



**BOARD OF DIRECTORS
EAST BAY MUNICIPAL UTILITY DISTRICT**

375 - 11th Street, Oakland, CA 94607

Office of the Secretary: (510) 287-0440

Notice of Location Change

**FINANCE/ADMINISTRATION
COMMITTEE MEETING
Tuesday, October 27, 2020
10:00 a.m.
Virtual**

Notice is hereby given that due to COVID-19 and in accordance with the most recent Alameda County Health Order, and with the Governor's Executive Order N-29-20 which suspends portions of the Brown Act, the Finance/Administration Committee meeting scheduled for Tuesday, October 27, 2020 at 10:00 a.m. **will be conducted via webinar and teleconference only**. In compliance with said orders, a physical location will not be provided for this meeting. These measures will only apply during the period in which state or local public health officials have imposed or recommended social distancing.

Dated: October 22, 2020

A handwritten signature in blue ink that reads "Rischa S. Cole".

Rischa S. Cole
Secretary of the District

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**BOARD OF DIRECTORS
EAST BAY MUNICIPAL UTILITY DISTRICT**

375 – 11th Street, Oakland, CA 94607

Office of the Secretary: (510) 287-0440

**AGENDA
Finance/Administration Committee
Tuesday, October 27, 2020
10:00 a.m.
Virtual**

Location

Due to COVID-19 and in accordance with the most recent Alameda County Health Order, and with the Governor’s Executive Order N-29-20 which suspends portions of the Brown Act, **this meeting will be conducted via webinar and teleconference only**. In compliance with said orders, a physical location will not be provided for this meeting. These measures will only apply during the period in which state or local public health officials have imposed or recommended social distancing.

Committee Members William B. Patterson {Chair}, John A. Coleman and Andy Katz will participate via webinar or teleconference

***** Please see appendix for public participation instructions*****

ROLL CALL:

PUBLIC COMMENT: The Board of Directors is limited by State law to providing a brief response, asking questions for clarification, or referring a matter to staff when responding to items that are not listed on the agenda.

DETERMINATION AND DISCUSSION:

1. Financial Review of Fiscal Year 2020 (Skoda)
2. Fiscal Year 2020 Key Performance Indicators Report (Skoda)
3. Quarterly Financial Reports: (Skoda)
 - Quarterly Payroll, Disbursement and Real Estate Summary Reports for the Water and Wastewater Systems for Quarter Ended September 30, 2020
 - Quarterly Investment Report – September 30, 2020
4. Monthly Investment Transactions Report (Skoda)
5. Water Infrastructure Finance and Innovation Act Loan Letter of Interest (Skoda)
6. Fiscal Year 2020 Annual Power Sales Report (Skoda)

ADJOURNMENT:

Disability Notice

If you require a disability-related modification or accommodation to participate in an EBMUD public meeting please call the Office of the Secretary (510) 287-0404. We will make reasonable arrangements to ensure accessibility. Some special equipment arrangements may require 48 hours advance notice.

Document Availability

Materials related to an item on this Agenda that have been submitted to the EBMUD Board of Directors within 72 hours prior to this meeting are available for public inspection in EBMUD's Office of the Secretary at 375 11th Street, Oakland, California, during normal business hours, and can be viewed on our website at www.ebmud.com.

W:\Board of Directors - Meeting Related Docs\Agendas\Agendas 2020\2020 Finance Committee\102720_finance_agenda.docx



Finance/Administration Committee Meeting
Tuesday, October 27, 2020
10:00 a.m.

EBMUD public Board meetings will be conducted via Zoom.
Please note that Board meetings are recorded, live-streamed, and posted on the District's website.

Please visit this page beforehand to familiarize yourself with Zoom.
<https://support.zoom.us/hc/en-us/articles/201362193-Joining-a-Meeting>

Online

<https://ebmud.zoom.us/j/98073157323?pwd=a1pzN3kyb05JSkZuNzZ5cmx0NIRzQT09>

Webinar ID: 980 7315 7323

Passcode: 508915

By Phone

Telephone: 1 669 900 6833

Webinar ID: 980 7315 7323

Passcode: 508915

International numbers available: <https://ebmud.zoom.us/j/98073157323>

Providing public comment

The EBMUD Board of Directors is limited by State law to providing a brief response, asking questions for clarification, or referring a matter to staff when responding to items that are not listed on the agenda.

If you wish to provide public comment please:

- Use the raise hand feature in Zoom to indicate you wish to make a public comment
<https://support.zoom.us/hc/en-us/articles/205566129-Raising-your-hand-in-a-webinar>
 - If you participate by phone, press *9 to raise your hand
- When prompted by the Secretary, please state your name, affiliation if applicable, and topic
- The Secretary will call each speaker in the order received
- Comments on **non-agenda items** will be heard at the beginning of the meeting
- Comments on **agenda items** will be heard when the item is up for consideration
- Each speaker is allotted 3 minutes to speak; the Committee Chair has the discretion to amend this time based on the number of speakers
- The Secretary will keep track of time and inform each speaker when his/her allotted time has concluded

To observe the Finance/Administration Committee Meeting,
please visit: <https://www.ebmud.com/about-us/board-directors/board-meetings/>

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EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: October 22, 2020

MEMO TO: Board of Directors

THROUGH: Clifford C. Chan, General Manager *ccc*

FROM: Sophia D. Skoda, Director of Finance *ss*

SUBJECT: Financial Review of Fiscal Year 2020

SUMMARY

Attached is the financial review of Fiscal Year (FY) 2020 for the period ending June 30, 2020. This report includes the basic financial statements, a memorandum on internal controls and required communication, the budget performance, and the financial indicators. Details on the financials as well as the budgetary performance for the fiscal year are provided in this report to enhance the usability, clarity and accessibility of financial information. Fiscal impacts to the District due to COVID-19 for fiscal year ending June 30, 2020 are discussed in the attached report. This report will be discussed at the October 27, 2020 Finance/Administration Committee meeting.

DISCUSSION

Based on a financial review of FY20 results, the Water and Wastewater Systems' overall financial condition continues to remain strong with a stable revenue base and sound reserves. The District's actions to support long-term financial health over the years have lessened the severity of fiscal impacts from the COVID-19 pandemic. While the FY20 financial results are positive, much is still evolving relative to the pandemic and impacts may be greater in FY21.

Basic Financial Statements

The annual financial audit for FY20 has been completed by the District's external auditors, Lance, Soll and Lunghard (LSL) CPAs and Advisors, in accordance with Section 11889 of the Municipal Utility District (MUD) Act. The annual audited Basic Financial Statements prepared by District staff is attached. Also in accordance with the MUD Act, summary financial statements for the Water and Wastewater Systems were published in the East Bay Times on September 18 and 25, 2020. Once again the District has received an unmodified or "clean" opinion on its financial statements.

Government Accounting Standards Board (GASB) Statement No. 88 – Certain Disclosures Related to Debt, including Direct Borrowing and Direct Placements, will be implemented effective fiscal year 2020-2021 in accordance with GASB Statement No. 95 – Postponement of Effective Dates of Certain Authoritative Guidance, which provides a temporary relief to governments and other stakeholders in light of the COVID-19 pandemic.

Audit Communication Letter

The external auditors found no material weaknesses in District operations during their audit.

Annual Budget Performance

The District declared an emergency on March 17, 2020 in response to the COVID-19 pandemic to ensure its ability to respond rapidly to changing circumstances. A reduction in revenues and increased expenses were seen during the second half of the fiscal year in response to the pandemic.

Water System

Total Water System revenues of \$710.9 million were \$47.7 million above budget and operating expenses were less than budget by \$36.1 million. All revenue sources were above budget. The primary drivers of revenues above budget were Water Charges (\$23.9 million) and System Capacity Charges (SCC) (\$13.3 million). Water Charges revenue was 4.0 percent above budget and resulted from billed consumption of 147.8 million gallons per day (MGD) compared to a budget for 141 MGD. FY20 billed water consumption was 3.6 percent greater than FY19 billed consumption of 142.7 MGD. SCC revenues were strong prior to the pandemic. A strong third quarter yielding \$22.1 million mitigated impacts of the shelter-in-place orders in the fourth quarter. Total capital expenses were \$285.7 million or 85 percent of budget.

Wastewater System

Total Wastewater System revenues of \$144.2 million were \$4.0 million above budget and operating expenses were less than budget by \$5.7 million. The major sources of revenues above budget are Resource Recovery (\$2.1 million), Wastewater Capacity Charges (\$1.7 million), Taxes (\$0.9 million), and Treatment Charges and Permits (\$0.5 million). Lower revenues for Interest Income and Wet Weather Facility Charges offset these revenues. Total capital expenses were \$41.8 million or 86 percent of budget.

Financial Indicators

The Water and Wastewater Systems' overall financial conditions remain sound. Both systems exceeded target goals in District Policies 4.02 and 4.27 due to efforts to contain operating costs and maintain revenues. All other indicators reflect stable conditions as compared to the prior year.

The attached report provides more detailed financial information for FY20.

CCC:AMM:JMC

Attachment



E EAST BAY
MUNICIPAL UTILITY DISTRICT

Financial Review of Fiscal Year 2020





FINANCIAL REVIEW OF FISCAL YEAR 2020

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FINANCIAL REVIEW OF FISCAL YEAR 2020

Executive Summary



FINANCIAL REVIEW OF FISCAL YEAR 2020

Executive Summary

Introduction

This annual report summarizes the Water and the Wastewater Systems' financial performance for the Fiscal Year 2020. The scope of this report includes the financial statements, internal controls review, budgetary performance, and financial trends.

Summary

The Water and Wastewater Systems' overall financial condition continues to remain healthy with a stable revenue base and sound reserves. Debt service coverage for both enterprises was higher than projected. Rate Stabilization Funds for both enterprises remain unchanged compared to the prior fiscal year.

On March 19, 2020 Governor Gavin Newsom issued a Shelter-in-Place Executive Order in response to the COVID-19 pandemic. Fiscal impacts to the District for fiscal year ending June 30, 2020 as a result are discussed in this report.

Discussion

Based on a financial review of FY20 results, the Water and Wastewater Systems' overall financial condition continues to remain healthy with a stable revenue base and sound reserves. The District's actions to support long-term financial planning over the years have lessened the severity of fiscal impacts from the COVID-19 pandemic. While the FY20 financial results are positive, much is still evolving relative to the pandemic and impacts may be greater in FY21.

Basic Financial Statements

The annual financial audit for Fiscal Year 2020 has been completed by the District's external auditors, LSL (Lance, Soll and Lunghard) CPAs and Advisors, in accordance with Section 11889 of the Municipal Utility District (MUD) Act. The annual audited Basic Financial Statements prepared by District staff is attached. Also in accordance with the MUD Act, summary financial statements for the Water and Wastewater Systems were published in the East Bay Times on September 18 and 25, 2020. Once again the District has received an unmodified or "clean" opinion on its financial statements.

Government Accounting Standards Board (GASB) Statement No. 88 – Certain Disclosures Related to Debt, including Direct Borrowing and Direct Placements, will be implemented effective fiscal year 2020-2021 in accordance with GASB Statement No. 95 – Postponement of Effective Dates of Certain Authoritative Guidance, which provides a temporary relief to governments and other stakeholders in light of the COVID-19 pandemic.

Balance Sheet

Water and Wastewater balance sheets remain sound.

Net Position

Overall net position increased \$244 million due to \$291 million increase in net investment in capital assets and \$43 million decrease from unrestricted funds primarily capital contributions and net operating income.



FINANCIAL REVIEW OF FISCAL YEAR 2020

Capital Contributions

The District's capital contribution decreased \$34 million due to a \$20 million decrease in System Capacity Charge (SCC) and \$7.6 million decrease in Wastewater Capacity Fees due to a slowdown in property development. Construction service installments decreased \$5.9 million due to slowdown of construction projects in the Oakland and Berkeley service areas.

Operating Indicators

The Water and Wastewater indicators reflect a stable customer base, strong collection controls and reasonable rates.

Retirement

The District's net Pension and Health Benefit Obligation funded percentage increased slightly from 73.20 percent in FY18 to 73.78 percent in FY19 due primarily to increases in investment earnings.

Memorandum on Internal Controls and Required Communication

The external auditors found no material weaknesses in District operations during their audit.

Annual Budget Performance

Water System

Total Water System revenues of \$710.9 million were \$47.7 million above budget and operating expenses were less than budget by \$36.1 million. All revenue sources were above budget. The primary drivers of revenues of above budget were Water Charges by \$23.9 million or 4.0 percent, and SCC Revenues by \$13.3 million or 33 percent. The budget was based on billed water consumption of 141 million gallons per day (MGD). Actual consumption was 147.8 MGD or 6.8 MGD greater than budget, and an increase of 3.6 percent compared to FY19 billed consumption of 142.7 MGD. Total capital expenses were \$285.7 million or 85 percent of budget.

Wastewater System

Total Wastewater System revenues of \$144.2 million were \$4.0 million above budget and operating expenses were less than budget by \$5.7 million. The major sources of higher revenues were Resource Recovery, Wastewater Capacity Charges, Taxes, and Treatment Charges and Permits. Lower revenues for Interest Income and Wet Weather offset these revenues. Total capital expenses were \$41.8 million or 86 percent of budget.

Financial Indicators

Water and Wastewater Systems' overall financial conditions remain sound. Both systems exceeded District Policies 4.02 and 4.27 target goals due to continuing actions taken to contain operating costs and maintain revenues. All other indicators reflect stable conditions as compared to the prior year.



FINANCIAL REVIEW OF FISCAL YEAR 2020

Basic Financial Statements



EAST BAY MUNICIPAL UTILITY DISTRICT

FOR THE YEARS ENDED JUNE 30, 2020 AND 2019

BASIC FINANCIAL STATEMENTS

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EAST BAY MUNICIPAL UTILITY DISTRICT
BASIC FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2020 AND 2019

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EAST BAY MUNICIPAL UTILITY DISTRICT
 BASIC FINANCIAL STATEMENTS
 For the Years Ended June 30, 2020 and 2019

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EAST BAY MUNICIPAL UTILITY DISTRICT
BASIC FINANCIAL STATEMENTS
For the Years Ended June 30, 2020 and 2019

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INDEPENDENT AUDITORS' REPORT

To the Board of Directors
East Bay Municipal Utility District
Oakland, California

Report on the Financial Statements

We have audited the accompanying financial statements of each major fund and the aggregate remaining fund information, of the East Bay Municipal Utility District (the District) as of and for the year ended June 30, 2020 and 2019, and the related notes to the financial statements, which collectively comprise the District's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions 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; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the State Controller's Minimum Audit Requirements for California Special Districts. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

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

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





To the Board of Directors
East Bay Municipal Utility District
Oakland, California

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the each major fund and the aggregate remaining fund information of the East Bay Municipal Utility District, as of June 30, 2020 and 2019, and the respective changes in financial position and, where applicable, cash flows thereof 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, and other required supplementary information 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 opinions on the financial statements that collectively comprise the District's basic financial statements. The supplemental information as listed in the table of contents are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The supplemental 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. 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 supplemental information is fairly stated in all material respects in relation to the basic financial statements as a whole.



To the Board of Directors
East Bay Municipal Utility District
Oakland, California

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated August 31, 2020 on our consideration of the District's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the District's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the District's internal control over financial reporting and compliance.

Lance, Soll & Lughard, LLP

Sacramento, California
August 31, 2020

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EAST BAY MUNICIPAL UTILITY DISTRICT

Management's Discussion and Analysis

June 30, 2020

This section presents management's analysis of the East Bay Municipal Utility District's (the District) financial condition and activities as of and for the year ended June 30, 2020. Management's Discussion and Analysis (MD&A) is intended to serve as an introduction to the District's basic financial statements.

This information should be read in conjunction with the audited financial statements that follow this section. The District, as the primary governmental entity, includes within the financial statements, the financial position and activities of the District's Employees' Retirement System (Employees' Retirement System) as a component unit. The Employees' Retirement System issues its own financial statements and MD&A under a separate cover. Significant matters pertaining to the Employees' Retirement System have been included in the notes to the financial statements as deemed appropriate.

The information in this MD&A is presented under the following headings:

Organization and Business

Overview of the Basic Financial Statements

Financial Analysis

Capital Assets

Debt Administration

Request for Information

ORGANIZATION AND BUSINESS

The District provides water and wastewater services to industrial, commercial, residential, and public authority users. The Water System collects, transmits, treats, and distributes high quality water to approximately 60% (332 square miles) of the developed area within Alameda and Contra Costa counties of California and serves a population of about 1.4 million. The Wastewater System intercepts and treats wastewater from residences and industries within an 88-square-mile service area including the communities of Alameda, Albany, Berkeley, Emeryville, Oakland, Piedmont, and the Stege Sanitary District and serves a population of about 685,000. The District recovers cost of service primarily through user fees.

OVERVIEW OF THE BASIC FINANCIAL STATEMENTS

The District's basic financial statements are comprised of two components: (1) Fund Financial Statements and (2) Notes to Basic Financial Statements. The report also contains other required supplementary information in addition to the basic financial statements.

Fund Financial Statements. A fund is a grouping of related accounts that is used to maintain control over resources that have been segregated for specific activities or objectives. The District, like other special purpose governments, uses fund accounting to ensure and demonstrate compliance with financial-related legal requirements.

Proprietary Funds. The District's proprietary funds consist of two enterprise funds, the Water System and the Wastewater System. Enterprise funds are used to account for operations that are financed and operated in a manner similar to private business enterprises – where the intent of the governing body is that the costs (including depreciation) of providing goods or services to the general public on a continuing basis be financed or recovered primarily through user charges.

EAST BAY MUNICIPAL UTILITY DISTRICT

Management's Discussion and Analysis

June 30, 2020

The District's proprietary fund statements include:

The *Balance Sheet* presents information on the District's assets and deferred outflows, and liabilities and deferred inflows, with the difference between the two reported as *net position*. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the District is improving or deteriorating.

While the Balance Sheet provides information about the nature and amount of resources and obligations at year-end, the *Statement of Revenues, Expenses, and Changes in Net Position* presents the results of the District's operations over the course of the fiscal year and information as to how the net position changed during the year. This statement can be used as an indicator of the extent to which the District has successfully recovered its costs through user fees and other charges. All changes in net position are reported during the period in which the underlying event giving rise to the change occurs, regardless of the timing of the related cash flows. Thus, revenues and expenses are reported in this statement for some items that will result in cash flows in future fiscal periods, such as delayed collection of operating revenues and the expense of employee earned but unused vacation leave.

The *Statement of Cash Flows* presents changes in cash and cash equivalents resulting from operational, capital, noncapital, and investing activities. This statement summarizes the annual flow of cash receipts and cash payments, without consideration of the timing of the event giving rise to the obligation or receipt and excludes noncash accounting measures of depreciation or amortization of assets.

Fiduciary Fund. Fiduciary funds are used to account for resources held for the benefit of parties outside the government. The District's fiduciary fund consists of the Pension and Other Employee Benefit Trust fund, which is maintained to account for assets held by the Employees' Retirement System in a trustee capacity for vested and retired employees. The accounting used for fiduciary funds is much like that used for the proprietary funds.

Notes to Basic Financial Statements. The notes provide additional information that is essential to a full understanding of the data provided in the basic financial statements. The notes to basic financial statements can be found on pages 33 to 92 of this report.

Other Information. In addition to the basic financial statements and accompanying notes, this report also presents *certain required supplementary information* concerning the District's progress in funding its obligation to provide pension and other post-employment healthcare benefits to its employees. Such required supplementary information can be found on pages 93 to 100 of this report.

EAST BAY MUNICIPAL UTILITY DISTRICT

Management's Discussion and Analysis

June 30, 2020

FINANCIAL ANALYSIS

Financial Highlights

In fiscal year 2020, EBMUD continued to effectively manage its finances and strengthen its financial position by adopting sufficient water and wastewater rates to fund capital infrastructure improvements and to maintain strong financial performance. The following results of operations indicate a continuing strong and stable fiscal position.

The total assets and deferred outflows of the District exceeded the total liabilities and deferred inflows by \$2.1 billion (*net position*).

Net position increased by \$244 million or 13% during the fiscal year.

Capital assets increased by \$187 million or 4% to \$5.2 billion.

Operating revenue increased by \$47 million or 7% to \$694 million.

Operating expense increased by \$56 million or 13% to \$488 million.

Non-operating net expense decreased by \$8 million or 18% to (\$39) million.

Capital contributions decreased by \$34 million or 30% from the prior fiscal year.

Financial Position

In the current year, the District's total net position increased by \$244 million or 13% during the fiscal year. The Water System's net position increased by \$214 million or 14% and the Wastewater System's net position increased by \$30 million or 9%. Current and other assets decreased by \$31 million or 3%. Capital assets increased by \$187 million or 4%. By far the largest portion of the District's net position, 86% or \$1.8 billion, represents its investment in capital assets necessary to provide services.

In the previous fiscal year, the District's total net position increased by \$259 million or 16% during the fiscal year. The Water System's net position increased by \$217 million or 16% and the Wastewater System's net position increased by \$42 million or 14%. Current and other assets increased by \$171 million or 19%. Capital assets increased by \$195 million or 4%. By far the largest portion of the District's net position, 82% or \$1.5 billion, represents its investment in capital assets necessary to provide services.

