District (Sanitation District) management has evaluated its operations and identified opportunities to optimize planned maintenance strategies in the Operations & Maintenance (O&M) Department by creating a new Preventative Maintenance (PM) Optimization Group. Currently, maintenance specialists schedule up to six hundred (600) incoming work orders per week. The proposed PM Optimization Group will track, maintain, and manage assets throughout their lifecycle to maximize reliability at the lowest possible costs; ensuring both planned and corrective (unplanned) maintenance efforts are effective.

The proposed PM Optimization Group will require four position exchanges with no increase to the overall number of full-time staff. Currently, the Sanitation District has four vacant budgeted positions with job titles/pay that can be exchanged for the position titles and salaries needed to form the group. Three of the four positions can be filled from vacant positions that are at a higher salary grade. One of the positions will require an upgrade as requested in the recommended action above. The proposed PM Optimization Group will be comprised of one Maintenance Supervisor and three Maintenance Specialists.

Three position exchanges and salary downgrades were implemented through the meet and confer process including:

- Engineering Manager (Salary Grade EM18) to Maintenance Supervisor (Salary Grade SUP82);
- Principal Staff Analyst (Salary Grade PRO84) to Maintenance Specialist (Salary Grade PRO80); and
- Principal I.T. Analyst (Salary Grade PRO87) to Maintenance Specialist (Salary Grade PRO80).

RELEVANT STANDARDS

- Plan for and execute succession, minimizing vacant position times
- Maintain and adhere to appropriate internal planning documents (Budget Update, Fiscal Year 2019-20)
- Maintain a proactive asset management program
- Maintain a culture of improving efficiency to reduce the cost to provide the current service level or standard

PROBLEM

New and aging infrastructure in the Plants and collections system requires an increased level of planned maintenance. The Sanitation District has a limited level of resources available to perform this scheduled maintenance. With limited resources, the current maintenance schedules may exceed the capacity to perform the work in an effective, timely, and economical manner.

PROPOSED SOLUTION

Conduct an in-depth assessment to optimize Sanitation District planned maintenance schedules. Assign this effort to a new PM Optimization Group, which will consist of four positions in charge of tracking, maintaining, and managing assets. Form this new group by downgrading three existing vacancies and approve one vacant position exchange and corresponding salary upgrade.

TIMING CONCERNS

Staff recommends approval of the position change to allow establishment of the PM Optimization Group during the current fiscal year to begin to address needs and proceed with the proposed organizational structure without delays.

RAMIFICATIONS OF NOT TAKING ACTION

Deferring the requested position upgrade to the upcoming budget cycle for Fiscal Year 2020-21 would require that the position remain vacant and unutilized for the remainder of the current fiscal year, a timeframe of approximately eight (8) months. This would delay the Sanitation District's launch of the PM Optimization Group, which is aimed to maximize efficiencies with the organization's asset management program.

PRIOR COMMITTEE/BOARD ACTIONS

June 2019 - Approved Budget Update, Fiscal Year 2019-20.

ADDITIONAL INFORMATION

The O & M Department is responsible for the reliability and maintenance of the Sanitation District's assets. To accomplish this, the Sanitation District utilizes a combination of routine preventative maintenance, predictive maintenance, managed activities, and corrective maintenance.

Management has identified a need to create a new PM Optimization Group in the O&M Department. This group will be tasked with conducting an in-depth assessment to optimize planned maintenance strategies for new and existing assets and to establish maintenance approaches and strategies for assets installed by capital improvement projects prior to beneficial occupancy. The PM Optimization Program will track, maintain, and manage assets throughout their lifecycles from design, construction, commissioning, beneficial occupancy, operations and maintenance, to the eventual decommissioning or replacement of assets.

This will ensure that asset life cycle is maximized with the lowest risk to process failure by achieving the intended reliability, at the lowest possible cost, and maximizing equipment availability.

CEQA

N/A

FINANCIAL CONSIDERATIONS

The recommended pay grade change represents a potential increased salary cost of \$29,494 per year. The estimated salary savings from downgrading other positions is \$105,768 per year. The net savings for FY 2019-20 is \$76,274 as a result of the position changes.

ATTACHMENT

The following attachment(s) are included in hard copy and may also be viewed on-line at the OCSD website (www.ocsd.com) with the complete agenda package:

- Preventative Maintenance Optimization Position Exchanges

PREVENTATIVE MAINTENANCE OPTIMIZATION POSITION EXCHANGES

November 2019

Proposed Position Change for Approval

Request Type	Budgeted Position	Current Pay Grade	Annual Salary (Range Max)	Current Barg Unit	Proposed Position	Proposed Pay Grade	Annual Salary (Range Max)	Proposed Barg Unit
Upgrade	Senior Mechanic	LOC67	\$ 96,366.40	Local 501	Maintenance Specialist	PRO80	\$ 125,860.80	Professional
							Salary Increase	\$ 29,494

**Position Exchanges
(Background Information Only)**

Request Type	Budgeted Position	Current Pay Grade	Annual Salary (Range Max)	Current Barg Unit	Updated Position	Updated Pay Grade	Annual Salary (Range Max)	Updated Barg Unit
Downgrade	Engineering Manager	EM18	\$ 201,198.40	N/A	Maintenance Supervisor	SUP82	\$ 132,204.80	Supervisor
Downgrade	Principal Staff Analyst	PRO84	\$ 138,923.20	Professional	Maintenance Specialist	PRO80	\$ 125,860.80	Professional
Downgrade	Principal Information Technology Analyst	PRO87	\$ 149,572.80	Professional	Maintenance Specialist	PRO80	\$ 125,860.80	Professional
							Salary Savings	\$ (105,768)
							Net Savings	\$ (76,274)



Orange County Sanitation District

ADMINISTRATION COMMITTEE

Administration Building
10844 Ellis Avenue
Fountain Valley, CA 92708
(714) 593-7433

Agenda Report

File #: 2019-713

Agenda Date: 11/13/2019

Agenda Item No: 10.

FROM: James D. Herberg, General Manager
Originator: Kathy Millea, Director of Engineering

SUBJECT:

CLIMATE RESILIENCY STUDY, PROJECT NO. SP-152

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION:

Information Item.

BACKGROUND

Governor's Executive Order #S-13-08 (EO-S-13-08) directs state agencies to plan for sea level rise and climate impacts through coordination of the State Climate Adaptation Strategy. The Orange County Sanitation District's (Sanitation District) Climate Change/Environmental Footprint Initiative started in 2007 and has completed a detailed carbon footprint study. In addition, the Sanitation District developed a strategy to respond to climate change regulations, public outreach and education, as well as research initiatives related to energy efficiency and sustainable technologies.

The location of Plant No. 2 and several pump stations along the coast make them vulnerable to disruptions due to climate change impacts. Similar studies done by other agencies on extreme events have shown that, in most cases, the costs of repairs were significantly higher than the costs of mitigation and adaptation strategies.

Climate Resiliency Study, Project No. SP-152, which was awarded by the Board of Directors on November 28, 2018, conducted a site-specific climate risk assessment for the Sanitation District's coastal facilities and provided recommendations for mitigation and adaptation strategies. Staff will present an overview of the study recommendations.

RELEVANT STANDARDS

- Maintain a proactive asset management program
- 24/7/365 treatment plant reliability
- Protect Orange County Sanitation District assets
- Sustain 1, 5, 20-year planning horizons

PRIOR COMMITTEE/BOARD ACTIONS

November 2018 - Approved a Professional Services Agreement with Hazen and Sawyer to provide engineering services for the Climate Resiliency Study, Project No. SP-152, for an amount not to exceed \$697,952; and approved a contingency of \$69,795 (10%).

ADDITIONAL INFORMATION

The Environmental Protection Agency (EPA) is currently drafting the Sanitation District's NPDES Ocean Discharge Permit for renewal. The EPA has indicated that the new permit may include a requirement to address impacts with climate change and sea level rise. This study would comply with such requirements.

CEQA

The project is exempt from CEQA pursuant to CEQA Guidelines Section 15262 [Feasibility and Planning Studies]. A Notice of Exemption was filed with the OC Clerk-Recorder on December 3, 2018.

FINANCIAL CONSIDERATIONS

This item is informational and does not require any commitment of funds.

ATTACHMENT

The following attachment(s) are included in hard copy and may also be viewed on-line at the OCSD website (www.ocsd.com) with the complete agenda package:

- SP-152 OCSD Climate Resiliency Executive Summary (*separately bound document*)

AN:sa:gc

Orange County Sanitation District Climate Resiliency Study

Executive Summary 2019

Hazen



Message from Our Director of Engineering

Dear Orange County Residents,

For the past 65 years, the Orange County Sanitation District (OCSD) has protected public health and the environment for the coastal region of Southern California. We are responsible for collecting, treating, and recycling wastewater, and have become an acknowledged leader in resource recovery. This includes our partnership with the Orange County Water District on the Groundwater Replenishment System—the world’s largest purification system for indirect potable reuse.

Our customers count on us around the clock and in every situation, including during extreme weather and climate conditions. We have operated through heavy storms that threatened to overflow our sewers. High tides have carried seawater into our coastal pump stations. And recent wildfires have affected the lands around our service area. Throughout these challenges we have remained resilient. We use each as an opportunity to analyze possible risks and vulnerabilities in our system, and better prepare for the next.

We pride ourselves on following the example of those who came before us, making forward-thinking decisions and investments to protect public health and the environment. To continue to look towards the future, OCSD has developed a Climate Resiliency Study. This study provides a comprehensive analysis of climate-related, site-specific risk assessments of OCSD’s facilities using the best available climate predictions, industry standards, and geographical information systems. We worked alongside industry experts to develop practical solutions that can be incorporated immediately to improve the resiliency of our facilities or folded into the design and construction of future projects.

This Executive Summary provides an overview of the information obtained and generated during the preparation of the Climate Resiliency Study. Together, we will use what we have learned through this study to keep our facilities resilient, preserving Orange County’s natural beauty and the communities we enjoy long into the future.



Kathleen T. Millea, P.E.
Director of Engineering



“Our infrastructure protects the environment and Orange County’s quality of life. We need to make sure that these important facilities can withstand extreme events.”