EAST BAY MUNICIPAL UTILITY DISTRICT

Management's Discussion and Analysis

June 30, 2020

Table 1 shows the District's net position for the fiscal years ended June 30, 2020, 2019, and 2018:

Table 1
Net Position
Water and Wastewater
June 30, 2020 and 2019
(In thousands)

	<u>2020</u>	<u>2019</u>	<u>Variance</u>	<u>%</u>
Current and other assets	\$ 1,044,499	\$ 1,075,055	\$ (30,556)	(3)%
Capital assets	5,237,870	5,051,112	186,758	4%
Total assets	<u>6,282,369</u>	<u>6,126,167</u>	<u>156,202</u>	3%
Deferred outflow of resources	215,423	205,992	9,431	5%
Total assets and deferred outflow	<u>6,497,792</u>	<u>6,332,159</u>	<u>165,633</u>	3%
Current and other liabilities	960,028	905,933	54,095	6%
Long-term liabilities	3,324,076	3,442,657	(118,581)	(3)%
Total liabilities	<u>4,284,104</u>	<u>4,348,590</u>	<u>(64,486)</u>	(1)%
Deferred inflow of resources	80,281	94,307	(14,026)	(15)%
Total liabilities and deferred inflow	<u>4,364,385</u>	<u>4,442,897</u>	<u>(78,512)</u>	(2)%
Net position:				
Net investment in capital assets	1,840,222	1,549,619	290,603	19%
Restricted	250,370	253,567	(3,197)	(1)%
Unrestricted	42,815	86,076	(43,261)	(50)%
Total net position	<u>\$ 2,133,407</u>	<u>\$ 1,889,262</u>	<u>\$ 244,145</u>	13%

Table 1
Net Position
Water and Wastewater
June 30, 2019 and 2018
(In thousands)

	<u>2019</u>	<u>2018</u>	<u>Variance</u>	<u>%</u>
Current and other assets	\$ 1,075,055	\$ 904,282	\$ 170,773	19%
Capital assets	5,051,112	4,855,907	195,205	4%
Total assets	<u>6,126,167</u>	<u>5,760,189</u>	<u>365,978</u>	6%
Deferred outflow of resources	205,992	169,099	36,893	22%
Total assets and deferred outflow	<u>6,332,159</u>	<u>5,929,288</u>	<u>402,871</u>	7%
Current and other liabilities	905,933	899,620	6,313	1%
Long-term liabilities	3,442,657	3,317,300	125,357	4%
Total liabilities	<u>4,348,590</u>	<u>4,216,920</u>	<u>131,670</u>	3%
Deferred inflow of resources	94,307	82,478	11,829	14%
Total liabilities and deferred inflow	<u>4,442,897</u>	<u>4,299,398</u>	<u>143,499</u>	3%
Net position:				
Net investment in capital assets	1,549,619	1,494,381	55,238	4%
Restricted	253,567	256,299	(2,732)	(1)%
Unrestricted	86,076	(120,790)	206,866	(171)%
Total net position	<u>\$ 1,889,262</u>	<u>\$ 1,629,890</u>	<u>\$ 259,372</u>	16%

EAST BAY MUNICIPAL UTILITY DISTRICT

Management's Discussion and Analysis

June 30, 2020

Results of Operations

In the current fiscal year, the District's total operating revenue of \$694 million for the year increased by \$47 million and total operating expense of \$488 million for the year increased by \$56 million. The change in net position (including capital contributions) decreased from \$279 million in the previous fiscal year to \$244 million in the current fiscal year. The District's total net position increased from \$1,889 million to \$2,133 million during the current fiscal year.

The major components of the District's results of operations in the current fiscal year were:

- Water revenue increased by \$47 million or 9% due to a 6.5% water rate increase at the beginning of fiscal year 2020 and a 3.5% increase of billed water consumption. The major categories of billed water consumption consist of a 6.0% increase in residential customers' water consumption and a 2.4% decrease in industrial customers' water consumption.
- Wastewater revenue remained largely stable in the fiscal year 2020 compared to fiscal year 2019, increasing \$1.6 million or 2%.
- The power revenue decreased by \$4 million or 36% due to dry weather and less water to generate hydropower in the current year.
- Operating expense increased by \$56 million, primarily as increases of \$33 million in pension expense, \$9 million in raw water expenses, \$9 million in water treatment and distribution, \$4 million in sewer treatment plant operations, \$5 million in depreciation on utility plant and vehicle, were offset by decrease of \$5 million in general administration expense.
- Net nonoperating expense decreased by \$8 million, primarily due to a \$5 million increase in property tax received and \$6 million decrease in bond interest expense and amortization, offset by \$3 million decrease in investment income resulting from fair market value fluctuation of investments. Included in non-operating net expense is investment income (loss), consisting of interest earned on investment and the net change in the fair value of investments were \$14 million and \$1 million respectively in the current fiscal year, and \$13 million and \$5 respectively in the prior fiscal year.
- Capital contributions decreased by \$34 million. After a continued high rate of development since fiscal year 2017 and a record high in fiscal year 2019, System Capacity Charges decreased by \$20 million and Wastewater Capacity Fees decreased by \$8 million in fiscal year 2020 reflecting a slowdown in property development. The construction service installments decreased by \$6 million compared to fiscal year 2019 due to slowdown of construction projects in the Oakland and Berkeley service areas. Grants and other reimbursements received remained stable in the current fiscal year compared to the prior year. Page 17 contains additional capital contributions information.

EAST BAY MUNICIPAL UTILITY DISTRICT

Management's Discussion and Analysis

June 30, 2020

In the previous fiscal year, the District's total operating revenue of \$647 million for the year increased by \$48 million and total operating expense of \$432 million for the year increased by \$2 million. The change in net position (including capital contributions) increased from \$210 million in fiscal year 2018 to \$279 million in the fiscal year 2019. The District's total net position increased from \$1,630 million to \$1,889 million during the fiscal year 2019, after a \$19 million decrease of prior period adjustments in net position for debt refunding costs and capitalization of Wastewater System inventories..

The major components of the District's results of operations in fiscal year 2019 were:

- Water revenue increased by \$40 million or 8% due to a 9% water rate increase at the beginning of fiscal year 2019, offset by a 1% decrease in billed water consumption.
- Wastewater revenue increased by \$4 million or 4% primarily due to a 5% wastewater rate increase at the beginning of fiscal year 2019.
- Operating expense remained stable, primarily as increases of \$4 million in raw water expenses, \$4 million in water treatment and distribution, \$5 million in financial and risk management (primarily liabilities claims), \$4 million in depreciation on utility plant and vehicle, were offset by decreases of \$7 million in general administration and \$8 million in pension expense.
- Net nonoperating expense decreased by \$11 million, primarily due to an \$11 million increase in investment income resulting from fair market value increase of investments. Included in non-operating net expense is investment income (loss), consisting of interest earned on investment and the net change in the fair value of investments were \$13 million and \$5 million respectively in fiscal year 2019, and \$9 million and (\$2) respectively in fiscal year 2018.
- Capital contributions increased by \$12 million primarily reflecting a \$4 million increase in System Capacity Charges and an \$2 million increase in Wastewater Capacity Fees due to increasing multi-family dwelling projects, particularly in the Oakland and Berkeley service areas. The construction service installments increased by \$8 million compared to fiscal year 2018 due to increased construction projects in the Oakland and Berkeley service areas. Grants and other reimbursements received decreased by \$2 million in fiscal year 2019 compared to fiscal year 2018. Page 17 contains additional capital contributions information.

EAST BAY MUNICIPAL UTILITY DISTRICT

Management's Discussion and Analysis

June 30, 2020

Table 2 shows changes in the District's net position for the fiscal years ended June 30, 2020, 2019, and 2018:

Table 2

Changes in Net Position

Water and Wastewater

June 30, 2020 and 2019

(In thousands)

	<u>2020</u>	<u>2019</u>	<u>Variance</u>	<u>%</u>
Operating Revenue:				
Water	\$ 567,394	\$ 520,344	\$ 47,050	9%
Sewer	91,956	90,323	1,633	2%
Power	7,223	11,272	(4,049)	(36)%
Wet weather facilities charges	27,090	25,113	1,977	8%
Total operating revenue	<u>693,663</u>	<u>647,052</u>	<u>46,611</u>	<u>7%</u>
Operating Expense:				
Raw water	53,246	44,626	8,620	19%
Water treatment & distribution	126,647	117,557	9,090	8%
Recreation areas, net	6,674	6,126	548	9%
Sewer lines & pumps	16,365	15,881	484	3%
Sewer treatment plant operations	41,504	37,954	3,550	9%
Customer accounting & collecting	19,922	20,282	(360)	(2)%
Financial and risk management	25,550	23,069	2,481	11%
Facilities management	5,980	5,020	960	19%
General administration	31,722	36,843	(5,121)	(14)%
Pension expense	14,523	(18,259)	32,782	(180)%
OPEB expense	(3,984)	(3,312)	(672)	20%
Depreciation (excluding amounts reported within the Water and Wastewater operations)	136,631	131,997	4,634	4%
Amortization	13,252	14,401	(1,149)	(8)%
Total operating expense	<u>488,032</u>	<u>432,185</u>	<u>55,847</u>	<u>13%</u>
Net operating income (expense)	<u>205,631</u>	<u>214,867</u>	<u>(9,236)</u>	<u>(4)%</u>
Nonoperating income (expense):				
Investment income	14,902	18,105	(3,203)	(18)%
Taxes & subventions	46,626	41,565	5,061	12%
Interest & amortization of bond expenses, net	(113,506)	(119,574)	6,068	(5)%
Increase (decrease) of Equity in JPA partnership fund	(3,325)	(3,545)	220	(6)%
Other income	16,194	15,928	266	2%
Total nonoperating income (expense), net	<u>(39,109)</u>	<u>(47,521)</u>	<u>8,412</u>	<u>(18)%</u>
Income (loss) before contributions	166,522	167,346	(824)	(0)%
Capital contributions	77,623	111,350	(33,727)	(30)%
Change in net position	244,145	278,696	(34,551)	(12)%
Total net position – beginning	1,889,262	1,629,890	259,372	16%
Prior Period adjustment - Debt Refunding	-	(23,802)	23,802	N/A
Changes in accounting estimates	-	4,478	(4,478)	N/A
Total net position – ending	<u>\$ 2,133,407</u>	<u>\$ 1,889,262</u>	<u>\$ 244,145</u>	<u>13%</u>

EAST BAY MUNICIPAL UTILITY DISTRICT

Management's Discussion and Analysis

June 30, 2020

Table 2 (Continued)

Changes in Net Position

Water and Wastewater

June 30, 2019 and 2018

(In thousands)

	<u>2019</u>	<u>2018</u>	<u>Variance</u>	<u>%</u>
Operating Revenue:				
Water	\$ 520,344	\$ 480,745	\$ 39,599	8%
Sewer	90,323	86,514	3,809	4%
Power	11,272	7,544	3,728	49%
Wet weather facilities charges	25,113	24,293	820	3%
Total operating revenue	<u>647,052</u>	<u>599,096</u>	<u>47,956</u>	8%
Operating Expense:				
Raw water	44,626	40,349	4,277	11%
Water treatment & distribution	117,557	113,422	4,135	4%
Recreation areas, net	6,126	5,682	444	8%
Sewer lines & pumps	15,881	13,422	2,459	18%
Sewer treatment plant operations	37,954	38,220	(266)	(1)%
Customer accounting & collecting	20,282	19,434	848	4%
Financial and risk management	23,069	17,518	5,551	32%
Facilities management	5,020	5,523	(503)	(9)%
General administration	36,843	43,839	(6,996)	(16)%
Pension expense	(18,259)	(10,183)	(8,076)	79%
OPEB expense	(3,312)	(1,153)	(2,159)	187%
Depreciation (excluding amounts reported within the Water and Wastewater operations)	131,997	128,076	3,921	3%
Amortization	14,401	16,197	(1,796)	(11)%
Total operating expense	<u>432,185</u>	<u>430,346</u>	<u>1,839</u>	0%
Net operating income (expense)	214,867	168,750	46,117	27%
Nonoperating income (expense):				
Investment income	18,105	7,131	10,974	154%
Taxes & subventions	41,565	41,480	85	0%
Interest & amortization of bond expenses, net	(119,574)	(120,719)	1,145	(1)%
Increase (decrease) of Equity in JPA partnership fund	(3,545)	(3,380)	(165)	5%
Other income	15,928	17,420	(1,492)	(9)%
Total nonoperating income (expense), net	<u>(47,521)</u>	<u>(58,068)</u>	<u>10,547</u>	(18)%
Income (loss) before contributions	167,346	110,682	56,664	51%
Capital contributions	111,350	98,997	12,353	12%
Change in net position	278,696	209,679	69,017	33%
Total net position – beginning	1,629,890	1,528,383	101,507	7%
Prior Period adjustment per implementation of GASB 75	-	(108,172)	108,172	N/A
Prior Period adjustment - Debt Refunding	(23,802)	-	(23,802)	N/A
Changes in accounting estimates	4,478	-	4,478	N/A
Total net position – ending	<u>\$ 1,889,262</u>	<u>\$ 1,629,890</u>	<u>\$ 259,372</u>	16%

EAST BAY MUNICIPAL UTILITY DISTRICT

Management's Discussion and Analysis

June 30, 2020

Liquidity

The District had \$733 million in combined current and noncurrent District Cash and Investments as of June 30, 2020, a decrease of \$33 million compared to \$766 million as of June 30, 2019. Components of cash and investments for the year ended June 30, 2020 were:

- Water System total combined current and noncurrent cash and investments decreased by \$26 million compared to the same date of the previous fiscal year. Net increase (decrease) in cash and cash equivalents increased by \$258 million compared to the prior year. This was primarily due to an increase of \$442 million in net proceeds from the sale and purchase of securities in investing activities, and an increase of \$50 million in operating activities offset by an increase of \$239 million in net cash from capital and related financing activities. Net increase (decrease) in noncurrent investments decreased by \$5 million was primarily due to reallocation of investments between short-term and long-term.
- Wastewater System total combined current and noncurrent cash and investments decreased by \$7 million compared to the same date in the previous fiscal year. Net increase (decrease) in cash and cash equivalents decreased by \$24 million compared to the prior year. This was primarily due to a decrease of \$7 million from operating activities, an increase of \$5 million spending to pay-down extended commercial paper in capital and related financing activities, and a decrease of \$13 million from the reallocation of investments between short-term and long-term. Net increase (decrease) in noncurrent investments decreased by \$12 million also primarily due to reallocation of investments between short-term and long-term.

EAST BAY MUNICIPAL UTILITY DISTRICT

Management's Discussion and Analysis

June 30, 2020

Table 3 shows the District's cash flow for the fiscal years ended June 30, 2020, 2019, and 2018:

Table 3
Cash Flows
Water and Wastewater System
June 30, 2020 and 2019
(In thousands)

	<u>2020</u>	<u>2019</u>	<u>Variance</u>	<u>%</u>
Cash and cash equivalents:				
Beginning of year	\$ 178,179	\$ 100,943	\$ 77,236	77%
Net cash provided by operating activities	387,106	343,354	43,752	13%
Net cash provided by noncapital financing activities	46,626	41,565	5,061	12%
Net cash provided by (used in) capital and related financing activities	(483,752)	(239,902)	(243,850)	102%
Net cash provided by (used in) investing activities	361,564	(67,781)	429,345	(633)%
Net increase (decrease) in cash and cash equivalents	<u>311,544</u>	<u>77,236</u>	<u>234,308</u>	303%
End of period	<u>\$ 489,723</u>	<u>\$ 178,179</u>	<u>\$ 311,544</u>	175%
Investments:				
Beginning of year	\$ 588,161	\$ 502,698	\$ 85,463	17%
Net increase (decrease) in investments	<u>(345,191)</u>	<u>85,463</u>	<u>(430,654)</u>	(504)%
End of period	<u>\$ 242,970</u>	<u>\$ 588,161</u>	<u>\$ (345,191)</u>	(59)%
Total District Cash and Investments	<u>\$ 732,693</u>	<u>\$ 766,340</u>	<u>\$ (33,647)</u>	(4)%

Table 3
Cash Flows
Water and Wastewater System
June 30, 2019 and 2018
(In thousands)

	<u>2019</u>	<u>2018</u>	<u>Variance</u>	<u>%</u>
Cash and cash equivalents:				
Beginning of year	\$ 100,943	\$ 269,057	\$ (168,114)	(62)%
Net cash provided by operating activities	343,354	342,147	1,207	0%
Net cash provided by noncapital financing activities	41,565	41,480	85	0%
Net cash provided by (used in) capital and related financing activities	(239,902)	(453,499)	213,597	(47)%
Net cash provided by (used in) investing activities	<u>(67,781)</u>	<u>(98,242)</u>	<u>30,461</u>	(31)%
Net increase (decrease) in cash and cash equivalents	<u>77,236</u>	<u>(168,114)</u>	<u>245,350</u>	(146)%
End of period	<u>\$ 178,179</u>	<u>\$ 100,943</u>	<u>\$ 77,236</u>	77%
Investments:				
Beginning of year	\$ 502,698	\$ 398,759	\$ 103,939	26%
Net increase (decrease) in investments	<u>85,463</u>	<u>103,939</u>	<u>(18,476)</u>	(18)%
End of period	<u>\$ 588,161</u>	<u>\$ 502,698</u>	<u>\$ 85,463</u>	17%
Total District Cash and Investments	<u>\$ 766,340</u>	<u>\$ 603,641</u>	<u>\$ 162,699</u>	27%

EAST BAY MUNICIPAL UTILITY DISTRICT

Management's Discussion and Analysis

June 30, 2020

Cash and Investments by Fund

In fiscal years 2020 and 2019, total cash and investments available for operating and capital activities are reported in current and noncurrent assets as unrestricted and restricted funds. Significant activities in current fiscal year were as follows: the Water System spent \$24 million in capital reserves to pay down commercial paper and \$5 million in funds received for construction. Wastewater System spent \$5 million in capital reserves to pay down extendable commercial paper.

In the previous fiscal year, significant activities were as follows: Water System increased reserves of \$3 million in working capital, \$172 million in capital reserves to fund capital projects and equipment and use of \$5 million in funds received for construction. Wastewater System increased \$5 million in capital reserves to fund capital projects and equipment.

Operating and Capital Reserves are components of Unrestricted Cash and Investments. Individual funds within Operating and Capital Reserves are funded pursuant to Board policy but are unrestricted as to use. The Unrestricted Reserve Balances indicate the District's ability to meet unanticipated revenue declines or expenditure increases. Unrestricted reserves are committed by the Board of Directors. This is distinct from restricted reserves which are legally constrained by law or by third party. For additional information, see Note 1H to the financial statements.

EAST BAY MUNICIPAL UTILITY DISTRICT

Management's Discussion and Analysis

June 30, 2020

Table 4 shows the District's cash and investment by fund for the fiscal years ended June 30, 2020, 2019, and 2018:

Table 4

Cash and Investment by Fund

Water and Wastewater

June 30, 2020 and 2019

(In thousands)

	Water System		Wastewater System		Total		Increase (decrease)	
	2020	2019	2020	2019	2020	2019	Amount	%
Unrestricted cash and investment								
Operating reserves:								
Rate stabilization fund	\$ 95,000	\$ 95,000	\$ 24,090	\$ 24,090	\$ 119,090	\$ 119,090	\$ -	0%
Working capital reserve	74,800	72,400	18,800	18,300	93,600	90,700	2,900	3%
Self-insurance	7,753	7,374	1,202	1,116	8,955	8,490	465	5%
Workers compensation	6,099	5,727	945	867	7,044	6,594	450	7%
Total operating reserves	<u>183,652</u>	<u>180,501</u>	<u>45,037</u>	<u>44,373</u>	<u>228,689</u>	<u>224,874</u>	<u>3,815</u>	2%
Capital reserves:								
Reserved for capital projects	384,050	411,964	21,067	38,813	405,117	450,777	(45,660)	(10)%
Reserve funded CIP - Wastewater	-	-	15,336	15,093	15,336	15,093	243	2%
Vehicle replacements	13,484	9,088	-	-	13,484	9,088	4,396	48%
Equipment replacements	2,580	2,657	26,589	17,587	29,169	20,244	8,925	44%
Total capital reserves	<u>400,114</u>	<u>423,709</u>	<u>62,992</u>	<u>71,493</u>	<u>463,106</u>	<u>495,202</u>	<u>(32,096)</u>	(6)%
Total Unrestricted cash and investment	<u>583,766</u>	<u>604,210</u>	<u>108,029</u>	<u>115,866</u>	<u>691,795</u>	<u>720,076</u>	<u>(28,281)</u>	(4)%
Restricted Cash and Investments								
Bond interest and redemption fund	457	844	21	18	478	862	(384)	(45)%
Debt service reserve fund	3,763	3,719	-	-	3,763	3,719	44	1%
Funds received for construction	33,827	38,931	-	-	33,827	38,931	(5,104)	(13)%
FERC partnership fund	2,276	2,203	-	-	2,276	2,203	73	3%
Monetary reserve	554	549	-	-	554	549	5	1%
Total restricted cash and investments	<u>40,877</u>	<u>46,246</u>	<u>21</u>	<u>18</u>	<u>40,898</u>	<u>46,264</u>	<u>(5,366)</u>	(12)%
Total District Cash and Investments	<u>\$ 624,643</u>	<u>\$ 650,456</u>	<u>\$ 108,050</u>	<u>\$ 115,884</u>	<u>\$ 732,693</u>	<u>\$ 766,340</u>	<u>\$ (33,647)</u>	(4)%

Table 4

Cash and Investment by Fund

Water and Wastewater

June 30, 2019 and 2018

(In thousands)

	Water System		Wastewater System		Total		Increase (decrease)	
	2019	2018	2019	2018	2019	2018	Amount	%
Unrestricted cash and investment								
Operating reserves:								
Rate stabilization fund	\$ 95,000	\$ 95,000	\$ 24,090	\$ 24,090	\$ 119,090	\$ 119,090	\$ -	0%
Working capital reserve	72,400	69,100	18,300	17,600	90,700	86,700	4,000	5%
Self-insurance	7,374	6,974	1,116	1,135	8,490	8,109	381	5%
Workers compensation	5,727	5,422	867	883	6,594	6,305	289	5%
Total operating reserves	<u>180,501</u>	<u>176,496</u>	<u>44,373</u>	<u>43,708</u>	<u>224,874</u>	<u>220,204</u>	<u>4,670</u>	2%
Capital reserves:								
Reserved for capital projects	411,964	254,186	38,813	35,731	450,777	289,917	160,860	55%
Reserve funded CIP - Wastewater	-	-	15,093	14,803	15,093	14,803	290	2%
Vehicle replacements	9,088	7,387	-	-	9,088	7,387	1,701	23%
Equipment replacements	2,657	3,190	17,587	18,007	20,244	21,197	(953)	(4)%
Total capital reserves	<u>423,709</u>	<u>264,763</u>	<u>71,493</u>	<u>68,541</u>	<u>495,202</u>	<u>333,304</u>	<u>161,898</u>	49%
Total Unrestricted cash and investment	<u>604,210</u>	<u>441,259</u>	<u>115,866</u>	<u>112,249</u>	<u>720,076</u>	<u>553,508</u>	<u>166,568</u>	30%
Restricted Cash and Investments								
Bond interest and redemption fund	844	97	18	18	862	115	747	650%
Debt service reserve fund	3,719	3,654	-	-	3,719	3,654	65	2%
Funds received for construction	38,931	43,659	-	-	38,931	43,659	(4,728)	(11)%
FERC partnership fund	2,203	2,164	-	-	2,203	2,164	39	2%
Monetary reserve	549	541	-	-	549	541	8	1%
Total restricted cash and investments	<u>46,246</u>	<u>50,115</u>	<u>18</u>	<u>18</u>	<u>46,264</u>	<u>50,133</u>	<u>(3,869)</u>	(8)%
Total District Cash and Investments	<u>\$ 650,456</u>	<u>\$ 491,374</u>	<u>\$ 115,884</u>	<u>\$ 112,267</u>	<u>\$ 766,340</u>	<u>\$ 603,641</u>	<u>\$ 162,699</u>	27%

EAST BAY MUNICIPAL UTILITY DISTRICT

Management's Discussion and Analysis

June 30, 2020

Capital Contributions

Capital contributions primarily consist of System Capacity Charges (SCCs) and Wastewater Capacity Fees (WCFs). In addition, the District can receive contributions when the District's facilities need to be relocated during construction projects. The District also receives state and federal grants to fund capital projects.