*- Jim Herberg,
General Manager*

Table of Contents

Page 1	Introduction
Page 2	Climate Resiliency
Page 3	Vulnerabilities
Page 4	Toolbox of Adaptations
Page 5	Causes of Flooding in Orange County
Page 6	Building Level Flood Protection
Page 7	Flooding and Tsunami Impacts
Page 8	Boundary Level Flood Protection
Page 9	Extreme Heat and Wildfire Risks in California
Page 10	Protection Against Heat and Fire
Page 11	Thinking Globally: How OCSD is Reducing Greenhouse Gas Emissions
Page 12	Looking to the Future

Our Mission

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



Introduction

The Orange County Sanitation District (OCSD) is a leader in regional wastewater collection, treatment, recycling, and disposal.

WHO WE SERVE

2.6

Million People

20

Cities

4

Special Districts



Parts of Unincorporated Orange County

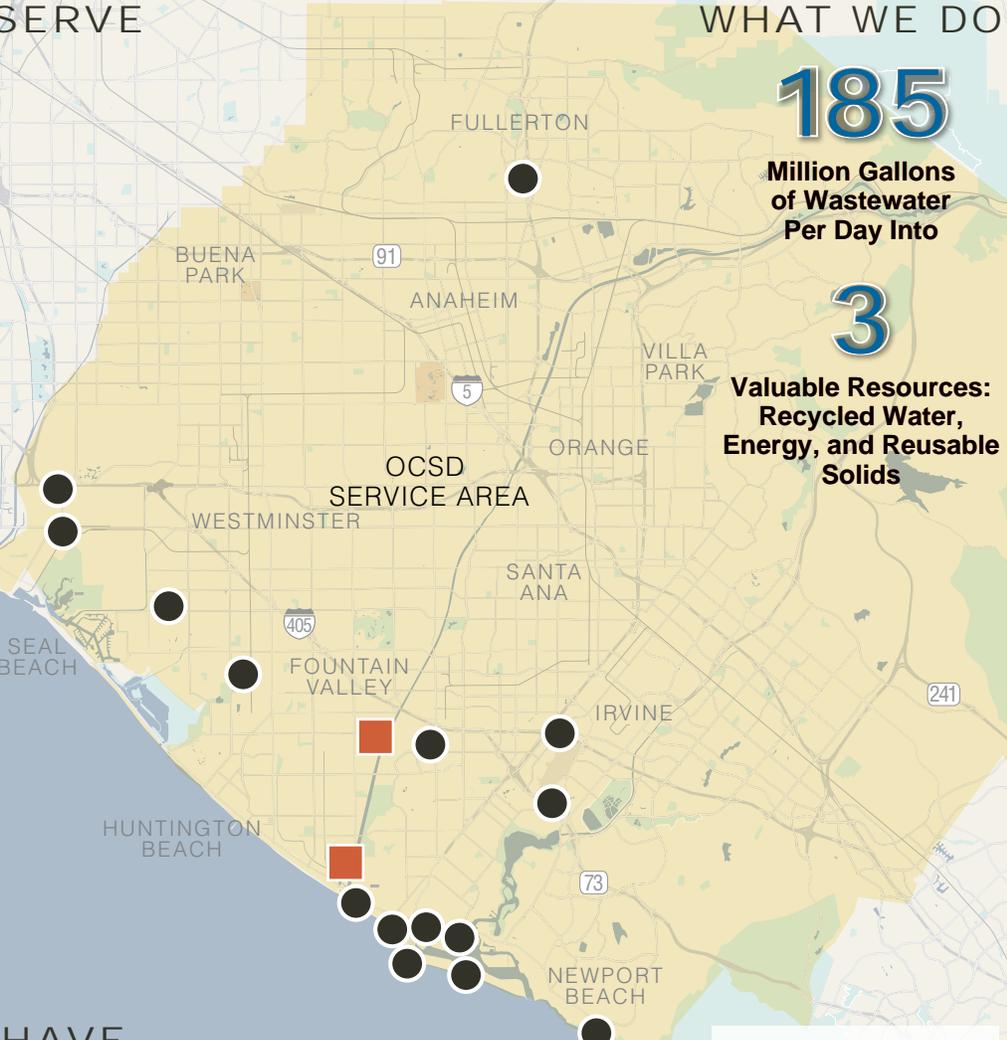
WHAT WE DO

185

Million Gallons of Wastewater Per Day Into

3

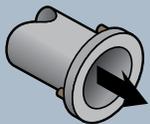
Valuable Resources: Recycled Water, Energy, and Reusable Solids



WHAT WE HAVE

389

Miles of Sewer Pipe



Sewer pipes are used to convey wastewater from cities and districts.

15

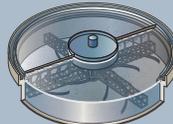
Pump Stations



Pump stations lift wastewater to elevations that enable gravity flow to the treatment plants.

2

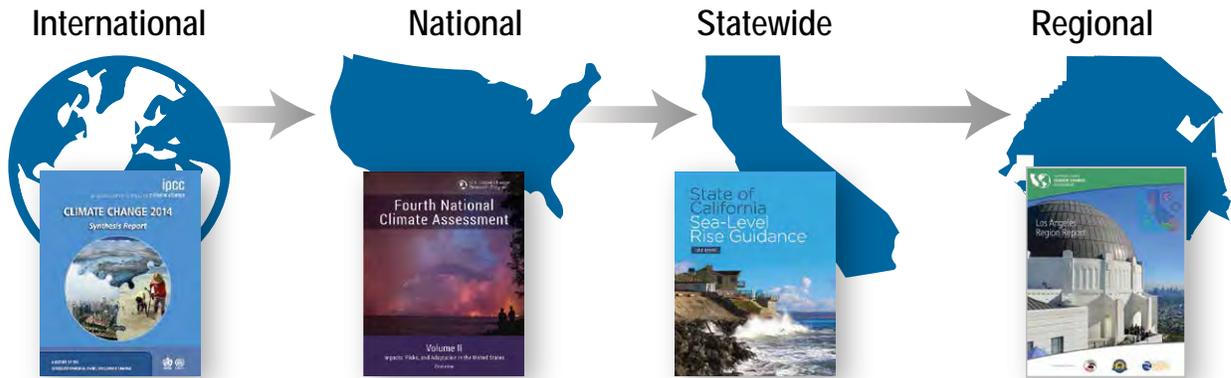
Treatment Plants



Treatment plants breakdown wastes to recover resources.

Climate Resiliency

OCSD is constantly striving to be resilient, reliable, and forward-thinking. Recognizing the value of our infrastructure and the risks posed by different forces of nature, we have conducted a climate resiliency study to better prepare for the future.



Due to the importance of climate conditions in future planning and capital investment, we reviewed and analyzed a variety of climate-related studies as part of this effort. The climate projections, including sea level rise, are based on the work of the Rising Seas Report and California’s Fourth Climate Change Assessment as representing the “state of the science” for Southern California.

Climate forces considered as part of the study:

Flooding threatens infrastructure near the coast and major channels, including Plant No. 2 and a number of pump stations.



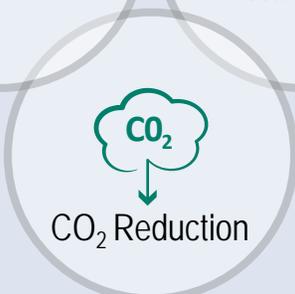
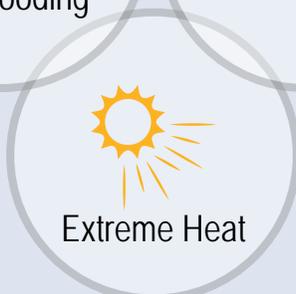
Coastal infrastructure is vulnerable to tsunamis.



Fire and flying embers are a risk to buildings near heavy vegetation.



Inland areas are subject to higher temperatures and longer heat waves.



Greenhouse gases, such as carbon dioxide, impact the earth’s atmosphere and climate.

Vulnerabilities

Maintaining safe and continuous operation of wastewater conveyance and treatment processes during climate-related events is of high importance to OCSD. By focusing efforts on high priority infrastructure and understanding site-specific risks, OCSD can provide resiliency and adaptability within upgrades to infrastructure and facilities.

-  Extreme Heat
-  Flooding
-  Flooding + Sea Level Rise
-  Tsunami



Toolbox of Adaptations

There are many adaptations that can be used to reduce the impacts of climate change related events. Generally these adaptations involve updates to design guidelines and practices, training and communication, and modifications or redundancies to operations.

Building-Level Adaptations for Flooding

At the building level, floodproofing seeks to prevent water from entering a facility or coming in contact with access points and infrastructure.



Watertight hatches



Floodproof/watertight electrical enclosures



Floodproof/watertight pump/motor enclosures



Stop logs over flood pathways (e.g., doors, windows, louvers)



Concrete barrier around facility (e.g., wall or hump)



Concrete barrier around facility with stop logs to cover opening



New doors and floors above flood level



Electric rooms above flood levels



Access routes above flood levels



Assets (e.g., pumps, motors, electrical equipment) elevated above flood levels

Asset-Level Adaptations for Flooding

At the asset level, floodproofing seeks to keep operations running when flood water is at risk of coming in contact with assets and infrastructure.



Sandbagging around assets and/or flood pathways



Securing tanks to floor to counteract buoyancy forces during flooding



Floodproofing electrical conduit and wiring



Installing floodproof instrumentation (e.g., valves, flow meters)

Operation and Redundancy Adaptations



Training for flood, fire, and tsunami response



Automatic controls for remote operation in emergencies

Building-Level Adaptations for Wildfires

At the building level, wildfire protection is included in design guidelines and construction materials.