The Water System's SCCs consist of charges collected from all applicants who request a new water service connection or a larger water meter size. These charges vary depending on geographic region. The SCC pays for the applicant's share of District capital facilities, including those that serve the entire water system such as the aqueducts and raw water facilities, regional facilities such as treatment plants and distribution facilities, and future water supply upgrades needed to meet long-term increases in water demand created by new customers. The portion of the SCC that pays for the future water supply is restricted and the remainder is unrestricted.

The Wastewater System's WCFs are treated as unrestricted funds and pay for the applicant's share of Wastewater facilities including the main wastewater treatment plant, interceptors, and wet weather facilities.

Capital contributions decreased \$34 million or 30% as compared to the previous fiscal year. After a continued high rate of development since fiscal year 2017 and a record high in fiscal year 2019, SCCs decreased by \$20 million and WCFs decreased by \$8 million in fiscal year 2020 reflecting a slowdown in property development. Earned contribution decreased by \$6 million also due to slowdown of construction projects in the Oakland and Berkeley service areas. Grants and other reimbursements remained stable in the current fiscal year compared to the prior year.

Table 5 shows the District's capital contributions received for the fiscal years ended June 30, 2020, 2019, and 2018:

Table 5

Capital Contributions
Water and Wastewater
June 30, 2020 and 2019
(In thousands)

	Water System		Wastewater System		Total		Increase (decrease)	
	2020	2019	2020	2019	2020	2019	Amount	%
System capacity charges	\$ 53,307	\$ 73,496	\$ -	\$ -	\$ 53,307	\$ 73,496	\$ (20,189)	(27)%
Wastewater capacity fees	-	-	5,697	13,260	5,697	13,260	(7,563)	(57)%
Earned contributions on construction	17,780	23,750	-	(52)	17,780	23,698	(5,918)	(25)%
Grants and other reimbursements	839	896	-	-	839	896	(57)	(6)%
Totals	\$ 71,926	\$ 98,142	\$ 5,697	\$ 13,208	\$ 77,623	\$ 111,350	\$ (33,727)	(30)%

Table 5

Capital Contributions
Water and Wastewater
June 30, 2019 and 2018
(In thousands)

	Water System		Wastewater System		Total		Increase (decrease)	
	2019	2018	2019	2018	2019	2018	Amount	%
System capacity charges	\$ 73,496	\$ 69,270	\$ -	\$ -	\$ 73,496	\$ 69,270	\$ 4,226	6%
Wastewater capacity fees	-	-	13,260	11,418	13,260	11,418	1,842	16%
Earned contributions on construction	23,750	15,518	(52)	16	23,698	15,534	8,164	53%
Grants and other reimbursements	896	2,775	-	-	896	2,775	(1,879)	(68)%
Totals	\$ 98,142	\$ 87,563	\$ 13,208	\$ 11,434	\$ 111,350	\$ 98,997	\$ 12,353	12%

EAST BAY MUNICIPAL UTILITY DISTRICT

Management's Discussion and Analysis

June 30, 2020

CAPITAL ASSETS

The District had \$5.2 billion (net of accumulated depreciation) invested in a broad range of utility capital assets as of June 30, 2020. Total capital assets were \$5.1 billion as of June 30, 2019. The investment in capital assets includes land, buildings, improvements, water treatment plants, filter plants, aqueducts, water transmission and distribution mains, water storage facilities, pump stations, water reclamation facilities, wastewater and wet weather treatment facilities, machinery and equipment. In the current fiscal year, capital assets increased by \$187 million or 4% over the prior fiscal year. In fiscal year 2019, capital assets increased by \$195 million or 4% over fiscal year 2018. Annual changes are consistent with the District's capital improvement program.

The Water System had \$4.5 billion (net of accumulated depreciation) invested in a broad range of utility capital assets as of June 30, 2020. The investment in capital assets includes land, buildings, improvements, water treatment plants, filter plants, aqueducts, water transmission and distribution mains, water storage facilities, power generation, pump stations, water reclamation facilities, machinery and equipment.

The Wastewater System had \$758 million (net of accumulated depreciation) invested in a broad range of utility capital assets as of June 30, 2020. The investment in capital assets includes land, buildings, improvements, power generation, wastewater and wet weather treatment facilities, machinery and equipment.

Table 6 shows the District's capital assets for the fiscal years ended June 30, 2020, 2019, and 2018:

Table 6
Capital Assets, Net of Depreciation
Water and Wastewater
June 30, 2020 and 2019
(In thousands)

	Water System		Wastewater System		Total		Increase/(decrease)	
	2020	2019	2020	2019	2020	2019	Amount	%
Structures, buildings, and equipment	\$ 3,908,424	\$ 3,716,296	\$ 638,147	\$ 651,379	\$ 4,546,571	\$ 4,367,675	\$ 178,896	4.1%
Land and rights of way	73,790	70,917	21,409	21,409	95,199	92,326	2,873	3.1%
Construction work in progress	497,634	522,919	98,466	68,192	596,100	591,111	4,989	0.8%
Totals	\$ 4,479,848	\$ 4,310,132	\$ 758,022	\$ 740,980	\$ 5,237,870	\$ 5,051,112	\$ 186,758	3.7%

EAST BAY MUNICIPAL UTILITY DISTRICT

Management's Discussion and Analysis

June 30, 2020

Table 6 (Continued)

Capital Assets, Net of Depreciation

Water and Wastewater

June 30, 2019 and 2018

(In thousands)

	Water System		Wastewater System		Total		Increase/(decrease)	
	2019	2018	2019	2018	2019	2018	Amount	%
Structures, buildings, and equipment	\$ 3,716,296	\$ 3,602,573	\$ 651,379	\$ 650,584	\$ 4,367,675	\$ 4,253,157	\$ 114,518	2.7%
Land and rights of way	70,917	65,001	21,409	21,357	92,326	86,358	5,968	6.9%
Construction work in progress	522,919	472,446	68,192	43,946	591,111	516,392	74,719	14.5%
Totals	\$ 4,310,132	\$ 4,140,020	\$ 740,980	\$ 715,887	\$ 5,051,112	\$ 4,855,907	\$ 195,205	4.0%

The District's net revenue, long-term debt, and contributions from customers are used to finance capital investments. More detailed information about the District's capital assets is presented in Note 3 to the basic financial statements.

This year's major capital expenditures included:

Water System:

Pipeline Infrastructure Renewals	\$ 51,360
Reservoir Rehab/Maintenance	51,005
Treatment Plant Upgrades	40,884
Pumping Plant Rehabilitation	40,164
Open Cut Reservoir Rehab	31,753
Maloney PZ Improvements	24,553
Trench Soils Storage Sites	23,725
Administration Building Modifications	20,811
Additional Supplemental Supply Projects	15,878
Pipeline Infrastructure Renew Historic	15,053
Service Lateral Replacements	14,324
West of Hills Master Plan	14,167
Large Diameter Pipelines	13,649
Mokelumne Aqueduct No 2 & 3 Relining Project	11,125
Raw Water Studies and Improvements	9,978
SRV Recycled Water Program	9,482
WTTIP Water Treatment Plant Improvements	8,714
Pipeline Relocations	6,086
Water Conservation Project	5,737
Raw Water Aqueduct O&M Improvements	5,378

Wastewater System:

General Wastewater	\$ 22,270
Interceptors and Pump Stations	20,208
Primary Treatment	14,193
Digesters	14,091
Preliminary Treatment	6,825
Power Generation and Biogas	3,847
Resource Recovery	3,302
Wet Weather Facilities	3,047
Utilities and Sitework	2,884
Effluent Discharge	2,481
Electricals and Controls	1,977
Nutrients	1,832

EAST BAY MUNICIPAL UTILITY DISTRICT

Management's Discussion and Analysis

June 30, 2020

DEBT ADMINISTRATION

The District had total long-term debt outstanding of \$3.4 billion as of June 30, 2020, a 3% decrease from June 30, 2019. Total long-term debt outstanding was \$3.5 billion as of June 30, 2019, a 4% increase from June 30, 2018. Components of the District's long-term debt portfolio as of June 30, 2020 are:

- The Water System had total long-term debt outstanding of \$3.0 billion.
- The Wastewater System had total long-term debt outstanding of \$394 million.

Table 7 shows the District's long-term debt outstanding for the fiscal years ended June 30, 2020, 2019, and 2018:

Table 7
Long -Term Debt
(Net of Unamortized Costs)
Water and Wastewater
June 30, 2020 and 2019
(In thousands)

	Water System		Wastewater System		Total		Increase (decrease)	
	2020	2019	2020	2019	2020	2019	Amount	%
Revenue bonds*	\$ 2,639,641	\$ 2,733,864	\$ 383,781	\$ 398,605	\$ 3,023,422	\$ 3,132,469	\$ (109,047)	(3)%
Commercial paper	335,800	359,800	10,000	15,000	345,800	374,800	(29,000)	(8)%
Loans	35,069	12,886	-	-	35,069	12,886	22,183	172%
Totals	\$ 3,010,510	\$ 3,106,550	\$ 393,781	\$ 413,605	\$ 3,404,291	\$ 3,520,155	\$ (115,864)	(3)%

Table 7
Long -Term Debt
(Net of Unamortized Costs)
Water and Wastewater
June 30, 2019 and 2018
(In thousands)

	Water System		Wastewater System		Total		Increase (decrease)	
	2019	2018	2019	2018	2019	2018	Amount	%
Revenue bonds*	\$ 2,733,864	\$ 2,592,137	\$ 398,605	\$ 407,937	\$ 3,132,469	\$ 3,000,074	\$ 132,395	4%
Commercial paper	359,800	359,800	15,000	15,000	374,800	374,800	-	0%
Loans	12,886	14,061	-	-	12,886	14,061	(1,175)	(8)%
Totals	\$ 3,106,550	\$ 2,965,998	\$ 413,605	\$ 422,937	\$ 3,520,155	\$ 3,388,935	\$ 131,220	4%

*Includes unamortized bond premium and discount. For Water System, the unamortized bond premium was \$243 million, \$272 million, and \$232 million as of June 30, 2020, 2019 and 2018, respectively. For Wastewater System, the net of unamortized bond premium and discount was \$25 million, \$29 million, and \$28 million as of June 30, 2020, 2019 and 2018, respectively.

EAST BAY MUNICIPAL UTILITY DISTRICT

Management's Discussion and Analysis

June 30, 2020

It is the policy of the District to maintain a reasonable balance between debt and current revenue financing of capital projects. The following targets provide the framework for financing capital projects:

Debt Service Coverage Ratio: Maintain an annual revenue bond debt service coverage ratio of at least 1.6 times. As of June 30, 2020, the coverage ratio for Water was 2.28 and for Wastewater was 2.59; the overall District ratio was 2.32.

Debt-Funded Capital Spending: Limit debt-funded capital to no more than 65% of the total capital program over each five-year planning period. As of June 30, 2020, the percentage of debt-funded capital spending for Water was 34% and for Wastewater was 10%; the overall District percentage was 31%.

Extendable Commercial Paper and Un-hedged Variable Rate Debt: Maintain an annual limit of 25% of outstanding long-term debt. As of June 30, 2020, the percentage of extended commercial paper and un-hedged variable rate debt compared to total outstanding long-term debt for Water was 12% and for Wastewater was 3%; the overall District percentage was 11%.

Revenue-supported debt authorization for the District can be approved by the District's Board of Directors, subject to a referendum process. At June 30, 2020, the Water System had \$602 million and the Wastewater System had \$186 million in authorized but unissued revenue bonds.

The District's credit ratings are outlined in Table 8.

Table 8
Credit Ratings
Water and Wastewater
June 30, 2020

District debt by type	Rating by		
	Standard & Poor's	Moody's Investors Service	Fitch
Water system:			
Fixed Rate Revenue Bonds	AAA	Aa1	AA+
Variable Rate Revenue Bonds			
Long-term Underlying Rating	AAA	Aa1	-
Short-Term Rating	A-1/A-1+	VMIG-1	-
Commercial Paper Notes	A-1+	P-1	-
Wastewater system:			
Fixed Rate Revenue Bonds	AAA	Aa1	AA+
Extendable Commercial Paper	A-1+	P-1	F1+

For detail credit rating by bond issue, please visit our website at <http://www.ebmud.com>.

Additional information on the District's long-term debt can be found in Note 7 to the financial statements.

EAST BAY MUNICIPAL UTILITY DISTRICT

Management's Discussion and Analysis

June 30, 2020

REQUEST FOR INFORMATION

This financial report is designed to provide ratepayers and creditors with a general overview of the District's finances and demonstrate the District's accountability for the monies it receives. If you have any questions about this report or need additional information, please contact: the Controller, Accounting Division, P.O. Box 24055, Oakland, CA 94623-1055 or visit our website at <http://www.ebmud.com>.

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EAST BAY MUNICIPAL UTILITY DISTRICT
BALANCE SHEETS
JUNE 30, 2020 AND JUNE 30, 2019
(DOLLARS IN THOUSANDS)

	Water System		Wastewater System		Total	
	June 30, 2020	June 30, 2019	June 30, 2020	June 30, 2019	June 30, 2020	June 30, 2019
Assets						
Current assets:						
Cash and cash equivalents (Note 2)	\$ 371,488	\$ 79,978	\$ 89,651	\$ 85,743	\$ 461,139	\$ 165,721
Investments	212,278	524,232	18,378	30,123	230,656	554,355
Receivables:						
Customer	55,257	49,972	6,684	6,630	61,941	56,602
Interest and other	2,915	5,439	3,171	3,205	6,086	8,644
Materials and supplies	12,732	10,211	5,476	4,870	18,208	15,081
Prepaid insurance	1,642	1,372	335	250	1,977	1,622
Total current assets	656,312	671,204	123,695	130,821	780,007	802,025
Noncurrent assets:						
Restricted assets (Note 2):						
Cash and cash equivalents	28,563	12,440	21	18	28,584	12,458
Investments	12,314	33,806	-	-	12,314	33,806
Total restricted cash and investments	40,877	46,246	21	18	40,898	46,264
Other assets:						
Equity in JPA partnership fund	223,006	226,285	-	-	223,006	226,285
Other	83	193	505	288	588	481
Total other assets	223,089	226,478	505	288	223,594	226,766
Capital assets (Note 3):						
Structures, buildings, and equipment	5,967,045	5,662,348	1,138,487	1,128,130	7,105,532	6,790,478
Intangible assets	365,341	359,487	40,223	38,496	405,564	397,983
Less accumulated depreciation/amortization	(2,423,962)	(2,305,539)	(540,563)	(515,247)	(2,964,525)	(2,820,786)
Subtotal	3,908,424	3,716,296	638,147	651,379	4,546,571	4,367,675
Land and rights-of-way	73,790	70,917	21,409	21,409	95,199	92,326
Construction in progress	497,634	522,919	98,466	68,192	596,100	591,111
Total capital assets, net	4,479,848	4,310,132	758,022	740,980	5,237,870	5,051,112
Total noncurrent assets	4,743,814	4,582,856	758,548	741,286	5,502,362	5,324,142
Total assets	5,400,126	5,254,060	882,243	872,107	6,282,369	6,126,167
Deferred outflow of resources						
Accumulated decrease in fair value of hedging derivatives	40,513	26,819	-	-	40,513	26,819
Debt refundings related (Note 7)	6,644	17,427	-	1,234	6,644	18,661
Pension related	130,560	128,283	21,531	21,556	152,091	149,839
OPEB related	13,916	9,158	2,259	1,515	16,175	10,673
Total deferred outflows	191,633	181,687	23,790	24,305	215,423	205,992
Total assets and deferred outflows	\$ 5,591,759	\$ 5,435,747	\$ 906,033	\$ 896,412	\$ 6,497,792	\$ 6,332,159

(Continued)

EAST BAY MUNICIPAL UTILITY DISTRICT
BALANCE SHEETS
JUNE 30, 2020 AND JUNE 30, 2019
(DOLLARS IN THOUSANDS)

Liabilities and Net Position	Water System		Wastewater System		Totals	
	June 30, 2020	June 30, 2019	June 30, 2020	June 30, 2019	June 30, 2020	June 30, 2019
Current liabilities:						
Current maturities of long-term debt and commercial paper (Note 6 and 7)	\$ 69,260	\$ 66,638	\$ 10,955	\$ 10,860	\$ 80,215	\$ 77,498
Accounts payable and accrued expenses (Note 4)	60,793	49,557	6,455	9,234	67,248	58,791
Compensated absences (Note 5)	34,256	29,282	5,805	5,224	40,061	34,506
Current reserve for claims	10,018	9,571	820	622	10,838	10,193
Accrued interest	10,022	10,392	1,497	1,548	11,519	11,940
Total current liabilities	184,349	165,440	25,532	27,488	209,881	192,928
Noncurrent liabilities:						
Other liabilities:						
Advances for construction	13,535	18,982	-	-	13,535	18,982
Reserve for claims	32,251	35,464	4,242	3,734	36,493	39,198
Net pension liability	469,634	430,703	79,015	73,797	548,649	504,500
Net OPEB liability	113,732	111,851	19,139	19,157	132,871	131,008
Other liabilities	12,632	12,785	5,967	6,532	18,599	19,317
Total other liabilities	641,784	609,785	108,363	103,220	750,147	713,005
Long-term liabilities, net of current maturities (Note 7)	2,941,250	3,039,912	382,826	402,745	3,324,076	3,442,657
Total noncurrent liabilities	3,583,034	3,649,697	491,189	505,965	4,074,223	4,155,662
Total liabilities	3,767,383	3,815,137	516,721	533,453	4,284,104	4,348,590
Deferred inflow of resources:						
Derivative instrument	40,513	26,819	-	-	40,513	26,819
Pension related	23,993	47,420	5,598	9,546	29,591	56,966
OPEB related	8,398	8,851	1,779	1,671	10,177	10,522
Total deferred inflows	72,904	83,090	7,377	11,217	80,281	94,307
Total liabilities and deferred inflows	3,840,287	3,898,227	524,098	544,670	4,364,385	4,442,897
Net position (Note 8):						
Net investment in capital assets	1,475,981	1,221,010	364,241	328,609	1,840,222	1,549,619
Restricted for construction	20,292	19,949	-	-	20,292	19,949
Restricted for debt service	4,220	4,564	21	18	4,241	4,582
Restricted for JPA	223,006	226,285	-	-	223,006	226,285
Restricted - other	2,831	2,751	-	-	2,831	2,751
Unrestricted	25,142	62,961	17,673	23,115	42,815	86,076
Total net position	1,751,472	1,537,520	381,935	351,742	2,133,407	1,889,262
Total liabilities and net position	\$ 5,591,759	\$ 5,435,747	\$ 906,033	\$ 896,412	\$ 6,497,792	\$ 6,332,159

See accompanying notes to basic financial statements

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EAST BAY MUNICIPAL UTILITY DISTRICT
STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION
FOR THE YEARS ENDED JUNE 30, 2020 AND 2019
(DOLLARS IN THOUSANDS)

	Water System		Wastewater System		Total	
	June 30 2020	June 30 2019	June 30 2020	June 30 2019	June 30 2020	June 30 2019
Operating revenue:						
Water	\$ 567,394	\$ 520,344	\$ -	\$ -	\$ 567,394	\$ 520,344
Sewer	-	-	91,956	90,323	91,956	90,323
Power	6,308	10,730	915	542	7,223	11,272
Wet weather facilities charges	-	-	27,090	25,113	27,090	25,113
Total operating revenue	573,702	531,074	119,961	115,978	693,663	647,052
Operating expense:						
Raw water	53,246	44,626	-	-	53,246	44,626
Water treatment and distribution	126,647	117,557	-	-	126,647	117,557
Recreation areas, net	6,674	6,126	-	-	6,674	6,126
Sewer lines and pumping	-	-	16,365	15,881	16,365	15,881
Sewer treatment plant operations	-	-	41,504	37,954	41,504	37,954
Customer accounting and collecting	17,391	17,929	2,531	2,353	19,922	20,282
Financial and risk management	24,752	22,415	798	654	25,550	23,069
Facilities management	5,980	5,020	-	-	5,980	5,020
General administration	25,728	30,871	5,994	5,972	31,722	36,843
Pension expense	13,228	14,575	1,295	(3,684)	14,523	(18,259)
OPEB expense	(3,329)	(2,807)	(655)	(505)	(3,984)	(3,312)
Depreciation on utility plant and vehicle	113,065	108,918	23,566	23,079	136,631	131,997
Amortization	11,575	12,680	1,677	1,721	13,252	14,401
Total operating expense	394,957	348,760	93,075	83,425	488,032	432,185
Net operating income (loss)	178,745	182,314	26,886	32,553	205,631	214,867
Other income (expense):						
Investment income	13,056	15,165	1,846	2,940	14,902	18,105
Taxes and subventions	40,337	35,709	6,289	5,856	46,626	41,565
Interest and amortization of bond expenses, net of	-	-	-	-	-	-
capitalized interest of \$10,896 and \$10,406 for the Water	-	-	-	-	-	-
System and \$967 and \$668 for the Wastewater	-	-	-	-	-	-
System in 2020 and 2019, respectively	(98,605)	(103,157)	(14,901)	(16,417)	(113,506)	(119,574)
Hedge fund termination	-	-	-	-	-	-
Increase (decrease) of equity in JPA partnership fund	(3,325)	(3,545)	-	-	(3,325)	(3,545)
Other income	11,818	11,823	4,376	4,105	16,194	15,928
Total other income (expense), net	(36,719)	(44,005)	(2,390)	(3,516)	(39,109)	(47,521)
Income before capital contributions	142,026	138,309	24,496	29,037	166,522	167,346
Capital contributions	71,926	98,142	5,697	13,208	77,623	111,350
Change in net position	213,952	236,451	30,193	42,245	244,145	278,696
Total net position - beginning	1,537,520	1,320,779	351,742	309,111	1,889,262	1,629,890
Prior period adjustment - Debt Refunding	-	(19,710)	-	(4,092)	-	(23,802)
Changes in accounting estimates	-	-	-	4,478	-	4,478
Total net position - ending	\$ 1,751,472	\$ 1,537,520	\$ 381,935	\$ 351,742	\$ 2,133,407	\$ 1,889,262

See accompanying notes to basic financial statements

EAST BAY MUNICIPAL UTILITY DISTRICT
STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED JUNE 30, 2020 AND 2019
(DOLLARS IN THOUSANDS)