Fireproof roofs and buildings



Louvers that prevent embers and smoke from entering buildings



Clear fire barriers around buildings

Causes of Flooding in Orange County

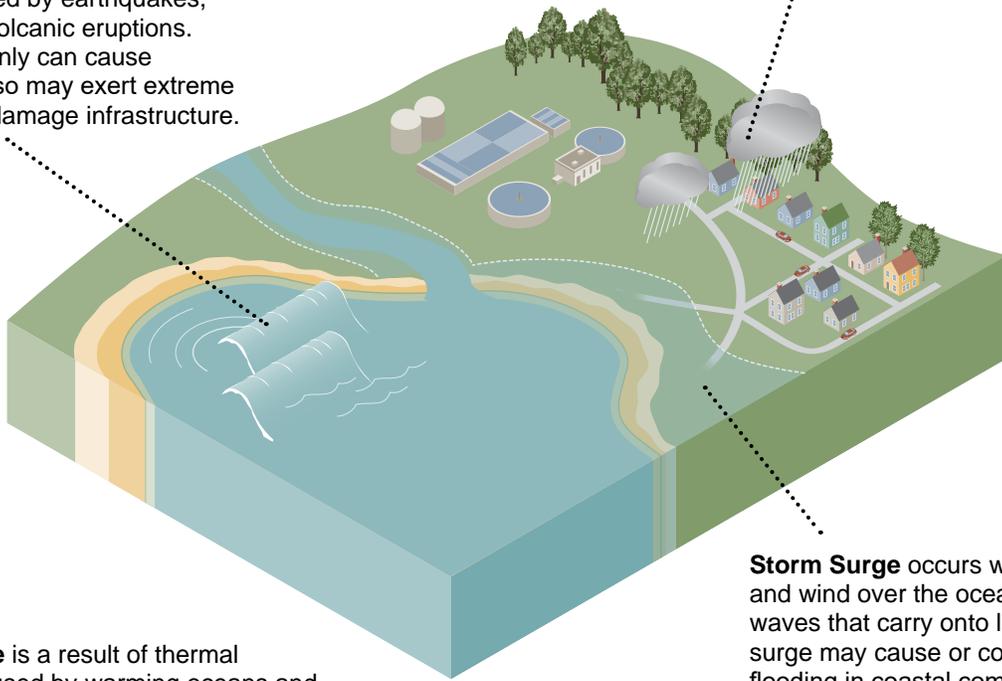
Many of OCSD's facilities are located near the coast, enclosed bays, or rivers, making flooding a major risk to the services provided by OCSD.

Flood risk is expected to increase with climate change. Climate change is expected to result in more extreme storms, increased flood depths, and raised sea levels. Tsunamis can cause extensive inland flooding, which is worsened by sea level rise.



King Tide is the highest tide caused by the combined effects of the gravitational forces exerted by the moon, sun, and rotation of the earth. It can cause flooding in coastal communities.

Tsunamis are large and fast-moving waves generated by earthquakes, landslides, or volcanic eruptions. Tsunamis not only can cause flooding, but also may exert extreme force that can damage infrastructure.



Storm Events exceeding intensity or duration of the design of local storm infrastructure may cause flooding in streets and communities.

Sea Level Rise is a result of thermal expansions caused by warming oceans and melting of land ice as temperatures rise due to climate change. Sea level rise increases flooding during storms and king tide events.



Storm Surge occurs when rainfall and wind over the ocean create larger waves that carry onto land. Storm surge may cause or contribute to flooding in coastal communities.



Building Level Flood Protection

Simple adaptations can be incorporated into individual facilities to protect against flooding. Building level solutions generally protect a greater number of assets at a lower cost than asset level solutions by preventing flood water from entering the facility.

Hatches are one of the lowest entry points into a facility, making them the first vulnerability for flooding. Waterproofing access points prevents water from entering the facility.

Existing Hatch



Waterproofed Hatch

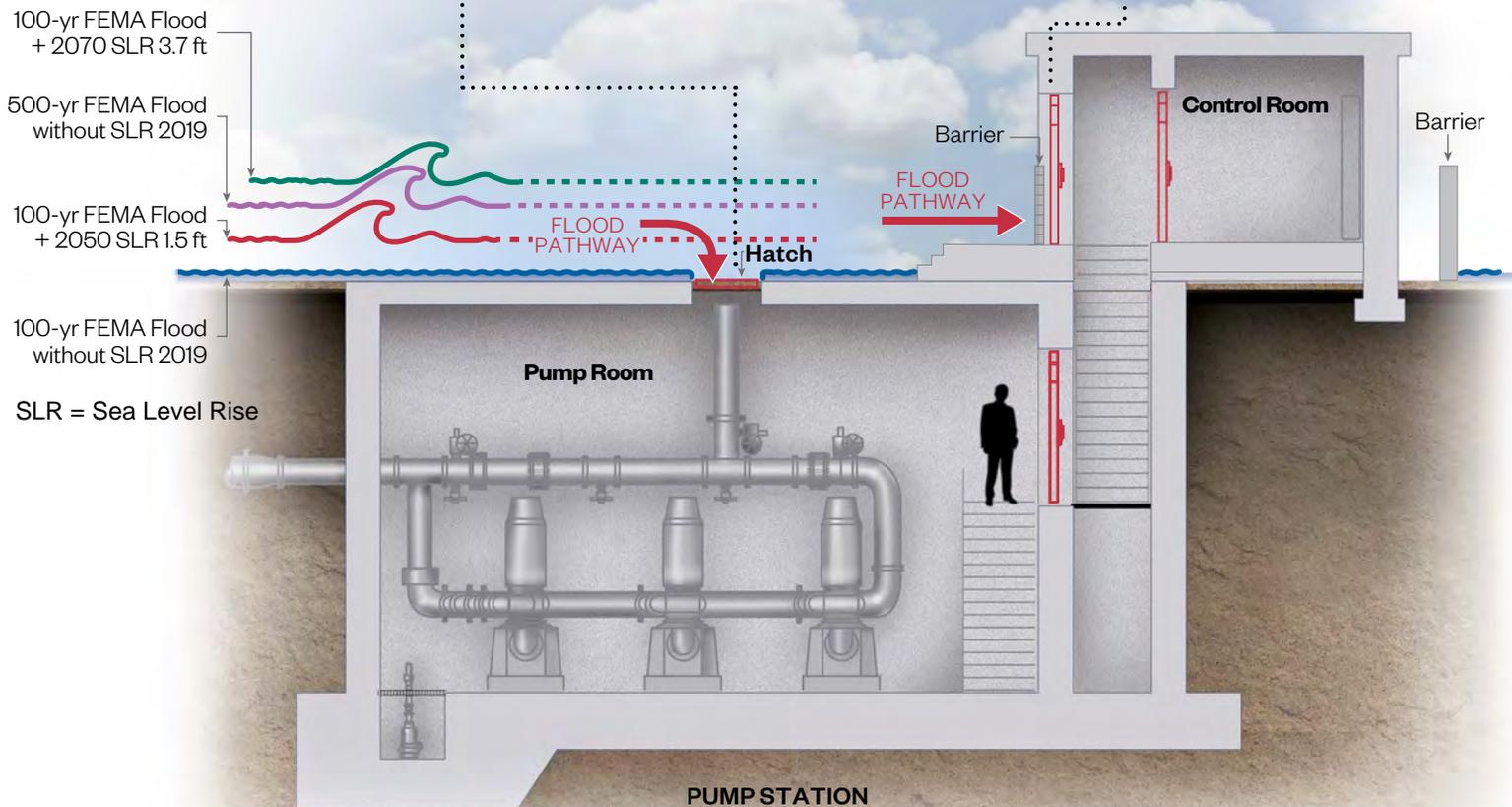


Important access points include doors, louvers, and transformer enclosures. Waterproofing barriers protect access points and can be deployed when necessary.

Existing Door



Waterproofed Door



Flooding and Tsunami Impacts

Other impacts from flooding on OCSD infrastructure include electrical or mechanical failure and unsafe conditions for operators and facility staff. An impacted OCSD facility can cause issues upstream and downstream in the network and affect surrounding communities and neighborhoods.

Safety and Access

If OCSD staff are unable to safely drive or walk to flooded or non-flooded facilities due to flooded access roads, facilities would be inoperable and cause sewer backups or environmental damage to local waterways.



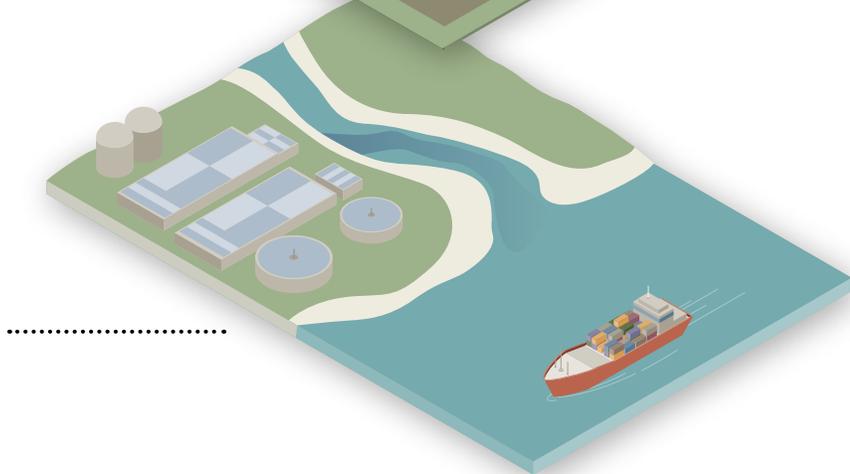
Possible Sewer Backups

If a pump station is unable to operate, flow to and from will be limited, and tributary neighborhoods may see sewer backups.



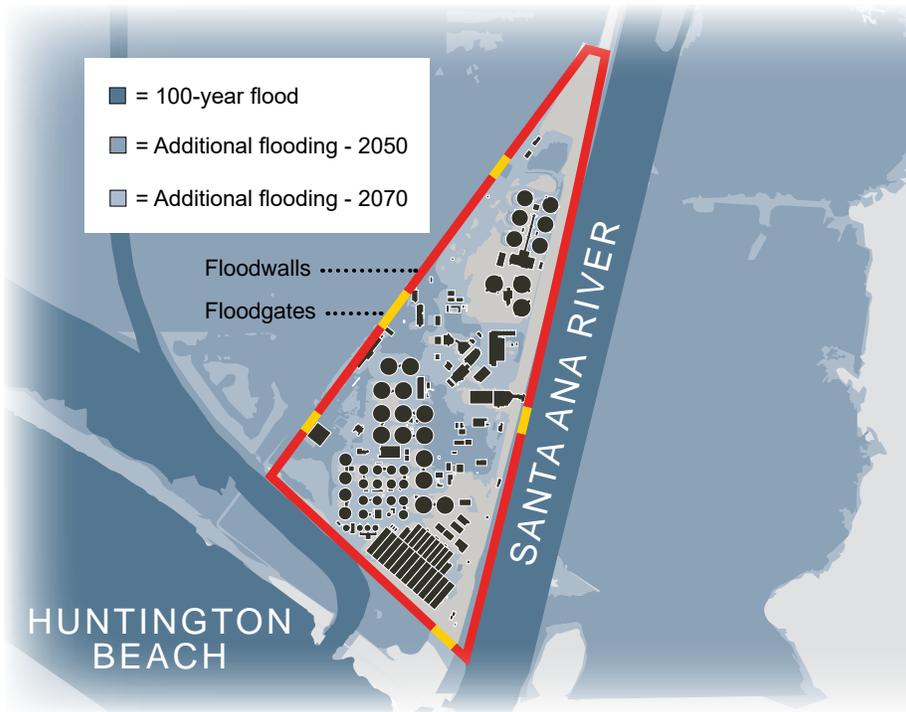
Water Quality Impacts and Environmental Damage

If a treatment plant is not able to operate, an emergency release of the raw or partially treated wastewater may be required. This would cause negative water quality impacts and damage to aquatic environments and nearby beaches.