	Water System		Wastewater System		Total	
	June 30 2020	June 30 2019	June 30 2020	June 30 2019	June 30 2020	June 30 2019
Cash flows from operating activities						
Cash received from customers	\$ 568,417	\$ 527,334	\$ 119,907	\$ 115,441	\$ 688,324	\$ 642,775
Cash received from other income	11,818	11,823	4,376	4,105	16,194	15,928
Cash payments for judgments and claims	(11,128)	(9,638)	(184)	(133)	(11,312)	(9,771)
Cash payments to suppliers for goods and services	(39,433)	(55,693)	(37,578)	(26,990)	(77,011)	(82,683)
Cash payments to employees for services	(196,416)	(191,007)	(32,673)	(31,888)	(229,089)	(222,895)
Net cash provided by operating activities	333,258	282,819	53,848	60,535	387,106	343,354
Cash flows from noncapital financing activities:						
Tax receipts	40,337	35,709	6,289	5,856	46,626	41,565
Net cash provided by noncapital financing activities	40,337	35,709	6,289	5,856	46,626	41,565
Capital and related financing activities:						
Capital contributions	71,926	98,142	5,697	13,208	77,623	111,350
Payments from advances for construction	(5,447)	(4,682)	-	-	(5,447)	(4,682)
Proceeds from sale of capital assets	1,393	1,144	-	-	1,393	1,144
Net proceeds and premiums from sale of bonds	-	201,324	-	-	-	201,324
Proceeds received from SRF loans	23,783	-	-	-	23,783	-
Acquisition and construction of capital assets	(297,217)	(294,282)	(42,284)	(49,892)	(339,501)	(344,174)
Change in Investment in JPA	(46)	-	-	-	(46)	-
Principal retirement on long-term debt and commercial paper	(109,040)	(52,329)	(18,590)	(8,364)	(127,630)	(60,693)
Costs and discounts from issuance on long-term debt	-	(662)	-	-	-	(662)
Interest paid on long-term debt	(98,975)	(122,960)	(14,952)	(20,549)	(113,927)	(143,509)
Net cash provided by (used in) capital and related financing activities	(413,623)	(174,305)	(70,129)	(65,597)	(483,752)	(239,902)
Cash flows from investing activities:						
Proceeds from securities	925,777	336,365	54,302	43,502	980,079	379,867
Expenditures from purchases of securities	(592,330)	(446,002)	(42,557)	(19,328)	(634,887)	(465,330)
Interest received on investments	14,214	14,859	2,158	2,823	16,372	17,682
Net cash (used in) provided by investing activities	347,661	(94,778)	13,903	26,997	361,564	(67,781)
Net increase (decrease) in cash and cash equivalents	307,633	49,445	3,911	27,791	311,544	77,236
Cash and cash equivalents:						
Beginning of year	92,418	42,973	85,761	57,970	178,179	100,943
End of year	400,051	92,418	89,672	85,761	489,723	178,179

(Continued)

EAST BAY MUNICIPAL UTILITY DISTRICT
STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED JUNE 30, 2020 AND 2019
(DOLLARS IN THOUSANDS)

	Water System		Wastewater System		Total	
	June 30 2020	June 30 2019	June 30 2020	June 30 2019	June 30 2020	June 30 2019
Reconciliation of net operating (loss) income to net cash provided by operating activities:						
Net operating income (loss)	\$ 178,745	\$ 182,314	\$ 26,886	\$ 32,553	\$ 205,631	\$ 214,867
Adjustments to reconcile net operating income to net cash provided by operating activities:						
Pension expense	13,228	(14,575)	1,295	(3,684)	14,523	(18,259)
OPEB expense	(3,329)	(2,807)	(655)	(505)	(3,984)	(3,312)
Depreciation on utility plant and vehicle	113,065	108,918	23,566	23,079	136,631	131,997
Depreciation within recreation area	1,466	1,428			1,466	1,428
Amortization on intangible assets	11,575	12,680	1,749	1,793	13,324	14,473
Amortization on deferred quality control services	-	-	(72)	(72)	(72)	(72)
Other income	11,818	11,823	4,376	4,105	16,194	15,928
Changes in assets/liabilities:						
Materials and supplies	(2,521)	(310)	(606)	(392)	(3,127)	(702)
Prepaid insurance	(270)	(103)	(85)	(2)	(355)	(105)
Customer receivables	(5,285)	(3,740)	(54)	(537)	(5,339)	(4,277)
Other assets	1,476	(1,437)	(495)	(197)	981	(1,634)
Reserve for claims	(2,766)	(1,062)	706	(548)	(2,060)	(1,610)
Accounts payable and accrued expenses	16,056	(10,310)	(2,763)	4,942	13,293	(5,368)
Net cash provided by operating activities	\$ 333,258	\$ 282,819	\$ 53,848	\$ 60,535	\$ 387,106	\$ 343,354

Schedule of Non-cash Activities
Change in fair value

	\$ 1,844	\$ 1,299	\$ 119	\$ 109	\$ 1,963	\$ 1,408
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See accompanying notes to basic financial statements

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EAST BAY MUNICIPAL UTILITY DISTRICT
STATEMENTS OF FIDUCIARY NET POSITION
FIDUCIARY FUND - PENSION AND OTHER EMPLOYEE BENEFIT TRUST
JUNE 30, 2020 AND 2019
(DOLLARS IN THOUSANDS)

	2020	2019
Assets:		
Cash and cash equivalents, at fair value (Note 2)	\$ 57,852	\$ 42,729
Invested securities lending collateral (Note 2)	80,731	48,857
Prepaid expenses	575	560
Receivables:		
Brokers, securities sold	475	1,647
Employer	2,246	1,674
Plan members	484	357
Interest, dividends and recoverable taxes	4,707	4,300
Total Receivables	7,912	7,978
Investments, at fair value (Note 2):		
U.S. government obligations	143,915	95,799
Municipal bonds	705	1,871
Domestic corporate bonds	298,975	342,052
International bonds	19,793	23,291
Domestic stocks	849,826	819,025
International stocks	397,426	415,642
Real estate	95,649	98,133
Total Investments	1,806,289	1,795,813
Total Assets	1,953,359	1,895,937
Liabilities:		
Accounts payable and accrued expenses	2,396	2,757
Payables to brokers, securities purchased	12,623	11,358
Securities lending collateral (Note 2)	80,731	48,857
Total Liabilities	95,750	62,972
Net Position:		
Restricted for pension benefits	1,813,591	1,792,124
Restricted for post-employment healthcare benefits	44,018	40,841
Total Net Position	\$ 1,857,609	\$ 1,832,965

See Accompanying Notes to Financial Statements

EAST BAY MUNICIPAL UTILITY DISTRICT
STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION
FIDUCIARY FUND - PENSION AND OTHER EMPLOYEE BENEFIT TRUST
FOR THE YEARS ENDED JUNE 30, 2020 AND 2019
(DOLLARS IN THOUSANDS)

	2020	2019
Additions:		
Contributions:		
Employers	\$ 88,734	\$ 84,551
Plan members	18,885	17,865
Total Contributions	107,619	102,416
Investment Income:		
Net appreciation (depreciation) in fair value investments:		
Traded securities	13,251	67,474
Real estate	688	1,667
Interest	14,341	11,295
Dividends	16,360	17,785
Real estate operating income, net	1,990	1,245
Total Investment Income	46,630	99,466
Less:		
Investment expense	(4,864)	(4,993)
Borrowers' rebates and other agent fees on securities lending transactions	(903)	(1,219)
Net Investment Income	40,863	93,254
Total Additions, net	148,482	195,670
Deductions:		
Benefits paid	121,889	114,168
Refunds of contributions	462	267
Administrative expenses	1,487	1,510
Total Deductions	123,838	115,945
Changes in Net Position	24,644	79,725
Net Position - Beginning of the Year	1,832,965	1,753,240
Net Position - End of the Year	\$ 1,857,609	\$ 1,832,965

See Accompanying Notes to Financial Statements

**EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO BASIC FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2020 AND 2019
(Dollars in Thousands)**

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. Description of the Primary Government

The East Bay Municipal Utility District (the District) was formed in May 1923 under the provisions of the Municipal Utility District Act of 1921, as amended in 1941. The District is comprised of two financially independent entities: the Water System and the Wastewater System. These two entities are governed by the same elected seven-member Board of Directors which determines such matters as rates and charges for services, approval of contracts, and District policies. The Water System provides administrative and other support services to the Wastewater System. These costs are charged to the Wastewater System.

B. Description of the Component Unit

The District's Employees' Retirement System (the Employees' Retirement System or the Plan) has been reported as a Pension and Other Employee Benefit Trust fund (a fiduciary fund) in the accompanying basic financial statements and is discretely presented. The System provides retirement, disability, survivorship, and post-employment health insurance benefits for eligible directors, officers, and employees of the District. The System is administered by a Retirement Board composed of three members appointed by the Board of Directors of the District, two members elected by and from the active membership, and one (nonvoting) member elected by and from the retired membership of the System. Retirement Ordinance No. 40 (Ordinance) assigns the authority to establish Plan benefit provisions to the District's Board of Directors.

Copies of the audited financial statements of the Employees' Retirement System may be obtained by writing to the Controller, P.O. Box 24055, Oakland, CA 94623 or visit our website at <http://www.ebmud.com>.

C. Basis of Presentation

The accounts of the District are organized and operated on a fund basis. The operations of each fund are accounted for with a separate set of self-balancing accounts that comprise its assets, deferred outflows, liabilities, deferred inflows, net position, revenues, and expenses.

The basic financial statements include prior year comparative information. A complete presentation of the prior year information can be found in the District's financial statements for the year ended June 30, 2019.

The District reports the following major proprietary (enterprise) funds:

The **Water System** is engaged in the collection, transmission, and distribution of water to communities within Alameda and Contra Costa counties of California.

The **Wastewater System** is engaged in the interception and treatment of wastewater from residences and industries in the California communities of Alameda, Albany, Berkeley, Emeryville, Oakland, Piedmont, and the Stege Sanitary District.

**EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO BASIC FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2020 AND 2019
(Dollars in Thousands)**

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Additionally, the District reports the following fiduciary fund:

The **Pension and Other Employee Benefit Trust** is used to account for the resources held by the Employees' Retirement System which provides retirement, disability, and survivorship benefits for eligible directors, officers, and employees of the District.

Enterprise funds are used to account for operations that are financed and operated in a manner similar to private business enterprises – where the intent of the governing body is that the costs (expenses, including depreciation) of providing goods or services to the general public on a continuing basis be financed or recovered primarily through user charges. The Pension and Other Employee Benefit Trust fund is maintained to account for assets held by the Employees' Retirement System in a trustee capacity.

D. Basis of Accounting

Proprietary funds and the Pension and Other Employee Benefit Trust fund are accounted for on a flow of economic resources measurement focus, using the accrual basis of accounting. Under this method, all assets, deferred outflows, liabilities and deferred inflows associated with operations are included on the balance sheet, and revenues are recorded when earned and expenses are recorded at the time liabilities are incurred.

Proprietary funds distinguish *operating* revenues and expenses from *non-operating* items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with a proprietary fund's principal ongoing operations. The principal operating revenues of the District are charges to customers for sales and services. The District also recognizes wet weather facilities charges as operating revenue. Operating expenses for enterprise funds include the cost of sales and services, administrative expenses, and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses.

When both restricted and unrestricted resources are available for use, it is the District's policy to use restricted resources first, then unrestricted resources as they are needed.

In addition, the accounting policies of the District conform to accounting policies generally accepted in the United States of America for water utilities. The accounts are maintained substantially in accordance with the Uniform System of Accounts for Water Utilities followed by investor-owned and major municipally owned water utilities.

Balance Sheet – The balance sheet is designed to display the financial position of the District. The District's fund equity is reported as net position, which is broken down into three categories defined as follows:

- Net investment in capital assets – This component of net position consists of capital assets, net of accumulated depreciation and reduced by the outstanding balances of any bonds, notes, or other borrowings that are attributable to the acquisition, construction, or improvement of those assets and related deferred inflows and outflows.
- Restricted – This component of net position consists of constraints placed on net position use through external constraints imposed by creditors (such as through debt covenants), grantors, contributors, or law or regulations of other governments. It also pertains to constraints imposed by law or constitutional provisions or enabling legislation.

**EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO BASIC FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2020 AND 2019
(Dollars in Thousands)**

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

- Unrestricted – This component of net position consists of net assets that do not meet the definition of “restricted” or “net investment in capital assets.”

Statement of Revenues, Expenses, and Changes in Net Position – The statement of revenues, expenses, and changes in net position is the operating statement for proprietary funds. Revenues are reported by major source. This statement distinguishes between operating and non-operating revenues and expenses and presents a separate subtotal for operating revenues, operating expenses, and other income.

E. Use of Estimates and Assumptions

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

F. Capital Assets

Utility Plant – at Original Cost

The cost of additions to utility plant and replacement of retired units of property are capitalized. Cost includes material, direct labor and fringe benefits, transportation, and such indirect items as engineering, supervision, and interest during construction based on the interest rate on outstanding debt of the system in the prior fiscal year as allowed by GASB 76. Repairs, maintenance, and minor purchases of equipment are charged to expenses as incurred.

The depreciated cost of capital assets, plus removal costs, less salvage, is charged to expense upon retirement.

Water Supply Management Program

Costs incurred in this program are debt funded and capitalized in construction in progress. These costs are transferred to utility plant upon completion of the project and depreciated over their useful life. Debt service costs on the debt used to finance the program are recovered in future through connection fees and rates and charges for service to those benefiting from the program.

Preliminary Survey and Investigation Costs

The District capitalizes initial costs incurred to study and evaluate certain potential long-term capital projects. These costs are transferred to property, plant and equipment upon completion of the project and are depreciated over the life of the asset. In the event the project is abandoned, these costs are expensed.

**EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO BASIC FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2020 AND 2019
(Dollars in Thousands)**

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Contract Water Rights

The District has contracted with the U.S. Bureau of Reclamation for water deliveries from the Central Valley Project (CVP) and shall continue so long as EBMUD pays applicable rates and charges consistent with applicable law. Payments under the contract include reimbursement for operation and maintenance costs based on the amounts of water delivered to EBMUD, the Operation & Maintenance Deficit (EBMUD's current balance is \$5,666), and prepayment of allocated capital costs for CVP storage and conveyance facilities (EBMUD's current estimated allocation is \$3,057). The Water Enterprise Fund capitalized the two components.

G. Depreciation

Depreciation of capital assets is computed on a straight-line basis using the estimated service lives of the related assets (5 to 100 years).

H. Restricted Assets

The District segregates cash and investments into funds that are "Restricted" and "Unrestricted." Funds are "restricted" when limitations on use of the resources are imposed by creditors, grantors, contributors, laws or regulations of other governments, or imposed by law through constitutional provision or by enabling legislation. "Unrestricted" resources are committed by the Board of Directors through the passage of a resolution, or constrained for a specific purpose by committees or officials with authority delegated by the Board. The exception is the Reserve for Capital Projects which is anticipated but not committed or constrained to be used for the District's capital improvement program.

Unrestricted cash and investments are further categorized into Operating and Capital Reserves:

Operating Reserves:

- Rate Stabilization Fund (RSF) reserve is established by Policy 4.02, as adopted by the Board of Directors in the biennial budget, to maintain at least 20% of projected annual water volume revenues for Water and at least 5% of annual operating and maintenance expenses for Wastewater. Funding of the RSF is consistent with the District's Bond indentures. In fiscal year 2014, the District combined the Rate Stabilization Fund referenced in the Bond indentures and the Contingency and Rate Stabilization Reserve referenced in Policy 4.02 into a single Rate Stabilization Fund reserve to enhance transparency.
- Working Capital reserve is established by Policy 4.02, as adopted by the Board of Directors in the biennial budget, to maintain at least three times the District's monthly net operating and maintenance expenses.
- Self-insurance reserve is established by Policy 4.02, as adopted by the Board of Directors in the biennial budget, to maintain a level based on the Actuarial Self-Insured Retention (SIR) funding recommendation for the following year's discounted loss and allocated loss adjustment expenses (ALAE) funding guidelines. Reserve amount should be calculated at a high (85%) confidence level. If an actuarial study is not available before close of the prior fiscal year end, the reserve shall equal 1.15 times the prior year reserve.

**EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO BASIC FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2020 AND 2019
(Dollars in Thousands)**

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

- Workers' compensation reserve is established by Policy 4.02, as adopted by the Board of Directors in the biennial budget, to maintain a level based on the Actuarial SIR funding recommendation for the following year's discounted loss and ALAE funding guidelines. Reserve amount should be calculated at a high (85%) confidence level. If an actuarial study is not available before close of the prior fiscal year end, the reserve shall equal 1.15 times the prior year reserve.

Capital Reserves:

- Reserve for Capital Projects comprises the resources available for cash funding of the District's capital improvement program as projected in conjunction with the biennial budget.
- Reserve Funded CIP (Wastewater) balance is a specific designation [Board Motion No. 029-94] used to fund wet and dry weather eligible construction projects.
- Vehicle Replacement Fund [Board Motion No. 030-94] is financed by deposits based on internal user rate charges, and used to reimburse operational expenditures and vehicle replacement purchases.
- Equipment Replacement Fund was established by the District with the implementation of the Wastewater Capacity Fees effective July 1, 1984. The balance in this account represents funds set aside for future wastewater department equipment replacements.

Restricted funds include the following:

- Debt funded construction funds are the proceeds of bond or commercial paper issues that are restricted for use on eligible projects in the District's capital program.
- Capitalized Interest fund is restricted by the District's bond indenture for the purpose of defraying that bond issue's debt service payments for a specified period.
- Bond Interest and Redemption fund is utilized, in order for the District to transfer funds to the Trustee for the payment of principal and interest on the outstanding bonds one business day prior to the date such payment is due as required under the District's bond indentures. The District uses the Bond Interest and Redemption Fund to segregate funds accumulated for such payments. In addition, under certain of the interest rate swap agreements related to the District's outstanding bonds, the District is required to post collateral to the swap counterparty to the extent that the District's total exposure for termination payments under the swap agreement exceeds the threshold amount specified in the applicable swap agreement. The District also uses the Bond Interest and Redemption Fund to segregate District funds held by the applicable custodian to satisfy this collateral posting obligation.
- Debt Service Reserve fund is created and required to be maintained at a specified level in connection with certain series of the District's outstanding bonds. Amounts in a Bond Reserve Fund may only be used (a) for the payment of principal and interest on the related series of bonds in the event the District fails to transfer the required payment from the related system Revenue Fund (the respective designated part of the General Fund) (b) for the payment or redemption of all of the related series of bonds then outstanding or (c) for the payment of the final principal and interest payments on the related series of bonds.
- Funds received for construction reflect advances received from applicants for work to be performed by the District and the unspent future water supply component of system capacity charges. This fund is used for the construction of major facilities, applicant requested services, and the design and construction of water supply improvement program projects.

**EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO BASIC FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2020 AND 2019
(Dollars in Thousands)**

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

- FERC partnership fund of \$2 million was established January 11, 1999, in compliance with Federal Energy Regulatory Commission (FERC) order which brought resolution to its Mokelumne River Proceeding. The District manages the fund and income derived from investing the funds to provide operating support to the Joint Settlement Agreement with US Fish and Wildlife and California Fish and Game to protect the Mokelumne River Ecosystem from Pardee Reservoir to the Delta. The principal and any unused earnings shall remain the property of the District and will revert to the District upon expiration of the agreement in March 2031 or upon withdrawal of any party to the agreement.
- Monetary Reserve represents money on deposit in the name of the District with the Automated Power Exchange Inc. (APX) in accordance with the terms and conditions of the Automated Power Exchange Inc. California Master Service Agreement of July 15, 1999, entered between the District and APX for the sale and purchase of electric power. The funds held on deposit shall be withdrawn by the Depository and Clearing Agent in the event that sufficient funds are not deposited in the District settlement account to cover power exchange transactions.

I. Deferred Amount on Bond Refundings

Gains and losses incurred in connection with debt refunding transactions are deferred and amortized over the shorter of the life of the refunded debt or the new debt.

J. Cash and Cash Equivalents

For purposes of the statement of cash flows, the District considers all highly liquid investments with original maturities of three months or less at the date of purchase to be cash equivalents.

K. District Investments

Investments are stated at fair value. Included in investment income (loss) is the net change in the fair value of investments, which consists of the realized gains or losses and the unrealized appreciation (depreciation) of those investments.

Measurement of the fair value of investments is based upon quoted market prices, if available. The estimated fair value of investments that have no quoted market price is determined based on equivalent yields for such securities or for securities of comparable maturity, quality, and type as obtained from market makers.

Each of the financial instruments invested in by the District represents a potential concentration of credit risk. However, as the portfolio and the components of the various instruments are diversified, and issuers of securities are dispersed throughout many industries and geographic locations, the concentrations of credit risk are limited.

**EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO BASIC FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2020 AND 2019
(Dollars in Thousands)**

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

L. Retirement System Investments

Investments are reported at fair value. Securities and bonds traded on a national or international exchange are valued at the last reported sales price at current exchange rates. Investments that have no quoted market price are reported at estimated fair value, which is determined based on yields equivalent for such securities or for securities of comparable maturity, quality, and type as obtained from market makers. Measurement of the fair value of real estate investments is estimated by the investment managers and reflects both internal and independent appraisals of real estate properties.

The System presents in the Statements of Changes in Plan Net Position the net change in the fair value of its investments, which consists of the realized gains or losses and the unrealized appreciation (depreciation) on those investments. Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date.

Each of the financial instruments invested in by the System represents a potential concentration of credit risk. However, as the portfolio and the components of the various instruments are diversified and issuers of securities are dispersed throughout many industries and geographical locations, the concentrations of credit risk are limited.

The System invests in a combination of stocks, bonds, fixed income securities, real estate, and other investment securities. These investments are exposed to various risks, such as interest rate and market risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and those such changes could materially affect the amounts reported in the Statement of Plan Net Position.

Retirement Board policies permit the System to use investments of the Plan to enter into securities lending transactions, which are loans of securities to broker-dealers and other entities for collateral with a simultaneous agreement to return collateral for the same securities in the future. The System's securities custodian is an agent in lending the Plan's securities for cash collateral, U.S. government securities, and irrevocable letters of credit of 102% for domestic securities and 105% for international securities lent.

As of June 30, 2020, the System had no credit risk exposure to borrowers because the amounts the System owed the borrowers exceeded the amounts the borrowers owed the System. Contracts with the lending agent require them to indemnify the System under certain circumstances if the borrowers fail to return the securities (and if the collateral is inadequate to replace the securities lent) or fail to pay the System for income distributions by the securities issuers while the securities are on loan. The risk of any loss of collateral or investment of cash collateral (including a loss of income or principal, or loss of market value thereon) lies with the System, except for losses resulting from negligence or intentional misconduct of the agent in performing the duties allocated under the securities lending agreement with respect to collateral. During the year ended June 30, 2020, there were no violations of legal or contractual provisions, and no borrower or lending agent default losses known to the securities lending agent.

**EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO BASIC FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2020 AND 2019
(Dollars in Thousands)**

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

In lending securities, cash collateral is invested in the lending agent's short-term investment pool, which as of June 30, 2020, had a weighted average maturity of 31 days. The relationship between the maturities of the investment pool and the System's loans is affected by the maturities of the securities loans made by other entities that use the agent's pool, which the System cannot determine. Cash collateral may also be invested separately in term loans, in which case the maturity of the collateral investment generally matches the term of the loan. Noncash collateral cannot be pledged or sold unless the borrower defaults. All securities loans can be terminated on demand by either the lender or the borrower, although the average term of overall loans for the System was approximately 77 days. There are no dividends or coupon payments owing on the securities lent. Cash received as collateral on securities lending transactions is reported as an asset of the System with a corresponding liability.

As of June 30, 2020, the fair value of securities on loan was \$78,660. The total cash and noncash collateral held by the System's custodian to secure these securities on loan was valued at \$80,731 (all cash collateral).

M. Material and Supplies

Material and supplies inventories are valued at cost, which approximates market, using the average-cost method.

N. Revenue

Water billings include charges for water flow, elevation, and a monthly meter charge. Customer water meters are read on a cyclical basis throughout a monthly or bimonthly period. Bills are rendered and revenue is recognized in the period that meters are read.

Wastewater treatment billings are a combination of flow, strength charges, and a monthly service charge. Customer bills are rendered on a cyclical basis throughout a monthly or bimonthly period, and revenue is recognized in the period in which bills are rendered.

Wet weather facilities charges are designed to finance the operating and capital costs related to wet weather sewage flows and are billed annually on the property tax bill.

**EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO BASIC FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2020 AND 2019
(Dollars in Thousands)**

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

O. Interest Rate Swap

The District enters into interest rate swap agreements to modify interest rates on some outstanding debt. The net interest is recorded in the financial statements annually.

In June 2008, GASB issued Statement No. 53, Accounting and Financial Reporting for Derivative Instruments (GASB 53). The statement specifically requires governments to measure and report most derivative instruments at fair value in their financial statements that are prepared using the economic resources measurement focus and the accrual basis of accounting. The requirement of reporting the derivative instruments at fair value on the face of the basic financial statements gives the users of those statements a clearer look into the risks their governments are sometimes exposed to when they enter into these transactions and how those risks are managed. The statement also addresses hedge accounting requirements and improves disclosures, providing a summary of the government's derivative instrument activity, its objectives for entering into derivative instruments, and their significant terms and risks. The District implemented GASB 53 in fiscal 2010.

P. Deferred Outflows/Inflows of Resources

In addition to assets, the balance sheet will sometimes report a separate section for deferred outflows of resources. This separate financial statement element, deferred outflows of resources, represents a consumption of net position or fund balance that applies to a future period(s) and so will not be recognized as an outflow of resources (expense/expenditure) until then.

In addition to liabilities, the balance sheet will sometimes report a separate section for deferred inflows of resources. This separate financial statement element, deferred inflows of resources, represents an acquisition of net position or fund balance that applies to a future period(s) and so will not be recognized as an inflow of resources (revenue) until that time.

Q. Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The District categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The fair value hierarchy categorizes the inputs to valuation techniques used to measure fair value into three levels based on the extent to which inputs used in measuring fair value are observable in the market.

Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2 inputs are inputs – other than quoted prices included within level 1 – that are observable for an asset or liability, either directly or indirectly.

Level 3 inputs are unobservable inputs for an asset or liability.

If the fair value of an asset or liability is measured using inputs from more than one level of the fair value hierarchy, the measurement is considered to be based on the lowest priority level input that is significant to the entire measurement.

**EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO BASIC FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2020 AND 2019
(Dollars in Thousands)**

NOTE 2 - CASH AND INVESTMENTS

A. Classification

Reconciliations of cash and investments reported on the financial statements as of June 30, 2020, are as follows:

	Water System	Wastewater System	Total
<i>District Enterprise Funds:</i>			
Cash and investments included in current assets	\$ 583,766	\$ 108,029	\$ 691,795
Cash and investments included in restricted investments	40,877	21	40,898
Total District cash and investments	624,643	108,050	732,693
Less investments	(224,592)	(18,378)	(242,970)
Cash and cash equivalents	<u>\$ 400,051</u>	<u>\$ 89,672</u>	<u>\$ 489,723</u>
	Pension Plan Benefits	Post-employment Healthcare Benefits	Total
<i>System Pension Trust Funds:</i>			
Cash and cash equivalents	\$ 56,506	\$ 1,346	\$ 57,852
Invested securities lending collateral	78,852	1,879	80,731
Retirement system investments	1,764,250	42,039	1,806,289
Total System cash and investments	<u>\$ 1,899,608</u>	<u>\$ 45,264</u>	<u>\$ 1,944,872</u>

Reconciliations of cash and investments reported on the financial statements as of June 30, 2019, are as follows:

	Water System	Wastewater System	Total
<i>District Enterprise Funds:</i>			
Cash and investments included in current assets	\$ 604,210	\$ 115,866	\$ 720,076
Cash and investments included in restricted investments	46,246	18	46,264
Total District cash and investments	650,456	115,884	766,340
Less investments	(558,038)	(30,123)	(588,161)
Cash and cash equivalents	<u>\$ 92,418</u>	<u>\$ 85,761</u>	<u>\$ 178,179</u>
	Pension Plan Benefits	Post-employment Healthcare Benefits	Total
<i>System Pension Trust Funds:</i>			
Cash and cash equivalents	\$ 41,794	\$ 935	\$ 42,729
Invested securities lending collateral	47,787	1,070	48,857
Retirement system investments	1,756,501	39,312	1,795,813
Total System cash and investments	<u>\$ 1,846,082</u>	<u>\$ 41,317</u>	<u>\$ 1,887,399</u>

B. District Enterprise Fund Investments Authorized by the California Government Code and the District's Investment Policy

The District's Investment Policy and the California Government Code allow the District to invest in the following, provided the credit ratings of the issuers are acceptable to the District; and approved percentages and maturities are not exceeded. The table below also identifies certain provisions of the California Government Code, or the District's Investment Policy where the District's Investment Policy is more restrictive and provides information as to the limitations as they relate to interest rate risk, credit risk and concentration risk.

**EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO BASIC FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2020 AND 2019
(Dollars in Thousands)**

NOTE 2 - CASH AND INVESTMENTS (Continued)

Authorized Investment Type	Maximum Maturity	Minimum Credit Quality	Maximum in Portfolio	Maximum Investment in One Issuer/Fund
U.S. Treasury Bonds, Notes and Bills	5 Years	N/A	up to 100%	N/A
U.S. Government Agency and U.S. Government-Sponsored Enterprise Obligation	5 Years	N/A	up to 100%	40% in each Agency
State of California Local Agency Investment Fund (LAIF Pool)	N/A	N/A	per Sec. 16429.1	N/A
California Asset Management Program (CAMP)	N/A	AAA m	40%	20%
Investment Trust of California (CalTRUST)	N/A	AAA m	40%	20%
Money Market Mutual Funds	N/A	AAA m	20%	5%
Certificates of Time Deposit	1 Year	AA-	20%	\$250
Negotiable Certificates of Deposit	5 Years	AA-	20%	\$250
Commercial Paper	270 Days	A-1+ and A	20%	5% of portfolio or 10%
Medium Term Corporate Notes	5 Years	AA- and A	20%	5%
Repurchase Agreements	270 Days	N/A	20%	N/A
Municipal Bonds	5 Years	AA- and A	20%	5%
Municipal Notes	N/A	SP-1+	20%	5%

The District does not enter into reverse repurchase agreements.

C. District Enterprise Fund Investments Authorized by Debt Agreements

The District must maintain required amounts of cash and investments with trustees or fiscal agents under the terms of certain debt issues. These funds are unexpended bond proceeds or are pledged reserves to be used if the District fails to meet its obligations under these debt issues. The California Government Code requires these funds to be invested in accordance with District resolutions, bond indentures or State statutes. The table below identifies the investment types that are authorized for investments held by fiscal agents. The table also identifies certain provisions of these debt agreements:

Authorized Investment Type	Minimum Credit Quality
Repurchase Agreements	Top Four Short Term Rating Category
U.S. Treasury Bonds, Notes and Bills	N/A
U.S. Government Agency and U.S. Government-Sponsored Enterprise Obligation	N/A
State Obligations	Not lower than the District's bond rating
Commercial Paper	Top Rating Category
Negotiable Certificates of Deposit	FDIC insured or collateralised
Time Certificates of Deposits - Banks or Savings and Loans	FDIC insured or collateralised
Corporate Notes (up to 3 years)	Top Short-Term Rating Category
Corporate Bonds (longer than 3 years)	Not lower than District's bond rating
Variable Rate Obligations	Top Short-Term Rating Category
Cash Sweep Agreements	Top Rating Category
Guaranteed Investment Contract	Not lower than District's bond rating
Shares of Beneficial Interest	Top Rating Category

**EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO BASIC FINANCIAL STATEMENTS
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NOTE 2 - CASH AND INVESTMENTS (Continued)

D. Employees Retirement System Authorized Investment Strategy

The System's Statement of Investment Policy and Procedures authorize the System to invest in financial instruments in three broad investment categories: equity, fixed income, and real estate. These financial instruments can include, but are not limited to, corporate bonds, commercial paper, U.S. government securities, common and preferred stock, real estate investment trusts, and mutual funds. Fixed income investments may include futures and options contracts in order to provide added flexibility in managing the fixed income portfolio. The following is a summary of the System's Statement of Investment Policy and Procedures adopted by the System on March 21, 2019.

The Retirement Board is authorized to designate multiple investment managers to manage the assets under their supervision subject to the laws of the State of California and the Investment Guidelines established by the Retirement Board. Allocation of assets to the investment managers are determined by the Retirement Board to accommodate changing conditions and laws.

On March 15, 2018, the System adopted an updated asset allocation, which is shown in the table below.

US Equity	25%
Non-US Equity	25%
Core Fixed Income	20%
Non-Core Fixed Income	5%
Covered Calls	20%
Real Estate	5%

The Director of Finance is authorized to transfer assets as provided in the System's Statement of Investment Policy and Procedures. The Director of Finance is further authorized to withdraw assets from assigned managers as necessary to efficiently meet operating needs.

The core fixed income target allocation (20% of the total portfolio) will primarily consist of U.S. denominated fixed income securities.

The non-core fixed income target allocation (5% of the total portfolio) will primarily consist of U.S. denominated fixed income securities. It is expected that this allocation may have a material allocation to below investment grade securities.

The domestic equity allocation target (25% of the total portfolio) will consist of the allocation to securities that corresponds to the weight of securities within the Russell 3000 Index.

The covered calls target allocation (20% of the total portfolio) may consist of a combination of Chicago Board Options Exchange S&P 500 BuyWrite Index (the "BXM Index") replication strategy and/or active non-replication strategies and their underlying domestic equity portfolios.

**EAST BAY MUNICIPAL UTILITY DISTRICT
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NOTE 2 - CASH AND INVESTMENTS (Continued)

The international equity target allocation (25% of the total portfolio) will consist of the allocation to securities that correspond to the weight of securities within the MSCI ACWI xUS Index for 10% of the total portfolio and of active strategies for 15% of the total portfolio.

The real estate target allocation (5% of the total portfolio) will consist of either equity (ownership) and/or fixed income participation in commercial, industrial, or residential properties. Investments may include interests in mortgages pools secured by loans of underlying properties.

The asset allocation does allow for the fact that at any time equity and fixed income managers may have transactional cash on hand and the District will maintain enough cash as working capital to effectively meet cash flow demands on the system. However, there is no specific allocation for cash as all investable cash is allocated to specific investment mandates.

E. Fair Value Hierarchy

The District categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure fair value of the assets. Level 1 inputs are quoted prices in an active market for identical assets; Level 2 inputs are significant other observable inputs; and Level 3 inputs are significant unobservable inputs.

The following is a summary of the fair value hierarchy of the fair value of investments of the District as of June 30, 2020 and 2019:

District Enterprise Funds:

The following is a summary of the fair value hierarchy of the fair value of investments of the District as of June 30, 2020:

Investment Type	Level 2	Total
Investments by Fair Value Level:		
U.S. Government-Sponsored Enterprise Agencies:		
Non-callable	\$ 109,432	\$ 109,432
Callable	35,836	35,836
U.S. Treasury Bill	111,977	111,977
Corporate Securities	57,510	57,510
Municipal Bonds	6,201	6,201
Total Investments at Fair Value	\$ 320,956	320,956
Investments Measured at Net Asset Value Per Share:		
California Asset Management Program		136,410
Investment Trust of California		30,015
Investments Measured at Amortized Cost:		
California Local Agency Investment Fund		70,870
Mutual Funds (U.S. Securities)		136,872
Total Investments		695,123
<i>Cash in banks</i>		37,570
Total District Cash and Investments		\$ 732,693

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NOTE 2 - CASH AND INVESTMENTS (Continued)

In fiscal year 2020, the U.S. Government-Sponsored Enterprise Agency securities totaled \$145,268, U.S. Treasury Bill totaled \$111,977, Corporate securities totaled \$57,510, and Municipal Bonds total \$6,201, are classified in Level 2 of the fair value hierarchy, are valued using matrix pricing techniques maintained by various pricing vendors. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices.

The following is a summary of the fair value hierarchy of the fair value of investments of the District as of June 30, 2019:

Investment Type	Level 2	Total
Investments by Fair Value Level:		
U.S. Government-Sponsored Enterprise Agencies:		
Non-callable	\$ 32,770	\$ 32,770
Callable	471,620	471,620
Corporate Securities	70,455	70,455
Municipal Bonds	13,316	13,316
Total Investments at Fair Value	\$ 588,161	588,161
Investments Measured at Net Asset Value Per Share:		
California Asset Management Program		72,665
Investments Measured at Amortized Cost:		
California Local Agency Investment Fund		61,628
Mutual Funds (U.S. Securities)		3,747
Total Investments		726,201
<i>Cash in banks</i>		40,139
Total District Cash and Investments		\$ 766,340

In fiscal year 2019, the U.S. Government-Sponsored Enterprise Agency securities totaled \$504,390, Corporate securities totaled \$70,455, and Municipal Bonds total \$13,316, are classified in Level 2 of the fair value hierarchy, are valued using matrix pricing techniques maintained by various pricing vendors. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices.

**EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO BASIC FINANCIAL STATEMENTS
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NOTE 2 - CASH AND INVESTMENTS (Continued)

System Pension Trust Fund:

The following is a summary of the fair value hierarchy of investments held by the Pension Trust Fund as of June 30, 2020:

Investment Type	Level 1	Level 2	Level 3	Total
Investments by Fair Value:				
Asset Backed Securities	\$ -	\$ 13,094	\$ -	\$ 13,094
Equities	637,430	-	74	637,504
Bank Loans	-	6,684	-	6,684
Commercial Mortgage-Backed	-	6,967	-	6,967
Corporate Bonds	-	233,243	-	233,243
Corporate Convertible Bonds	-	400	-	400
Govt Agencies	-	72,856	-	72,856
Govt Bonds	-	10,577	-	10,577
Govt Mortgage Backed Securities	-	41,210	-	41,210
Index Linked Govt Bonds	-	19,551	-	19,551
Municipal/Provincial Bonds	-	705	-	705
Other Fixed Income	-	23,711	-	23,711
Real Estate-Partnerships	-	-	50,541	50,541
Total Investments at Fair Value	\$ 637,430	\$ 428,998	\$ 50,615	1,117,043
Investments Not Subject to Fair Value Hierarchy:				
Comingled Funds and Other				689,246
Total System Investments				1,806,289
Invested Securities Lending Collateral				80,731
Cash and Cash Equivalents:				
California Local Agency Investment Fund				4,518
Cash & Short-term Investments				53,334
Total System Cash and Investments				\$ 1,944,872

Investments classified in Level 1 of the fair value hierarchy, valued at \$637,430, are valued using quoted prices in active markets. \$428,998 of investments classified in Level 2 of the fair value hierarchy, are valued using matrix pricing techniques maintained by various pricing vendors. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Investments totaling \$50,615 classified in Level 3 of the fair value hierarchy are valued using appraisals and estimates by investment managers. Fair value is defined as the quoted market value on the last trading day of the period. These prices are obtained from various pricing sources by our custodian bank.

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NOTE 2 - CASH AND INVESTMENTS (Continued)

The following is a summary of the fair value hierarchy of the fair value of investments of the Pension Trust Fund as of June 30, 2019:

Investment Type	Level 1	Level 2	Level 3	Total
Investments by Fair Value:				
Asset Backed Securities	\$ -	\$ 17,742	\$ -	\$ 17,742
Equities	651,192	-	87	651,279
Bank Loans	-	5,986	-	5,986
Commercial Mortgage-Backed	-	9,542	-	9,542
Commercial Paper	-	369	-	369
Corporate Bonds	-	117,786	-	117,786
Corporate Convertible Bonds	-	236	-	236
Govt Agencies	-	24,943	-	24,943
Govt Bonds	-	28,311	-	28,311
Govt Issued Commercial Mortgage-Backed	-	37	-	37
Govt Mortgage Backed Securities	-	38,430	-	38,430
Index Linked Govt Bonds	-	4,770	-	4,770
Municipal/Provincial Bonds	-	1,870	-	1,870
Non-Govt Backed CMO's	-	849	-	849
Other Fixed Income	-	30,079	-	30,079
Real Estate-Partnerships	-	-	46,191	46,191
Total Investments at Fair Value	\$ 651,192	\$ 280,950	\$ 46,278	978,420
Investments Not Subject to Fair Value Hierarchy:				
Comingled Funds and Other				817,393
Total System Investments				1,795,813
Invested Securities Lending Collateral				48,857
Cash and Cash Equivalents:				
California Local Agency Investment Fund				4,958
Cash & Short-term Investments				37,771
Total System Cash and Investments				\$ 1,887,399

During fiscal year 2019, investments classified in Level 1 of the fair value hierarchy, valued at \$651,192, are valued using quoted prices in active markets. \$280,950 of investments classified in Level 2 of the fair value hierarchy, are valued using matrix pricing techniques maintained by various pricing vendors. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Investments totaling \$46,278 classified in Level 3 of the fair value hierarchy are valued using appraisals and estimates by investment managers. Fair value is defined as the quoted market value on the last trading day of the period. These prices are obtained from various pricing sources by our custodian bank.

F. Interest Rate Risk

Interest rate risk is the risk that changes in market interest rates will adversely affect the market value of an investment. Normally, the longer the maturity of an investment, the greater the sensitivity of its market value to changes in market interest rates. The District generally manages its interest rate risk by holding investments to maturity.

**EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO BASIC FINANCIAL STATEMENTS
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NOTE 2 - CASH AND INVESTMENTS (Continued)

Information about the sensitivity of the market values of the District's and System's investments (including investments held by bond trustees) to market interest rate fluctuations is provided by the following table that shows the distribution of the District's investments by maturity or earliest call date.

District Enterprise Funds:

Information about the sensitivity of the fair value of the District's investments to market interest rate fluctuations is provided in the following table that shows the distribution of the District's investments by maturity or earliest call date for June 30, 2020:

Investment Type	12 Months or less	13 to 24 Months	25 to 60 Months	Total
U.S. Government-Sponsored Enterprise Agencies				
Non-callable	\$ 107,893	\$ 1,539	\$ -	\$ 109,432
Callable	27,387	-	8,449	35,836
U.S. Treasury Bill	111,977	-	-	111,977
Corporate Securities	24,646	22,404	10,460	57,510
Municipal Bonds	5,694	136	371	6,201
Mutual Funds (U.S. Securities)	136,872	-	-	136,872
California Asset Management Program	136,410	-	-	136,410
Investment Trust of California	30,015	-	-	30,015
California Local Agency Investment Fund	70,870	-	-	70,870
 Total Investments	 <u>\$ 651,764</u>	 <u>\$ 24,079</u>	 <u>\$ 19,280</u>	 695,123
 <i>Cash in banks</i>				 <u>37,570</u>
 Total District Cash and Investments				 <u>\$ 732,693</u>

Information about the sensitivity of the fair value of the District's investments to market interest rate fluctuations is provided in the following table that shows the distribution of the District's investments by maturity or earliest call date for June 30, 2019:

Investment Type	12 Months or less	13 to 24 Months	25 to 60 Months	Total
U.S. Government-Sponsored Enterprise Agencies				
Non-callable	\$ 29,766	\$ 2,003	\$ 1,001	\$ 32,770
Callable	94,862	93,966	282,792	471,620
Corporate Securities	32,251	17,813	20,391	70,455
Municipal Bonds	7,145	5,672	499	13,316
Mutual Funds (U.S. Securities)	3,747	-	-	3,747
California Asset Management Program	72,665	-	-	72,665
California Local Agency Investment Fund	61,628	-	-	61,628
 Total Investments	 <u>\$ 302,064</u>	 <u>\$ 119,454</u>	 <u>\$ 304,683</u>	 726,201
 <i>Cash in banks</i>				 <u>40,139</u>
 Total District Cash and Investments				 <u>\$ 766,340</u>

**EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO BASIC FINANCIAL STATEMENTS
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NOTE 2 - CASH AND INVESTMENTS (Continued)

System Pension Trust Fund:

Information about the sensitivity of the fair value of the Pension Trust Fund's investments to market interest rate fluctuations is date provided in the following table that shows the distribution of the District's investments by maturity or earliest call for June 30, 2020:

Investment Type	Less than 12 Months	12 to 72 Months	72 to 120 Months	More than 120 Months	Maturity not Determined	Total
Asset Backed Securities	\$ -	\$ 10,157	\$ 1,937	\$ 1,000	\$ -	\$ 13,094
Equity Securities	637,504	-	-	-	-	637,504
Bank Loans	-	4,857	1,827	-	-	6,684
Commercial Mortgage-Backed	-	-	300	6,667	-	6,967
Corporate Bonds	1,915	109,039	84,309	37,980	-	233,243
Corporate Convertible Bonds	-	400	-	-	-	400
Govt Agencies	3,769	61,599	2,777	4,711	-	72,856
Govt Bonds	-	2,832	2,369	5,376	-	10,577
Govt Mortgage Backed Securities	-	-	865	40,345	-	41,210
Index Linked Govt Bonds	-	9,176	7,921	2,454	-	19,551
Municipal/Provincial Bonds	-	-	-	705	-	705
Other Fixed Income	1,671	21,079	961	-	-	23,711
Real Estate-Partnerships	-	-	-	-	50,541	50,541
Comingled Funds and Other	-	-	-	-	689,246	689,246
Total System Investments	<u>\$ 644,859</u>	<u>\$ 219,139</u>	<u>\$ 103,266</u>	<u>\$ 99,238</u>	<u>\$ 739,787</u>	<u>\$ 1,806,289</u>

Information about the sensitivity of the fair value of the Pension Trust Fund's investments to market interest rate fluctuations is date provided in the following table that shows the distribution of the District's investments by maturity or earliest call for June 30, 2019:

Investment Type	Less than 12 Months	12 to 72 Months	72 to 120 Months	More than 120 Months	Maturity not Determined	Total
Asset Backed Securities	\$ -	\$ 9,138	\$ 6,857	\$ 1,747	\$ -	\$ 17,742
Equity Securities	651,279	-	-	-	-	651,279
Bank Loans	298	2,265	3,423	-	-	5,986
Commercial Mortgage-Backed	-	740	275	8,527	-	9,542
Commercial Paper	369	-	-	-	-	369
Corporate Bonds	7,252	69,097	21,389	19,958	90	117,786
Corporate Convertible Bonds	97	139	-	-	-	236
Govt Agencies	149	4,325	15,604	4,865	-	24,943
Govt Bonds	1,136	9,739	8,176	9,260	-	28,311
Govt Issued Commercial Mortgage-Backed	-	37	-	-	-	37
Govt Mortgage Backed Securities	-	3	1,893	36,534	-	38,430
Index Linked Govt Bonds	-	500	2,879	1,391	-	4,770
Municipal/Provincial Bonds	-	-	-	1,870	-	1,870
Non-Govt Backed CMO's	-	-	158	691	-	849
Other Fixed Income	1,406	28,673	-	-	-	30,079
Real Estate-Partnerships	-	-	-	-	46,191	46,191
Comingled Funds and Other	155	-	-	-	817,238	817,393
Total System Investments	<u>\$ 662,141</u>	<u>\$ 124,656</u>	<u>\$ 60,654</u>	<u>\$ 84,843</u>	<u>\$ 863,519</u>	<u>\$ 1,795,813</u>

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NOTE 2 - CASH AND INVESTMENTS (Continued)

The District and System are participants 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. They report their investment in LAIF at the market value amount provided by LAIF, which is the same as the value of the pool share. 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 collateralized mortgage obligations, mortgage-backed securities, other asset-backed securities, loans to certain state funds, and floating rate securities issued by federal agencies, government-sponsored enterprises, United States Treasury Notes and Bills, and corporations. On June 30, 2020, these investments matured in an average of 180 days.