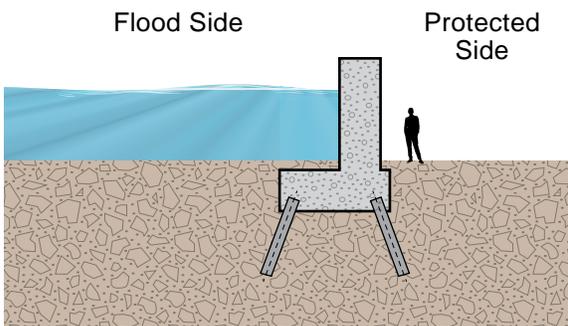
Boundary Level Flood Protection

Plant No. 2 can treat up to 150 million gallons of wastewater per day and is located in a low-lying area close to the Pacific Ocean coast of Orange County. Numerous facilities at Plant No. 2 are at risk of flooding caused by extreme events such as a 500-year coastal flood and tsunamis, and this risk is exacerbated by sea level rise. Floodgates and floodwalls are recommended to protect Plant No. 2 from these risks.



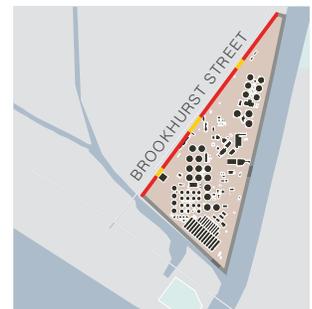
Plant No. 2 is above the 100-year floodplain, but sea level rise and tsunamis will increase the flood risk. These recommended adaptations will protect Plant No. 2 from flooding due to sea level rise and tsunami.

Floodwall

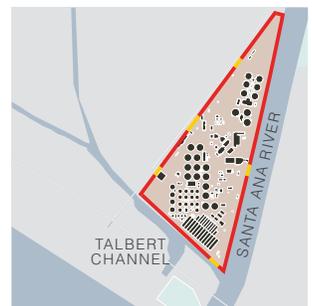


A typical floodwall design to withstand storm surge, waves, flooding, and tsunamis.

A floodwall along Brookhurst Street is needed to prevent flooding with projected sea level rise for 2070.



Additional floodwalls along the Talbert Channel and Santa Ana River will protect Plant No. 2 from flooding due to maximum tsunami risk for the region.



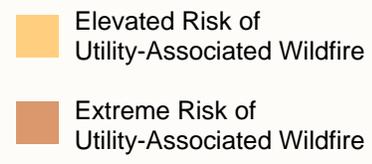
Extreme Heat and Wildfire Risks in California

Extreme Heat

Temperatures across California have been consistently rising due to climate change. We've experienced higher average temperatures during summer months, more intense and longer heat waves, and an increased frequency of extreme heat days. Inland areas of Orange County and urbanized areas have seen the largest impacts of these rising temperatures. Higher temperatures also dry out vegetation and soil, creating fuel for wildfires.

Wildfires

Wildfires are a common threat for California communities, exacerbated by climate and land use stressors. Fires that begin in dry areas spread rapidly, often carried by extreme Santa Ana winds. Changes in weather patterns reduce the frequency of storms that could bring much-needed moisture to slow the spread of fires.



OCSD Service Area

* Map data provided by the California Public Utilities Commission

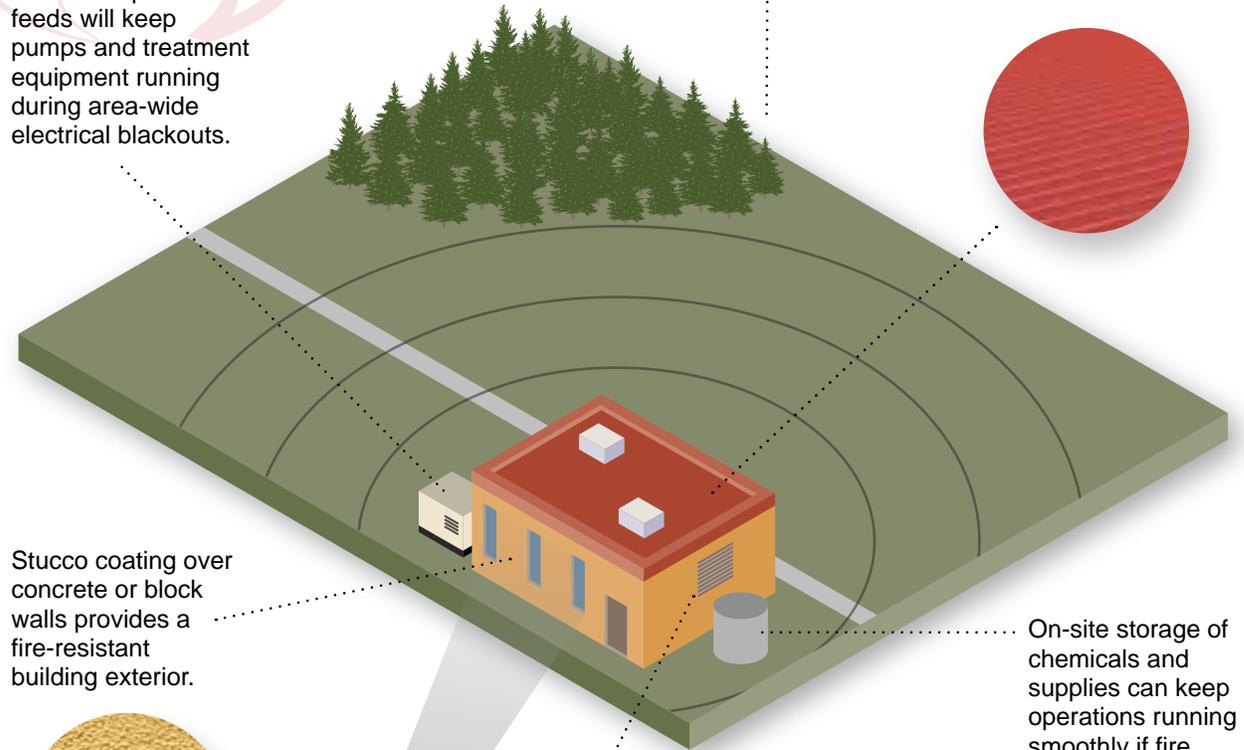
Protection Against Heat and Fire

The location and construction of OCSD pump stations and treatment plants are designed to protect critical infrastructure from heat and fire.

Generators, fuel, and redundant power feeds will keep pumps and treatment equipment running during area-wide electrical blackouts.

OCSD facilities are located within low wildfire risk areas of Orange County.

Metal or tile roofs provide fire-resistance.



Stucco coating over concrete or block walls provides a fire-resistant building exterior.

On-site storage of chemicals and supplies can keep operations running smoothly if fire interrupts normal delivery routes.

Fire-safe louvers prevent embers and smoke carried by high winds from entering the building.

Design Guidelines for OCSD Equipment: 104°F (40°C)



Motors



Electrical Wiring



HVAC

Extreme heat and increased temperatures can cause physical stress to materials and operational stress on equipment, such as electronics, electrical equipment, motors, and chemical handling facilities. OCSD systems are designed to withstand outdoor temperatures up to 104°F (40°C).

Thinking Globally: How OCSD is Reducing Greenhouse Gas Emissions

OCSD implements measures to reduce greenhouse gas emissions to minimize contribution to climate change and remain resilient in the face of potential future regulations.

The State of California aims to reduce greenhouse gas emissions in the state to 40% below 1990 levels by 2030. In an effort to accomplish this, the California Air Resources Board requires reporting of greenhouse gas emissions. Most of OCSD's emissions are biogenic, sustainably produced through on-site anaerobic

digestion of wastewater sludge, electricity generation, and heating. The remainder are below the 25,000 CO₂ equivalent limit that would require participation in the Cap-and-Trade program. The many things that we do to reduce emissions also conserves natural resources and saves money for our ratepayers.

Achieving Greenhouse Gas (GHG) Emission Goals at OCSD

CALIFORNIA GOAL

Reduce GHG emissions 40% below 1990 levels by 2030

Senate Bill 32

40%

We have reduced GHG emissions using several different means



Water recycling

Avoid emissions from pumping imported water



Renewable energy sources

Solar panels designed for new headquarters building



Low-emissions transportation

Fuel-efficient and electric vehicles, compressed natural gas fueling



Energy and resource recovery

Methane produced during wastewater treatment used as an energy source



High-efficiency assets

Variable frequency drives on motors; occupancy sensors for lighting and HVAC



Battery storage system

Offset power demand during critical times

Looking to the Future

As infrastructure upgrades are planned and designed, there are opportunities to integrate resiliency measures and adaptations for flooding, sea level rise, tsunamis, extreme heat, and wildfires. Incorporating resiliency can also be applied program-wide through updates to design guidelines and emergency response plans.

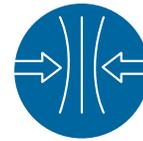
Resiliency Toolbox



Updating design guidelines to build potential flood pathways of new facilities to be above identified flood elevations associated with sea level rise



Integrating deployment, operation, and maintenance of adaptation strategies into emergency response plan



Integrating climate resiliency into capital projects, even if resiliency is not the main goal of the project (e.g., a screening wall project that also provides flood protection)

Orange County Sanitation District Climate and Catastrophic Event Resilience Policy

The Sanitation District aims to design, maintain, and operate valuable wastewater assets that withstand or adapt to adverse conditions in a reasonable manner that is both cost-effective and sustainable for present and future generations. These adverse conditions include heavy rains, flooding, sea level rise, earthquakes, tsunamis, extreme heat, wildfires, and electrical grid interruptions.



Reclamation Plant No. 1 (Administration Offices)

10844 Ellis Avenue • Fountain Valley, California 92708 • 714.962.2411

Treatment Plant No. 2

22212 Brookhurst Street • Huntington Beach, California 92646

Follow us on Facebook, Twitter,
Instagram, and Youtube @OCSEwers