The System’s investments include the following investments that are highly sensitive to interest rate fluctuations to a greater degree than already indicated above as of June 30, 2020 and 2019:

Highly Sensitive Investments	Fair Value at Year End
Government Mortgage - Backed Securities	\$ 41,210
Commercial Mortgage - Backed Securities	6,967
Highly Sensitive Investments	Fair Value at Year End
Government Mortgage - Backed Securities	\$ 38,430
Commercial Mortgage - Backed Securities	9,542
Government Issued Commercial Mortgage - Backed Securities	37

G. Credit Risk

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 credit rating organization.

**EAST BAY MUNICIPAL UTILITY DISTRICT
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NOTE 2 - CASH AND INVESTMENTS (Continued)

District Enterprise Funds:

Presented below is the actual rating as of June 30, 2020 for each investment type as provided by Moody's.

Investment Type	Aaa	Aa1	Aa2	Aa3	Total
U.S. Government-Sponsored					
Non-Callable	\$ 109,432	\$ -	\$ -	\$ -	\$ 109,432
Callable	35,836	-	-	-	35,836
U.S. Treasury Bill	111,977	-	-	-	111,977
Corporate Securities	5,174	52,117	-	219	57,510
Mutual Funds (U.S. Securities)	136,872	-	-	-	136,872
Totals	<u>\$ 399,291</u>	<u>\$ 52,117</u>	<u>\$ -</u>	<u>\$ 219</u>	451,627
<i>Not rated by Moody's:</i>					
Municipal Bonds					6,201
California Local Agency Investment Fund					70,870
California Asset Management Program					136,410
Investment Trust of California					30,015
Cash in Banks					<u>37,570</u>
Total District Cash and Investments					<u>\$ 732,693</u>

Presented below is the actual rating as of June 30, 2019 for each investment type as provided by Moody's.

Investment Type	Aaa	Aa1	Aa2	Aa3	Total
U.S. Government-Sponsored					
Non-Callable	\$ 32,770	\$ -	\$ -	\$ -	\$ 32,770
Callable	471,620	-	-	-	471,620
Corporate Securities	2,314	63,660	-	4,481	70,455
Municipal Bonds	2,629	-	500	278	3,407
Mutual Funds (U.S. Securities)	3,747	-	-	-	3,747
Totals	<u>\$ 513,080</u>	<u>\$ 63,660</u>	<u>\$ 500</u>	<u>\$ 4,759</u>	581,999
<i>Not rated by Moody's:</i>					
Municipal Bonds					9,909
California Local Agency Investment Fund					61,628
California Asset Management Program					72,665
Cash in Banks					<u>40,139</u>
Total District Cash and Investments					<u>\$ 766,340</u>

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NOTE 2 - CASH AND INVESTMENTS (Continued)

System Pension Trust Fund:

Presented below is the actual rating as of June 30, 2020 for each investment type as provided by Moody's.

Investment Type	Aaa	Aa	A	Baa	Ba	B	Caa	C	U.S. Government		Total
									Guaranteed	Not Rated	
Asset Backed Securities	\$ 5,570	\$ 1,247	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,277	\$ 13,094
Equity Securities	-	-	-	-	-	-	-	-	-	637,504	637,504
Bank Loans	-	-	-	523	2,399	3,003	369	-	-	390	6,684
Commercial Mortgage - Backed Securities	3,624	-	-	527	-	-	-	-	-	2,816	6,967
Corporate Bonds	1,218	13,519	159,451	21,397	16,572	13,747	2,075	50	-	5,214	233,243
Corporate Convertible Bonds	-	-	-	48	-	224	-	-	-	-	400
Government Agencies	43,523	692	-	-	-	-	-	-	26,599	2,042	72,856
Government Bonds	5,612	-	-	1,115	-	-	-	-	3,850	-	10,577
Government Mortgage - Backed Securities	-	-	-	-	-	-	-	-	40,191	1,019	41,210
Index Linked Government Bonds	19,551	-	-	-	-	-	-	-	-	-	19,551
Municipal Bonds	-	705	-	-	-	-	-	-	-	-	705
Other Fixed Income	-	-	-	-	-	-	-	-	-	23,711	23,711
Real Estate - Partnerships	-	-	-	-	-	-	-	-	-	50,541	50,541
Comingled Funds and Other	-	-	-	-	-	-	-	-	-	689,246	689,246
Total System Investments	\$ 79,098	\$ 16,163	\$ 159,451	\$ 23,610	\$ 18,971	\$ 16,974	\$ 2,444	\$ 50	\$ 70,640	\$ 1,418,888	\$ 1,806,289

Presented below is the actual rating as of June 30, 2019 for each investment type as provided by Moody's.

Investment Type	Aaa	Aa	A	Baa	Ba	B	Caa	U.S. Government		Total	
								Guaranteed	Not Rated		
Asset Backed Securities	\$ 9,395	\$ 1,029	\$ 310	\$ 87	\$ -	\$ -	\$ -	\$ -	\$ 6,921	\$ 17,742	
Equity Securities	-	-	-	-	-	-	-	-	-	651,279	651,279
Bank Loans	-	-	-	400	2,548	1,998	-	-	-	1,040	5,986
Commercial Mortgage - Backed Securities	5,042	-	-	526	-	-	-	-	-	3,974	9,542
Commercial Paper	-	-	-	-	-	-	-	-	-	369	369
Corporate Bonds	3,549	11,893	46,360	19,819	19,104	13,976	1,185	-	1,900	117,786	
Corporate Convertible Bonds	-	-	-	-	139	97	-	-	-	-	236
Government Agencies	24,595	-	-	348	-	-	-	-	-	-	24,943
Government Bonds	27,968	-	-	343	-	-	-	-	-	-	28,311
Government Issued Commercial Mortgage - Backed Securities	-	-	-	-	-	-	-	37	-	-	37
Government Mortgage - Backed Securities	-	111	-	-	-	-	-	37,969	350	-	38,430
Index Linked Government Bonds	4,770	-	-	-	-	-	-	-	-	-	4,770
Municipal Bonds	-	1,763	-	-	-	-	-	-	-	107	1,870
Non-Government Backed CMO's	469	121	38	147	-	-	-	-	-	74	849
Other Fixed Income	-	-	-	-	-	-	-	-	-	30,079	30,079
Real Estate - Partnerships	-	-	-	-	-	-	-	-	-	46,191	46,191
Comingled Funds and Other	-	-	-	-	-	-	-	-	-	817,393	817,393
Total System Investments	\$ 75,788	\$ 14,917	\$ 46,708	\$ 21,670	\$ 21,791	\$ 16,071	\$ 1,185	\$ 38,006	\$ 1,559,677	\$ 1,795,813	

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NOTE 2 - CASH AND INVESTMENTS (Continued)

H. Concentration Risk

Significant District investments in the securities of any individual issuers, other than U. S. Treasury securities, LAIF, and mutual funds, are set forth below as of June 30, 2020:

District Enterprise Funds:

Reporting Unit	Issuer	Investment Type	Reported Amount
District-Wide	APPLE INC.	Corporate Securities	\$ 52,116
	FHLB	Federal Agency Securities	54,991
Major Funds:			
Water System	APPLE INC.	Corporate Securities	49,533
	FHLB	Federal Agency Securities	54,991
Wastewater System	FFCB	Federal Agency Securities	7,009
	FHLMC	Federal Agency Securities	5,370

Significant District investments in the securities of any individual issuers, other than U. S. Treasury securities, LAIF, and mutual funds, are set forth below as of June 30, 2019:

District Enterprise Funds:

Reporting Unit	Issuer	Investment Type	Reported Amount
District-Wide	FHLMC	Federal Agency Securities	\$ 133,649
	FNMA	Federal Agency Securities	50,668
	FHLB	Federal Agency Securities	245,614
	FFCB	Federal Agency Securities	73,959
Major Funds:			
Water System	FHLMC	Federal Agency Securities	121,926
	FHLB	Federal Agency Securities	239,129
	FNMA	Federal Agency Securities	46,235
	FFCB	Federal Agency Securities	71,644
Wastewater System	FHLMC	Federal Agency Securities	11,723
	FNMA	Federal Agency Securities	4,433
	FHLB	Federal Agency Securities	6,485

**EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO BASIC FINANCIAL STATEMENTS
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NOTE 2 - CASH AND INVESTMENTS (Continued)

System Pension Trust Fund:

As of June 30, 2020 and June 30, 2019, the District did not have investments in any one organization exceeding 5% of the System's investments.

The District held demand deposits (overdrafts) amounting to \$2,874 and \$4,941 on behalf of the System as of June 30, 2020 and 2019, respectively. The financial institution which holds these deposits is required by state law to maintain collateral pools against all public deposits they hold.

I. Foreign Currency Risk

System Pension Trust Fund:

Foreign currency risk is the risk that changes in foreign exchange rates will adversely affect the fair values of an investment or deposit.

Presented below in US dollars is the fair market value of the System's foreign investments at June 30, 2020:

Foreign Currency	Equity Securities Investment Type
Euro	\$ 74,178
British Pound Sterling	22,077
Japanese Yen	46,519
Hong Kong Dollar	16,904
South Korean Won	8,866
Swiss Franc	9,729
Danish Krone	3,263
Canadian Dollar	3,825
Australian Dollar	4,138
Norwegian Krone	3,967
Indonesian Rupiah	1,710
Singapore Dollar	1,272
Total	\$ 196,448

The Fund's investment policy permits it to invest 20% of total investment on foreign currency-denominated investments. The Fund's current position is 10.88%.

**EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO BASIC FINANCIAL STATEMENTS
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NOTE 2 - CASH AND INVESTMENTS (Continued)

Presented below in US dollars is the fair market value of the System's foreign investments at June 30, 2019:

Foreign Currency	Equity Securities Investment Type
Euro	\$ 92,700
British Pound Sterling	33,678
Japanese Yen	28,915
Hong Kong Dollar	19,130
South Korean Won	10,605
Swiss Franc	8,140
Danish Krone	5,530
Canadian Dollar	5,147
Australian Dollar	4,382
Norwegian Krone	3,333
Indonesian Rupiah	2,487
Singapore Dollar	1,849
Thai Baht	206
Total	\$ 216,102

The Fund's investment policy permits it to invest 20% of total investment on foreign currency-denominated investments. The Fund's prior year position is 12.03%.

J. Custodial Credit Risk

Custodial credit risk for *cash on deposits* is the risk that, in the event of the failure of a depository financial institution, a government will not be able to recover its deposits or will not be able to recover collateral securities that are in the possession of an outside party. The custodial credit risk for *investments* is the risk that, in the event of the failure of the counterparty (e.g., broker-dealer) to a transaction, the District or System will not be able to recover the value of its investment or collateral securities that are in the possession of another party.

California Law requires banks and savings and loan institutions to pledge government securities with a market value of 110% of the District's cash on deposit, or first trust deed mortgage notes with a market value of 150% of the deposit, as collateral for these deposits. Under California Law this collateral is held in a separate investment pool by another institution in the District's name and places the District ahead of general creditors of the institution.

**EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO BASIC FINANCIAL STATEMENTS
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NOTE 2 - CASH AND INVESTMENTS (Continued)

The District and System invest in individual investments and in investment pools. Individual investments are evidenced by specific identifiable *securities instruments*, or by an electronic entry registering the owner in the records of the institution issuing the security, called the *book entry* system. In order to increase security, the District and System employ the Trust Department of a bank or trustee as the custodian of certain District and System managed investments, regardless of their form.

As of June 30, 2020 and 2019, the System's brokers/dealers held \$0 in cash exposed to custodial credit risk.

K. Joint Powers Authority and Partnership Funds

DSRSD/EBMUD Recycled Water Authority - On June 28, 1995, the Dublin San Ramon Services District (DSRSD) and East Bay Municipal Utility District (District) entered into a Joint Powers Agreement (JPA) and established the DSRSD/EBMUD Recycled Water Authority (DERWA) with the purpose of creating a recycled water program in the San Ramon and Livermore-Amador Valleys. The JPA governing body is not substantially the same as the District and its independent Board consists of two directors each from the DSRSD and District. The JPA books and records are being maintained separately from DSRSD and the District. The DSRSD and District made member contributions to fund the JPA start-up and continue to fund capital projects at the request of the JPA on an as needed basis. Although DERWA has a significant relationship with the District, DERWA does not provide services solely to the District, and therefore is not considered a component unit of the District.

Freeport Regional Water Authority - The Freeport Regional Water Project (FRWP) is a regional water supply project undertaken by the District in partnership with the Sacramento County Water Agency (SCWA). In February 2002, with the support of the United States Bureau of Reclamation, the District and SCWA formed the Freeport Regional Water Authority (FRWA) under a joint powers agreement to develop the FRWP. The FRWP provides the permanent infrastructure to allow the District to receive water deliveries pursuant to the Long-Term Renewal Central Valley Project Contract at a new point of diversion along the Sacramento River. In addition to providing the District up to 100 MGD of supplemental water in dry years, the FRWP can provide up to 85 MGD to SCWA in all years. The District's share of the facilities is recorded as Investment in JPA and is presented on the balance sheet. To increase the District's reserve of water supply during the last drought, the District activated the pumping of water from the Sacramento River via the Freeport facility during Fiscal Year 2015.

California Asset Management Program (CAMP) – the District is a participant in the CAMP. CAMP is an investment pool offered by the California Asset Management Trust (the Trust). The Trust is a joint powers authority and public agency created by the Declaration of Trust and established under the provisions of the California Joint Exercise of Powers Act (California Government Code Sections 6500 et seq., or the "Act") for the purpose of exercising the common power of CAMP participants to invest certain proceeds of debt issues and surplus funds. CAMP investments are limited to investments permitted by subdivisions (a) to (n), inclusive, of Section 53601 of the California Government Code. The District reports its investments in CAMP at the fair value amounts provided by CAMP, which is the same as the value of the pool share in accordance with GASB 72 requirements. At June 30, 2020, the fair value was approximate to the District's cost. As of June 30, 2020, the District investment in CAMP is \$136,410.

**EAST BAY MUNICIPAL UTILITY DISTRICT
 NOTES TO BASIC FINANCIAL STATEMENTS
 FOR THE YEARS ENDED JUNE 30, 2020 AND 2019
 (Dollars in Thousands)**

NOTE 2 - CASH AND INVESTMENTS (Continued)

Investment Trust of California (CalTRUST) – the District is a voluntary participant in the CalTRUST, which is a Joint Powers Authority governed by a Board of Trustees including local treasurers and investment officers. The Board of Trustees sets overall policy for CalTRUST and selects and supervises the activities of the investment managers and other agents. As of June 30, 2020, the District’s investment in CalTRUST is \$30,015.

NOTE 3 – CAPITAL ASSETS

A. Summary

The District capitalizes all assets with a historical cost of at least \$5 and a useful life of at least three years. Contributed capital assets are valued at their estimated acquisition value on the date contributed.

The purpose of depreciation is to spread the cost of capital assets equitably among all customers over the life of these assets, so that each customer’s bill includes a pro rata share of the cost of these assets. The amount charged to depreciation expense each year represents that year’s pro rata share of depreciable capital assets.

Depreciation of all capital assets in service, excluding land, is charged as an expense against operations each year and the total amount of depreciation taken over the years, called accumulated depreciation, is reported on the balance sheet as a reduction in the book value of the capital assets.

Capital assets are depreciated using the straight line method of depreciation, which means the cost of the asset is divided by its expected useful life in years and the result is charged to expense each year until the asset is fully depreciated. The District has assigned the useful lives listed below to capital assets:

Utility plant:	Years
Source of supply	25-100
Raw water transmission and storage	20-100
Interception and outfall	60-75
Pumping	25-75
Treatment	20-75
Distribution	25-75
Power Generation	25-75
Equipment	5-20
Plant Structures	25-75
Other	5-40

EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO BASIC FINANCIAL STATEMENTS
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(Dollars in Thousands)

NOTE 3 – CAPITAL ASSETS (Continued)

B. Additions and Retirements

Capital assets activity for all business-type activities for the year ended June 30, 2020 was as follows:

	Balance at June 30, 2019	Additions and Transfers, net	Retirements and Transfers, net	Balance at June 30, 2020
Water System:				
Capital assets, not being depreciated:				
Land	\$ 67,874	\$ 2,881	\$ (8)	\$ 70,747
Rights-of-way	3,043	-	-	3,043
Construction in progress - land/rights of way	181	3,352	(2,880)	653
Construction in progress	522,738	301,899	(327,656)	496,981
Total capital assets, not being depreciated	<u>593,836</u>	<u>308,132</u>	<u>(330,544)</u>	<u>571,424</u>
Capital assets, being depreciated/amortized:				
Buildings and improvements	246,981	1,060	-	248,041
System and improvements	5,293,075	303,049	(3,606)	5,592,518
Machinery and equipment	122,292	9,690	(5,496)	126,486
Intangible Assets	359,487	5,854	-	365,341
Total capital assets, being depreciated/amortized:	<u>6,021,835</u>	<u>319,653</u>	<u>(9,102)</u>	<u>6,332,386</u>
Less accumulated depreciation/amortization for:				
Buildings and improvements	(118,031)	(5,295)	-	(123,326)
System and improvements	(1,812,568)	(102,563)	2,886	(1,912,245)
Machinery and equipment	(69,690)	(6,673)	4,797	(71,566)
Intangible assets	(305,250)	(11,575)	-	(316,825)
Total accumulated depreciation/amortization	<u>(2,305,539)</u>	<u>(126,106)</u>	<u>7,683</u>	<u>(2,423,962)</u>
Total capital assets, being depreciated/amortized, net	<u>3,716,296</u>	<u>193,547</u>	<u>(1,419)</u>	<u>3,908,424</u>
Water System capital assets, net	<u>\$ 4,310,132</u>	<u>\$ 501,679</u>	<u>\$ (331,963)</u>	<u>\$ 4,479,848</u>
Wastewater System:				
Capital assets, not being depreciated:				
Land	\$ 21,218	\$ -	\$ -	\$ 21,218
Rights-of-way	191	-	-	191
Construction in progress - land/rights of way	130	59	-	189
Construction in progress	68,062	42,299	(12,084)	98,277
Total capital assets, not being depreciated	<u>89,601</u>	<u>42,358</u>	<u>(12,084)</u>	<u>119,875</u>
Capital assets, being depreciated/amortized:				
Buildings and improvements	90,560	371	-	90,931
System and improvements	1,022,481	9,504	-	1,031,985
Machinery and equipment	15,089	482	-	15,571
Intangible assets	38,496	1,727	-	40,223
Total capital assets, being depreciated/amortized:	<u>1,166,626</u>	<u>12,084</u>	<u>-</u>	<u>1,178,710</u>
Less accumulated depreciation/amortization for:				
Buildings and improvements	(41,426)	(1,636)	-	(43,062)
System and improvements	(435,243)	(20,910)	-	(456,153)
Machinery and equipment	(10,381)	(1,020)	-	(11,401)
Intangible assets	(28,197)	(1,750)	-	(29,947)
Total accumulated depreciation/amortization	<u>(515,247)</u>	<u>(25,316)</u>	<u>-</u>	<u>(540,563)</u>
Total capital assets, being depreciated/amortized, net	<u>651,379</u>	<u>(13,232)</u>	<u>-</u>	<u>638,147</u>
Wastewater System capital assets, net	<u>\$ 740,980</u>	<u>\$ 29,126</u>	<u>\$ (12,084)</u>	<u>\$ 758,022</u>
Business-type activities capital assets, net	<u>\$ 5,051,112</u>	<u>\$ 530,805</u>	<u>\$ (344,047)</u>	<u>\$ 5,237,870</u>

EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO BASIC FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2020 AND 2019
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NOTE 3 – CAPITAL ASSETS (Continued)

Capital assets activity for all business-type activities for the year ended June 30, 2019 was as follows:

	Balance at June 30, 2018	Additions and Transfers, net	Retirements and Transfers, net	Balance at June 30, 2019
Water System:				
Capital assets, not being depreciated:				
Land	\$ 61,958	\$ 5,916	\$ -	\$ 67,874
Rights-of-way	3,043	-	-	3,043
Construction in progress - land/rights of way	178	3	-	181
Construction in progress	472,268	288,149	(237,679)	522,738
Total capital assets, not being depreciated	<u>537,447</u>	<u>294,068</u>	<u>(237,679)</u>	<u>593,836</u>
Capital assets, being depreciated/amortized:				
Buildings and improvements	244,400	2,581	-	246,981
System and improvements	5,083,511	224,673	(15,109)	5,293,075
Machinery and equipment	112,450	13,561	(3,719)	122,292
Intangible assets	349,942	9,545	-	359,487
Total capital assets, being depreciated/amortized:	<u>5,790,303</u>	<u>250,360</u>	<u>(18,828)</u>	<u>6,021,835</u>
Less accumulated depreciation/amortization for:				
Buildings and improvements	(112,373)	(5,658)	-	(118,031)
System and improvements	(1,715,860)	(98,523)	1,815	(1,812,568)
Machinery and equipment	(66,927)	(6,165)	3,402	(69,690)
Intangible assets	(292,570)	(12,680)	-	(305,250)
Total accumulated depreciation/amortization	<u>(2,187,730)</u>	<u>(123,026)</u>	<u>5,217</u>	<u>(2,305,539)</u>
Total capital assets, being depreciated/amortized, net	<u>3,602,573</u>	<u>127,334</u>	<u>(13,611)</u>	<u>3,716,296</u>
Water System capital assets, net	<u>\$ 4,140,020</u>	<u>\$ 421,402</u>	<u>\$ (251,290)</u>	<u>\$ 4,310,132</u>
Wastewater System:				
Capital assets, not being depreciated:				
Land	\$ 21,166	\$ 52	\$ -	\$ 21,218
Rights-of-way	191	-	-	191
Construction in progress - land/rights of way	327	-	(197)	130
Construction in progress	43,619	50,110	(25,667)	68,062
Total capital assets, not being depreciated	<u>65,303</u>	<u>50,162</u>	<u>(25,864)</u>	<u>89,601</u>
Capital assets, being depreciated/amortized:				
Buildings and improvements	87,522	3,038	-	90,560
System and improvements	1,000,724	21,757	-	1,022,481
Machinery and equipment	14,217	872	-	15,089
Intangible assets	38,496	-	-	38,496
Total capital assets, being depreciated/amortized:	<u>1,140,959</u>	<u>25,667</u>	<u>-</u>	<u>1,166,626</u>
Less accumulated depreciation/amortization for:				
Buildings and improvements	(39,851)	(1,575)	-	(41,426)
System and improvements	(414,690)	(20,553)	-	(435,243)
Machinery and equipment	(9,430)	(951)	-	(10,381)
Intangible assets	(26,404)	(1,793)	-	(28,197)
Total accumulated depreciation/amortization	<u>(490,375)</u>	<u>(24,872)</u>	<u>-</u>	<u>(515,247)</u>
Total capital assets, being depreciated/amortized, net	<u>650,584</u>	<u>795</u>	<u>-</u>	<u>651,379</u>
Wastewater System capital assets, net	<u>\$ 715,887</u>	<u>\$ 50,957</u>	<u>\$ (25,864)</u>	<u>\$ 740,980</u>
Business-type activities capital assets, net	<u>\$ 4,855,907</u>	<u>\$ 472,359</u>	<u>\$ (277,154)</u>	<u>\$ 5,051,112</u>

**EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO BASIC FINANCIAL STATEMENTS
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(Dollars in Thousands)**

NOTE 3 – CAPITAL ASSETS (Continued)

C. Construction in Progress

Construction in Progress in fiscal 2019-2020 comprises:

	<u>Expended to Date</u>
<i>Water System:</i>	
Pipeline Infrastructure Renewals	\$ 51,360
Reservoir Rehab/Maintenance	51,005
Treatment Plant Upgrades	40,884
Pumping Plant Rehabilitation	40,164
Open Cut Reservoir Rehab	31,753
Maloney PZ Improvements	24,553
Trench Soils Storage Sites	23,725
Administration Building Modifications	20,811
Additional Supplemental Supply Projects	15,878
Pipeline Infrastructure Renew Historic	15,053
Service Lateral Replacements	14,324
West of Hills Master Plan	14,167
Large Diameter Pipelines	13,649
Mokelumne Aqueduct No 2 & 3 Relining Project	11,125
Raw Water Studies and Improvements	9,978
SRV Recycled Water Program	9,482
WTTIP Water Treatment Plant Improvements	8,714
Pipeline Relocations	6,086
Water Conservation Project	5,737
Raw Water Aqueduct Operation and Maintenance Improvements	5,379
Other Construction Projects	83,807
	497,634
<i>Wastewater System:</i>	
General Wastewater	22,270
Interceptors and Pump Stations	20,208
Primary Treatment	14,193
Digesters	14,091
Preliminary Treatment	6,824
Power Generation and Biogas	3,847
Resource Recovery	3,302
Wet Weather Facilities	3,047
Utilities and Sitework	2,884
Effluent Discharge	2,481
Electricals and Controls	1,977
Nutrients	1,831
Secondary	1,657
Treatment Plant Infrastructure	852
South Interceptor Relocation High Street	540
Other Construction Projects	(1,538)
	98,466
Total District Construction in Progress	\$ 596,100

At June 30, 2020, the District's remaining current major project commitments are estimated to be \$105,790 for the Water System and \$22,923 for the Wastewater System.

**EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO BASIC FINANCIAL STATEMENTS
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NOTE 3 – CAPITAL ASSETS (Continued)

Construction in Progress in fiscal 2018-2019 comprises:

	<u>Expended to Date</u>
<i>Water System:</i>	
Treatment Plant Upgrades	\$ 86,638
Pipeline Infrastructure Renewals	47,944
Reservoir Rehab/Maintenance	43,092
Open Cut Reservoir Rehab	40,835
Summit Pressure Zone Improvement	35,785
Large Diameter Pipelines	25,774
Pumping Plant Rehabilitation	22,614
Faria PZI (formerly Purdue)	17,224
Additional Supplemental Supply Projects	17,221
Trench Soils Storage Sites	16,734
Service Lateral Replacements	11,744
Maloney PZ Improvements	9,060
Raw Water Studies and Improvements	9,035
SRV Recycled Water Program	8,990
Mokelumne Aqueduct No 2 & 3 Relining Project	8,682
West of Hills Master Plan	8,290
Pipeline Relocations	7,134
Administration Building Modifications	7,002
Water Conservation Project	5,827
Water Capital Costs Misc.	5,433
Other Construction Projects	87,861
	522,919
 <i>Wastewater System:</i>	
3rd Street Sewer Interceptor Rehab	11,205
Concrete Rehab at Special District 1	9,166
Digester Upgrade	8,065
Treatment Plant Infrastructure	6,648
Routine Capital Equipment Replacement	5,443
PS Q FM Dual-Mode Operation	3,911
Infiltration/Inflow Control Project	3,331
MWWTP Master Planning	2,919
Resource Recovery Project	2,793
Treatment Plant Infrastructure Phase 2	2,723
PGS Engine Overhaul	1,782
Interceptor Corrosion Prevention	1,374
MWWTP Power Distribution System Upgrade	1,207
Pump Station Major Improvement	1,105
Seismic Retrofits	924
Other Construction Projects	5,596
	68,192
Total District Construction in Progress	\$ 591,111

At June 30, 2019, the District's remaining current major project commitments are estimated to be \$86,882 for the Water System and \$16,089 for the Wastewater System.

**EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO BASIC FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2020 AND 2019
(Dollars in Thousands)**

NOTE 4 – ACCOUNTS PAYABLE & ACCRUED EXPENSES

Accounts payable and accrued expenses at June 30, 2020 and 2019 consist of:

	Water System		Wastewater System		Total	
	June 30, 2020	June 30, 2019	June 30, 2020	June 30, 2019	June 30, 2020	June 30, 2019
Accounts payable	\$34,907	\$24,490	\$ 4,662	\$ 7,341	\$39,569	\$31,831
Accrued salaries	5,484	3,853	908	642	6,392	4,495
Other	20,402	21,214	885	1,251	21,287	22,465
Total	<u>\$60,793</u>	<u>\$49,557</u>	<u>\$ 6,455</u>	<u>\$ 9,234</u>	<u>\$67,248</u>	<u>\$58,791</u>

NOTE 5 – COMPENSATED ABSENCES

Compensated absences as of June 30, 2020 and 2019, are included on the balance sheet separately from accounts payable and accrued expenses. In previous years, trends have shown that the District employees utilize the accruals annually, therefore, amounts payable are accrued and reported as a current liability on the financial statements.

The changes in compensated absences were as follows:

	Water System		Wastewater System		Total	
	June 30,	June 30,	June 30,	June 30,	June 30,	June 30,
Beginning Balance	\$ 29,282	\$ 28,506	\$ 5,224	\$ 4,827	\$ 34,506	\$ 33,333
Additions	35,023	31,761	5,682	5,325	40,705	37,086
Payments	<u>(30,049)</u>	<u>(30,985)</u>	<u>(5,101)</u>	<u>(4,928)</u>	<u>(35,150)</u>	<u>(35,913)</u>
Ending Balance	<u>\$ 34,256</u>	<u>\$ 29,282</u>	<u>\$ 5,805</u>	<u>\$ 5,224</u>	<u>\$ 40,061</u>	<u>\$ 34,506</u>

NOTE 6 – COMMERCIAL PAPER NOTES

The District's Board of Directors has authorized the issuance of short-term indebtedness of the District in a maximum principal amount of up to the lesser of either the average of the total annual revenue for the three preceding years or 25% of the District's total outstanding bonds. Under this authority the District has established two commercial paper programs: an extendable commercial paper program and a traditional commercial paper program. The proceeds from the issuance of commercial paper under these programs are restricted as to use. Under the programs, which must be authorized by the Board of Directors every seven years by resolution subject to the right of referendum, the Water System or the Wastewater System may issue commercial paper and bank notes at prevailing interest rates for periods of not more than 270 days from the date of issuance. The programs were last authorized on April 28, 2015.

**EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO BASIC FINANCIAL STATEMENTS
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NOTE 6 – COMMERCIAL PAPER NOTES (Continued)

The District initially established its extendable commercial paper program in March 2009. Under the extendable commercial paper program, no liquidity support agreement with a commercial bank is needed. Instead, the District limits the term of the extendable commercial paper to 120 days, and the investor agrees to extend the maturity of their investment by 150 days at a higher interest rate in the event of a failure to place new commercial paper notes to pay maturing notes, which is expected to provide the District sufficient time to find a replacement investor or refund the extendable commercial paper with a different form of debt to repay the investor.

Pursuant to Board Resolution No. 35166-20, the District paid down \$5 million in extendable commercial paper for the Wastewater System in April 2020. As of June 30, 2020, \$10.0 million in Wastewater Series extendable commercial paper notes were outstanding under this program. There are no outstanding balances in Water Series extendable commercial paper notes under this program. The Wastewater Series included the term of 79 days and an interest rate of 0.30% as of June 30, 2020, and the term of 70 days and an interest rate of 1.37% as of June 30, 2019.

The District established its current traditional commercial paper program in December 2015. Pursuant to Board Resolution No. 35166-20, the District paid down \$24 million in commercial paper for the Water System in March 2020. As of June 30, 2020, \$335.8 million in Water Series and \$0 in Wastewater Series commercial paper notes were outstanding under this program. The Water Series commercial paper notes included the terms of 33 to 93 days and interest rates ranging from 0.12% to 0.40% as of June 30, 2020, and the terms of 28 to 94 days and interest rates ranging from 1.24% to 1.60% as of June 30, 2019.

To provide liquidity for the Water Series notes issued under the traditional commercial paper program, the District maintains two liquidity support facilities with commercial banks: a standby letter of credit in the amount of \$200.0 million (reduced to \$176.0 million in March 2020 in connection with the pay down of commercial paper referenced above) and a revolving credit agreement in the amount of \$160.0 million. Borrowings by the Water System for commercial paper notes and bank notes under the traditional commercial paper program cannot exceed the aggregate amount available under these agreements. Drawings under the liquidity support facilities are restricted to pay principal on maturing Water Series commercial paper notes. There were no borrowings under the liquidity support facilities as of June 30, 2020. The liquidity support facilities expire on May 6, 2024 and November 30, 2021, respectively, and are subject to extension at the request of the District upon agreement by the issuing bank.

There were no unused proceeds of commercial paper notes as of June 30, 2020. It is the District's practice to use the commercial paper programs as a portion of the District's long-term variable rate debt exposure.

**EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO BASIC FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2020 AND 2019
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NOTE 7 – LONG-TERM DEBT

A. Composition and Changes

The District generally incurs long-term debt to finance projects or purchase assets which will have useful lives equal to or greater than the related debt. The District's debt issues and transactions are summarized below and discussed in detail thereafter.

The District's debt issues and transactions during fiscal year 2019-2020 are summarized below.

	Original Issue Amount	Balance June 30, 2019	Additions	Retirements	Balance June 30, 2020	Amount due within one year
Water System Revenue Bonds:						
Subordinated Series 2008 A						
1.55% variable rate, due 6/1/38	\$ 322,525	\$ 105,250	\$ -	\$ -	\$ 105,250	\$ -
Subordinated Series 2010 A						
3.00 - 5.00%, due 6/1/36	192,830	2,090	-	2,090	-	-
Subordinated Series 2010 B						
5.87%, due 6/1/40	400,000	400,000	-	-	400,000	-
Series 2012 A (Private Placement)						
5.00% , due 6/1/37	191,750	81,750	-	-	81,750	-
Series 2012 B						
1.00 -5.00%, due 6/1/26	358,620	178,740	-	45,160	133,580	47,190
Series 2013 A						
5.00%, due 6/1/21	48,670	14,780	-	7,195	7,585	7,585
Series 2014 A						
3.00-5.00%, due 6/1/35	128,315	128,315	-	-	128,315	-
Series 2014 B						
2.00-5.00%, due 6/1/30	242,730	216,985	-	8,720	208,265	9,080
Series 2014 C						
5.00%, due 6/1/44	75,000	75,000	-	-	75,000	-
Series 2015 A						
4.00-5.00%, due 6/1/37	429,360	429,360	-	-	429,360	-
Series 2015 B						
4.00-5.00%, due 6/1/45	74,335	74,335	-	-	74,335	-
Series 2015C						
4.00-5.00%, due 6/1/45	110,715	110,715	-	-	110,715	-
Series 2017 A						
3.00 - 5.00%, due 6/1/45	185,355	185,355	-	-	185,355	-
Series 2017 B						
3.00 - 5.00%, due 6/1/37	309,665	297,130	-	-	297,130	970
Series 2019 A						
5.00%, due 6/1/49	161,820	161,820	-	2,270	159,550	2,560
Total water long-term bonds		2,461,625	-	65,435	2,396,190	67,385

**EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO BASIC FINANCIAL STATEMENTS
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NOTE 7 - LONG TERM DEBT (Continued)

	Original Issue Amount	Balance June 30, 2019	Additions	Retirements	Balance June 30, 2020	Amount due within one year
<i>Wastewater System Revenue Bonds:</i>						
Subordinated Series 2010 A						
2.00 - 5.00%, due 6/1/29	\$ 58,095	\$ 2,680	\$ -	\$ 2,680	\$ -	\$ -
Subordinated Series 2010 B						
5.03 - 5.18%, due 6/1/40	150,000	150,000	-	-	150,000	-
Series 2012 A (Private Placement)						
5.00% , due 6/1/37	20,000	20,000	-	-	20,000	-
Series 2014 A						
2.00 - 5.00%, due 6/1/31	82,150	62,935	-	6,100	56,835	6,420
Series 2015 A-1						
5.00%, due 6/1/37	54,805	54,805	-	-	54,805	-
Series 2015 A-2						
5.00%, due 6/1/38	13,565	13,565	-	-	13,565	-
Series 2015 B						
2.10 - 3.35% , due 6/1/30	2,795	2,145	-	170	1,975	175
Series 2017 A						
4.00 - 5.00%, due 6/1/37	69,420	63,575	-	1,910	61,665	4,360
Total wastewater long-term bonds		369,705	-	10,860	358,845	10,955
Total long-term bonds		2,831,330	-	76,295	2,755,035	78,340
<i>Water Loans (Direct Borrowings):</i>						
<i>State Water Resources Control Board</i>						
2004 Upper San Leandro Reservoir Project						
2.51%, due 1/1/24	2,188	590	-	126	464	129
2008 East Bayshore, Recycled Water Project						
2.40%, due 4/1/28	20,100	10,093	-	1,018	9,075	1,042
2018 South Reservoir Replacement Project						
1.70%, due 7/1/28	2,260	2,202	11,738	224	13,716	386
2018 MacArthur Davenport Pipeline Replacement Project						
1.7%, due 7/1/49	12,045	-	12,045	232	11,813	318
Total water loans		12,885	23,783	1,600	35,068	1,875
Total long-term loans		12,885	23,783	1,600	35,068	1,875
<i>Commercial Paper (see Note 6)</i>						
Water System Commercial Paper		359,800	2,187,610	2,211,610	335,800	
Wastewater System Commercial Paper		15,000	100,000	105,000	10,000	
Total commercial paper		374,800	2,287,610	2,316,610	345,800	
Amount due within one year		(77,498)	(2,717)	-	(80,215)	
Add: Unamortized premium, net		301,140	-	32,752	268,388	
Total long-term liabilities, net		\$ 3,442,657	\$ 2,308,676	\$ 2,427,257	\$ 3,324,076	\$ 80,215

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FOR THE YEARS ENDED JUNE 30, 2020 AND 2019
(Dollars in Thousands)**

NOTE 7 - LONG TERM DEBT (Continued)

The District's debt issues and transactions during fiscal year 2018-2019 are summarized below.

	Original Issue Amount	Balance June 30, 2018	Additions	Retirements	Balance June 30, 2019	Amount due within one year
<i>Water System Revenue Bonds:</i>						
Subordinated Series 2008 A						
1.55% variable rate, due 6/1/38	\$ 322,525	\$ 105,250	\$ -	\$ -	\$ 105,250	\$ -
Subordinated Series 2010 A						
3.00 - 5.00%, due 6/1/36	192,830	4,480	-	2,390	2,090	2,090
Subordinated Series 2010 B						
5.87%, due 6/1/40	400,000	400,000	-	-	400,000	-
Series 2012 A (Private Placement)						
5.00% , due 6/1/37	191,750	81,750	-	-	81,750	-
Series 2012 B						
1.00 -5.00%, due 6/1/26	358,620	214,850	-	36,110	178,740	45,160
Series 2013 A						
5.00%, due 6/1/21	48,670	21,600	-	6,820	14,780	7,195
Series 2014 A						
3.00-5.00%, due 6/1/35	128,315	128,315	-	-	128,315	-
Series 2014 B						
2.00-5.00%, due 6/1/30	242,730	225,410	-	8,425	216,985	8,720
Series 2014 C						
5.00%, due 6/1/44	75,000	75,000	-	-	75,000	-
Series 2015 A						
4.00-5.00%, due 6/1/37	429,360	429,360	-	-	429,360	-
Series 2015 B						
4.00-5.00%, due 6/1/45	74,335	74,335	-	-	74,335	-
Series 2015C						
4.00-5.00%, due 6/1/45	110,715	110,715	-	-	110,715	-
Series 2017 A						
3.00 - 5.00%, due 6/1/45	185,355	185,355	-	-	185,355	-
Series 2017 B						
3.00 - 5.00%, due 6/1/37	309,665	303,475	-	6,345	297,130	-
Series 2019 A						
5.00%, due 6/1/49	161,820	-	161,820	-	161,820	2,270
Total water long-term bonds		<u>2,359,895</u>	<u>161,820</u>	<u>60,090</u>	<u>2,461,625</u>	<u>65,435</u>

**EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO BASIC FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2020 AND 2019
(Dollars in Thousands)**

NOTE 7 - LONG TERM DEBT (Continued)

	Original Issue Amount	Balance June 30, 2018	Additions	Retirements	Balance June 30, 2019	Amount due within one year
<i>Wastewater System Revenue Bonds:</i>						
Subordinated Series 2010 A						
2.00 - 5.00%, due 6/1/29	\$ 58,095	\$ 5,295	\$ -	\$ 2,615	\$ 2,680	\$ 2,680
Subordinated Series 2010 B						
5.03 - 5.18%, due 6/1/40	150,000	150,000	-	-	150,000	-
Series 2012 A (Private Placement)						
5.00% , due 6/1/37	20,000	20,000	-	-	20,000	-
Series 2014 A						
2.00 - 5.00%, due 6/1/31	82,150	67,570	-	4,635	62,935	6,100
Series 2015 A-1						
5.00%, due 6/1/37	54,805	54,805	-	-	54,805	-
Series 2015 A-2						
5.00%, due 6/1/38	13,565	13,565	-	-	13,565	-
Series 2015 B						
2.10 - 3.35% , due 6/1/30	2,795	2,310	-	165	2,145	170
Series 2017 A						
4.00 - 5.00%, due 6/1/37	69,420	66,530	-	2,955	63,575	1,910
Total wastewater long-term bonds		380,075	-	10,370	369,705	10,860
Total long-term bonds		2,739,970	161,820	70,460	2,831,330	76,295
<i>Water Loans (Direct Borrowings):</i>						
<i>State Water Resources Control Board</i>						
2004 Upper San Leandro Reservoir Project						
2.51%, due 1/1/24	2,188	713	-	123	590	126
2008 East Bayshore, Recycled Water Project						
2.40%, due 4/1/28	20,100	11,087	-	994	10,093	1,018
2018 South Reservoir Replacement Project						
1.70%, due 7/1/28	2,260	2,260	-	58	2,202	59
Total water loans		14,060	-	1,175	12,885	1,203
Total long-term loans		14,060	-	1,175	12,885	1,203
<i>Commercial Paper (see Note 6)</i>						
Water System Commercial Paper		359,800	2,287,565	2,287,565	359,800	
Wastewater System Commercial Paper		15,000	76,500	76,500	15,000	
Total commercial paper		374,800	2,364,065	2,364,065	374,800	
Amount due within one year		(71,635)	(5,863)		(77,498)	
Add: Unamortized premium, net		260,105	64,579	23,544	301,140	
Total long-term liabilities, net		<u>\$ 3,317,300</u>	<u>\$ 2,584,601</u>	<u>\$ 2,459,244</u>	<u>\$ 3,442,657</u>	<u>\$ 77,498</u>

**EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO BASIC FINANCIAL STATEMENTS
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NOTE 7 - LONG TERM DEBT (Continued)

B. Description of the District's Long-Term Debt Issues

Revenue-supported debt can be authorized by the District's Board of Directors, subject to a referendum process.

The net revenues of the Water System are pledged toward the repayment of the Water Revenue Bonds and the State Water Resources Control Board (SWRCB) Parity Loans of the Water System. The net revenues of the Wastewater System are pledged toward the repayment of the Wastewater Revenue Bonds of the Wastewater System.

The District is subject to certain revenue bond covenants on outstanding debt which require the setting of rates and charges to yield net revenues of the respective Water System or Wastewater System, as applicable, equal to at least 110% of the current annual debt service requirements for all revenue bonds and other parity obligations of the respective Water System or Wastewater System. The District has designated \$119.1 million (\$95.0 million for the Water System and \$24.1 million for the Wastewater System) of operating reserves as a rate stabilization fund, which is available to satisfy the coverage requirements for debt service in future years. There have never been any draws for this purpose.

Upon the occurrence and continuation of an event of default under the Water System Revenue Bond Indenture or Wastewater System Revenue Bond indenture, the principal amounts of (and accrued interest on) the respective system's revenue bonds can be accelerated and declared immediately due and payable by the registered bondholders of a majority in aggregate principal amount of the then outstanding bonds upon written notice delivered to the District. Failure to pay debt service when due and the occurrence of certain insolvency or bankruptcy-related events are events of default. Failure to observe or perform the covenants and agreements under the Indenture for a period of 60 days after written notice of such failure is given to the District is also an event of default unless the District has taken all action reasonably possible to remedy such failure within 60 days and the District diligently proceeds to remedy the failure. A default by the District under any agreement governing Parity Debt which continues after the applicable grace period, if any, is also an event of default.

2018 South Reservoir Replacement Project Parity Loan – The District entered into a loan agreement with the SWRCB to fund construction for the South Reservoir Replacement Project. The project replaced the existing South Reservoir with an 8.5 MG partially buried concrete reservoir to meet demand and increase system reliability. This project was completed in January 2020. The final loan amount based on project expenditure reimbursements is \$14 million. The loan repayments are payable solely from net revenues of the Water System. Interest payments on the outstanding loan balance commenced on July 1, 2018 and principal payments commenced on January 1, 2019. Principal and interest are payable semi-annually thereafter.

**EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO BASIC FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2020 AND 2019
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NOTE 7 - LONG TERM DEBT (Continued)

2018 MacArthur Davenport Pipeline Replacement Project Parity Loan – The District entered into a loan agreement with the SWRCB to fund construction for the MacArthur Davenport Pipeline Replacement Project. The project re-aligned part of the transmission main and installed approximately 7,000 feet of 8-inch and 10,900 feet of 24-inch steel water pipes away from the Hayward fault reducing the likelihood of failure during a seismic event. This project was completed in June 2019. As of June 30, 2020, the District has received \$12 million in loan proceeds from the SWRCB. The District may receive additional loan proceeds for reimbursement of past expenses in the fiscal year ending June 30, 2021. The loan repayments are payable solely from net revenues of the Water System. Principal and interest payments on the outstanding loan balance commenced on July 1, 2020. Principal and interest are payable semi-annually thereafter.

C. Debt Service Requirements

Annual debt service requirements for fiscal year 2019-2020, including the swap payments discussed in F., are shown below for the above debt issues:

For the Year Ending June 30	Water System		Wastewater System		Total	
	Principal	Interest	Principal	Interest	Principal	Interest
2021	\$ 69,260	\$ 118,772	\$ 10,955	\$ 17,875	\$ 80,215	\$ 136,647
2022	72,196	115,563	11,480	17,329	83,676	132,892
2023	75,666	112,128	12,010	16,757	87,676	128,885
2024	78,935	108,477	12,575	16,158	91,510	124,635
2025	82,735	104,699	13,155	15,531	95,890	120,230
2026 - 2030	466,012	459,800	64,105	67,780	530,117	527,580
2031 - 2035	590,647	333,383	101,840	49,227	692,487	382,610
2036 - 2040	657,418	175,240	100,030	23,486	757,448	198,726
2041 - 2045	297,228	49,070	32,695	1,919	329,923	50,989
2046 - 2049	41,161	4,760	-	-	41,161	4,760
Totals	\$ 2,431,258	\$ 1,581,892	\$ 358,845	\$ 226,062	\$ 2,790,103	\$ 1,807,954

Annual debt service requirements for fiscal year 2018-2019, including the swap payments discussed in F., are shown below for the above debt issues:

For the Year Ending June 30	Water System		Wastewater System		Total	
	Principal	Interest	Principal	Interest	Principal	Interest
2020	\$ 66,638	\$ 121,636	\$ 10,860	\$ 18,364	\$ 77,498	\$ 140,000
2021	68,617	118,438	10,955	17,875	79,572	136,313
2022	71,540	115,239	11,480	17,329	83,020	132,568
2023	75,001	111,815	12,010	16,757	87,011	128,572
2024	78,257	108,176	12,575	16,158	90,832	124,334
2025 - 2029	442,806	480,430	71,730	70,806	514,536	551,236
2030 - 2034	560,078	359,295	90,780	51,187	650,858	410,482
2035 - 2039	708,520	210,751	116,620	26,144	825,140	236,895
2040 - 2044	317,901	63,868	31,595	2,082	349,496	65,950
2045 - 2049	85,152	8,488	1,100	40	86,252	8,528
Totals	\$ 2,474,510	\$ 1,698,136	\$ 369,705	\$ 236,742	\$ 2,844,215	\$ 1,934,878

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NOTES TO BASIC FINANCIAL STATEMENTS
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NOTE 7 - LONG TERM DEBT (Continued)

Interest payments on debt subject to swap agreements were calculated using the variable rates at June 30, 2020 and 2019, respectively.

D. Prior-Year Defeasances

In prior years, the District defeased certain debt issues by placing proceeds of new bonds in an irrevocable trust to provide for all future debt service payments on the refunded bonds. Accordingly, the trust account assets and the liability for the defeased debt are not included in the District's financial statements. As of June 30, 2020 and 2019, \$110 million and \$318 million of the bonds outstanding are considered defeased, respectively.

E. Variable Rate Debt

The District has a number of bond issues with variable interest rates. The Water Series 2008A Bonds are subject to purchase on the demand of the holder with seven days prior notice at a price equal to the principal plus accrued interest. The remarketing agent is authorized to use its best efforts to sell the repurchased bonds at a price equal to 100 percent of the principal amount by adjusting the interest rate. In the event that they are not sold, under Standby Bond Purchase Agreements (SBPAs) issued by banks for the above variable rate debt issues, the trustee or the remarketing agent is entitled to draw an amount sufficient to pay the purchase price of delivered bonds. The District's obligation to repay the banks for any draws on the respective SBPAs (to the extent such repayment is not thereafter provided from remarketing proceeds of the related bonds) is payable from net revenues of the Water System and secured on parity with the District's Water Revenue Bonds. The District is required to pay an annual commitment fee to the banks issuing SBPAs. Expiration dates of these SBPAs are presented below by debt issue. In addition, the remarketing agent receives an annual fee of seven basis points of the outstanding principal amount of the bonds.

Issue	Standby Purchase Agreement Terms		
	Expiration Date	Interest Rate	Interest Rate Swap
Water System Revenue Subordinated Bonds:			
Series 2008A-1	12/9/2022	Reset Weekly	See below
Series 2008A-2	11/24/2021	Reset Weekly	See below
Series 2008A-3	11/24/2021	Reset Weekly	See below
Series 2008A-4	12/9/2022	Reset Weekly	See below

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NOTE 7 - LONG TERM DEBT (Continued)

F. Interest Rate Swap Agreements

The District has entered into a number of matched interest rate swap contracts with providers in which the District contracted to pay a fixed rate on the nominal amount of outstanding bonds, in exchange for a floating rate payment, set monthly on the first day of each calendar month for its LIBOR based swaps. The combination of variable rate bonds and a floating-rate swap creates synthetic fixed-rate debt for the District. The synthetic fixed rate on the bonds provides a hedge against increases in short-term interest rates. The terms, fair values, and credit risk of each of the swap agreements are discussed below.

Term and credit risks. The terms and credit ratings of the outstanding swaps, as of June 30, 2020, are included below. The District's swap agreements contain scheduled reductions to outstanding notional amounts that are expected to follow scheduled reductions in the associated bonds.

Related Bond Issue	Notional Amount	Effective Date	Counterparty	Counterparty Credit Ratings (Moody's/ S&P)	Issuer Pays	Issuer Receives	Maturity/ Termination Date
2008A Water System Refunding Bonds	37,240	6/2/2005	JP Morgan Chase & Co.	Aa2/A+	3.115%	62.3% of 30-day LIBOR	6/1/2038
2008A Water System Refunding Bonds	37,240	6/1/2011	Bank of America National Assoc.	Aa2/A+	3.115%	62.3% of 30-day LIBOR	6/1/2038
2008A Water System Refunding Bonds	16,195	6/1/2012	Merrill Lynch Capital Services	A2/A-	3.115%	62.3% of 30-day LIBOR	6/1/2038
2008A Water System Refunding Bonds	14,575	9/25/2008	The Bank of New York Mellon	Aa2/AA-	3.115%	62.3% of 30-day LIBOR	6/1/2038

The effect of these transactions is structured to result in the approximate equivalent of the District paying a fixed rate on the bonds, since the inflow of payments from the LIBOR based swaps are anticipated to approximate the outflow of payments on the variable rate bonds. Only the net difference in the amount owed to and received from the swap providers is made under the swap contracts.

Fair value. The fair value of the swaps takes into consideration the prevailing interest rate environment, the specific terms and conditions of a given transaction and any upfront payments that may have been received. The fair value was estimated using the zero-coupon discounting method. This method calculates the future payments required by the swap, assuming that the current forward rates implied by the LIBOR swap yield curve are the market's best estimate of future spot interest rates. These payments are then discounted using the spot rates implied by the current yield curve for a hypothetical zero-coupon rate bond due on the date of each future net settlement on the swaps. The fair values of each swap at June 30, 2020 and 2019, are included below:

Related Bond Issuance	Fair Value	
	2020	2019
2008A Water System Refunding Bonds	(\$40,513)	(\$26,819)

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NOTE 7 - LONG TERM DEBT (Continued)

Credit risk. As of June 30, 2020, the District was not exposed to credit risk on its outstanding swaps because the swaps had a negative fair value of \$40.5 million. The District faces a maximum possible loss equivalent to the swaps' fair value. However, if interest rates increase and the fair value of the swaps were to become positive, the District would be exposed to credit risk.

The District will be exposed to interest rate risk only if the counterparty to the swap defaults or if the swap is terminated. The swap agreements contain provisions that determine if and when the District or the counterparty must provide collateral. The agreements require full collateralization of the fair value of the swap should the counterparty's credit rating fall below a certain threshold. As of June 30, 2020, the District was not required to provide collateral to any swap counterparty.

Basis risk. Basis risk is the risk that the interest rate paid by the District on underlying variable rate bonds to bondholders temporarily differs from the variable swap rate received from the applicable counterparty. The District is exposed to basis risk as the District receives payments based on LIBOR rates to offset the actual variable interest rate the District pays on its bonds. The District is exposed to basis risk should the floating rate that it receives on a swap be less than the actual variable rate the District pays on the bonds. Depending on the magnitude and duration of any basis risk shortfall, the expected cost of the basis risk may vary. For the year ended June 30, 2020, the District has a cumulative average basis difference on its swaps of a positive 7 basis points (the District received more from its swap floating rate payment than it paid out on its variable rate debt).

Termination risk. The District or the counterparty may terminate if the other party fails to perform under the terms of the swap contract. The District will be exposed to variable rates if the providers to the swap contracts default or if the swap contracts are terminated as it will lose the hedge provided by the swap. A termination of the swap contracts may also result in the District's making or receiving a termination payment based on market interest rates at the time of the termination. If at the time of termination the swap has a negative fair value, the District would be liable to the counterparty for a payment equal to the swap's fair value.

Swap payments and associated debt. Using rates as of June 30, 2020, debt service requirements of the District's outstanding variable-rate debt and net swap payments are as follows. As rates vary, variable-rate bond interest payments and net swap payments will vary. These payments below are included in the Debt Service Requirements at C. above:

For the Year Ending June 30	Variable-Rate Bonds		Interest Rate Swaps, Net	Total
	Principal	Interest	Interest	
2021	\$ -	\$ 101	\$ 3,174	\$ 3,275
2022	-	101	3,173	3,274
2023	-	102	3,174	3,276
2024	-	101	3,174	3,275
2025	-	101	3,174	3,275
2026 - 2030	-	506	15,868	16,374
2031 - 2035	62,450	330	10,343	73,123
2036 - 2040	42,800	42	1,319	44,161
Totals	\$ 105,250	\$ 1,384	\$ 43,399	\$ 150,033

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NOTE 8 – NET POSITION

Net Position is the excess of all the District's assets and deferred outflows over all its liabilities and deferred inflows, regardless of fund. Net Position is divided into three captions. These captions apply only to Net Position and are described below:

Net Investment in Capital Assets describes the portion of Net Position which is represented by the current net book value of the District's capital assets, less the outstanding balance of any debt issued to finance these assets and any related deferred outflows and inflows.

Restricted describes the portion of Net Position which is restricted as to use by the terms and conditions of agreements with outside parties, governmental regulations, laws, or other restrictions which the District cannot unilaterally alter. These principally include developer fees received for use on capital projects, debt service requirements, and fees charged for the provision of future water resources.

Unrestricted describes the portion of Net Position which is not restricted to use.

NOTE 9 – EMPLOYEES' RETIREMENT PLAN

A. Description

The Employees' Retirement System is a single-employer, contributory, defined benefit pension plan (the Plan) which provides retirement, disability, survivorship, and post-employment healthcare benefits for eligible directors, officers, and employees of the District. The Plan is administered by a Retirement Board composed of three members appointed by the District's Board of Directors and two members elected by and from the active membership of the Plan, and a nonvoting member elected by the retirees of the Plan. Retirement Ordinance No. 40 assigns the authority to establish Plan benefit provisions to the District's Board of Directors. A stand-alone financial report of the Employees' Retirement System is available. Please send request to the Controller, Accounting Division, P.O. Box 24055, Oakland, CA 94623-1055 or visit the District website at <http://www.ebmud.com>.

All regular full-time employees of the District are members of the Plan in addition to certain job share and intermittent employees. In accordance with the ordinance governing the System, eligible employees become members on the first day they are physically on the job. Members become vested in the Plan after five years of continuous full-time employment. Vested members who terminate employment may elect a refund of their contributions or leave them in the Plan until eligible to receive benefits.

The Plan is funded by contributions from its members and from the District. District contribution percentages are recommended by the Retirement Board; employee contribution rates are established by the Board of Directors pursuant to the Ordinance, giving consideration to actuarial recommendations and prospective changes in factors which affect funding.

B. Retirement Benefits and Allowances

There are two tiers in effect currently, the 1980 Plan and the 2013 Plan. Employees who became Members of the Retirement System prior to January 1, 2013, or who have reciprocal membership prior to January 1, 2013 are in the 1980 Plan (1980 Plan Members), employees who became

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NOTE 9 – EMPLOYEES’ RETIREMENT PLAN (Continued)

Members on or after January 1, 2013, or who have reciprocal membership after January 1, 2013 are in the 2013 Plan (2013 Plan Members).

1980 Plan Members may elect voluntary reduced service retirement upon attaining the age of 54 and completing 5 years of continuous full-time employment. Members may elect voluntary unreduced service retirement upon attaining the age of 62 and completing 5 years of continuous full-time employment or age 65 without restriction. Members who continue to work upon attaining the normal retirement age of 65 continue to contribute to the Plan, and at the time they retire, computation of their retirement allowance is based upon their compensation and length of service as of the date of retirement. Service retirement allowances are computed by formulas specified in the Ordinance and are based on date of employment, length of employment, age at date of retirement, and compensation earned during employment.

2013 Plan Members may elect voluntary reduced service upon attaining the age of 52 and completing 5 years of continuous full-time employment. Members may elect voluntary unreduced service retirement upon attaining the age of 67 and completing 5 years of continuous full-time employment. Members who continue to work upon attaining the normal retirement age of 67 continue to contribute to the Plan, and at the time they retire, computation of their allowance is based upon their compensation and length of service as of the date of retirement. Service retirement allowances are computed by formulas specified in the Ordinance and are based on length of service, age at retirement, and compensation earned during employment.

C. Post-Employment Healthcare Cost

In addition to retirement benefits, the District provides post-employment health benefits assistance (administered by the Employees’ Retirement System) for employees who retire from the District or their surviving spouses. As of June 30, 2019, there were 1,646 participants receiving these health care benefits.

Effective July 1, 1996, a 20-year vesting schedule for full benefits was implemented for all new participants. Effective January 1, 1999, retired members who had separated from the District prior to their retirement who has at least 10 years of service also became eligible for the post-employment health benefits based on the same sliding scale. The scale provides for 25% of healthcare benefits for service from 5 through 10 years, 50% of healthcare benefits for service from 10 through 15 years, 75% of healthcare benefits for service from 15 through 20 years, and 100% of healthcare benefits for service of 20 years or more. Effective July 1, 2003, the District reimbursed up to \$450 per month (\$550 per month effective July 1, 2004, for membership of a spouse or registered domestic partner) for any health, dental, or long-term care insurance premiums paid by the retiree for themselves, current spouse, or domestic partner, or any health, dental, or long-term care insurance premiums paid by the eligible surviving spouse of a retiree. These benefits are paid from a separate post-employment healthcare benefits fund which up until June 17, 2002, was advance funded entirely by the District on an actuarially determined basis. Cash reimbursement of these benefits totaled \$8,963 in the year ended June 30, 2020. Effective June 18, 2002, a portion of the post-employment healthcare benefits costs is recovered through employee contributions.

Through June 30, 1999, the medical premium subsidy was not a vested benefit and the District reserved the right to modify or terminate the benefit at any time. If the medical subsidy were

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NOTE 9 – EMPLOYEES’ RETIREMENT PLAN (Continued)

terminated, assets accumulated from contributions made for the subsidy would be used to provide other pension benefits. Effective July 1, 1999, the medical premium subsidy became a vested benefit to a maximum of \$200 per month, was changed effective October 1, 2000, to a maximum of \$250 per month, and was changed effective July 1, 2002, to a maximum of \$400 per month per month, and was changed effective July 1, 2003, to a maximum of \$450 per month, and was changed again effective July 1, 2004, to a maximum of \$450 per month and \$550 per month for membership of a spouse or registered domestic partner.

D. Actuarial Assumptions and Funding Policy

The Plan’s funding policy provides for periodic District contributions at actuarially determined amounts sufficient to accumulate the necessary assets to pay benefits when due as specified by ordinance. The individual entry age normal method is used to determine the normal cost for other post-employment benefits (OPEB) and service cost for pension, and the OPEB unfunded actuarial accrued liability (past service liability) is amortized as a level percentage of future payroll over 30 years open period.

District adopted contribution rates for the year ended June 30, 2020 are as follows:

1980 Plan:

Pension plan:

Employer service cost	15.97%
Toward unfunded pension liability	21.89%

Other post-employment benefits:

Employer normal cost	1.05%
Unfunded actuarial accrued liability	4.27%

2013 Plan:

Pension plan:

Employer service cost	9.04%
Toward unfunded pension liability	22.20%

Other post-employment benefits:

Employer normal cost	0.75%
Unfunded actuarial accrued liability	4.17%

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NOTE 9 – EMPLOYEES’ RETIREMENT PLAN (Continued)

District adopted contribution rates for fiscal year 2020-2021 are as follows:

1980 Plan:

Pension plan:

Employer service cost	15.92%
Toward unfunded pension liability	21.94%

Other post-employment benefits:

Employer normal cost	1.00%
Unfunded actuarial accrued liability	4.32%

2013 Plan:

Pension plan:

Employer service cost	9.15%
Toward unfunded pension liability	22.09%

Other post-employment benefits:

Employer normal cost	0.74%
Unfunded actuarial accrued liability	4.18%

Actuarial calculations reflect a long-term perspective and actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future. Calculations are based on the benefits provided under the terms of the substantive plan in effect at the time of each valuation and on the pattern of sharing the costs between the employer and plan members to that point.

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NOTE 9 – EMPLOYEES’ RETIREMENT PLAN (Continued)

Significant assumptions used to compute contribution requirements from the latest unaudited actuarial are as follows:

Valuation date	June 30, 2019
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Level percent of payroll
Remaining amortization period	Plan changes, assumption changes, and experience gains/losses prior to July 1, 2011 are amortized over separate decreasing 30-year amortization periods. On or after July 1, 2011, plan changes are amortized over separate decreasing 15-year periods; assumption changes are amortized over separate decreasing 25 year periods; experience gains/losses are amortized over separate decreasing 20 year periods.
Assets valuation method	Market value of assets less unrecognized returns in each last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the market value, and is recognized over a five year period, further adjusted, if necessary, to be within 30% of the market value.
Actuarial assumptions:	
Net Investment Return	7.00%, net of investment and administrative expenses.
Average projected salary increases*	Ranges from 3.75% to 9.25% based on years of service*
Inflation rate	2.75%
Cost-of-living adjustments	3.00% per annum
Mortality	Pre-retirement: Headcount-Weighted RP-2014 Employee Mortality Table projected 20 years with the two-dimensional improvement scale MP-2015, set forward two years for males and one year for females. After Service Retirement and All Beneficiaries: Headcount-Weighted RP-2014 Healthy Annuitant Mortality Table projected 20 years with the two-dimensional improvement scale MP-2015, set forward two years for males and one year for females. After Disability Retirement: Headcount-Weighted RP-2014 Healthy Annuitant Mortality Table projected 20 years with the two-dimensional improvement scale MP-2015, set forward nine years for males and females.

*Includes inflation of 2.75% plus across the board salary increase of 0.50% plus merit and promotional increases.

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NOTE 9 – EMPLOYEES’ RETIREMENT PLAN (Continued)

E. Contributions Required and Contributions Made

Contributions for the years ended June 30, 2020 and June 30, 2019, based on the June 30, 2019, actuarial valuation (latest available and includes amounts for post-employment healthcare benefits), were as follows:

	2020		2019	
	Healthcare Benefit			
	Pension	Plan	Totals	
Regular contributions:				
District contributions	\$ 77,645	\$ 11,089	\$ 88,734	\$ 84,551
Member contributions	18,661	195	18,856	17,825
	96,306	11,284	107,590	102,376
Other contributions:				
Member buybacks	29	-	29	40
	\$ 96,335	\$ 11,284	\$ 107,619	\$ 102,416

Regular District and member contributions in fiscal year 2020 represent an aggregate of 40.98% and 8.72% of covered payroll, respectively. The District’s contributions include amounts for post-employment healthcare benefits at a rate of 5.12% of covered payroll, determined by the actuarial dated June 30, 2019. The actual payroll for the District employees covered by the Plan for the year ended June 30, 2020, was \$216,549 which was 91.06% of the total District payroll of \$237,803.

The total District contribution \$88,734 in regular contributions (\$31,740 for normal cost and service cost) also includes \$56,994 for amortization of the unfunded actuarial accrued liability.

Regular District and member contributions in fiscal year 2019 represented an aggregate of 41.38% and 8.74% of covered payroll, respectively. The District’s contributions include amounts for post-employment healthcare benefits at a rate of 5.10% of covered payroll, determined by the actuarial valuation dated June 30, 2018. The actual payroll for the District employees covered by the Plan for the year ended June 30, 2019, was \$204,331 which was 90.61% of the total District payroll of \$225,512.

The total District contribution of \$84,551 as of June 30, 2019, in regular contributions (\$30,506 for normal cost and service cost; also includes \$54,045 for amortization of the unfunded actuarial accrued liability).

Member buyback contributions relate to prior years’ service credits for Plan participants. The Plan was amended in 1998 for limited temporary construction workers and in 2003 for intermittent employees to allow current members, who previously worked for the District in a status which did not qualify for membership in the System, to establish retirement service credit for prior service with payments over a period of two to eight years.

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NOTE 9 – EMPLOYEES’ RETIREMENT PLAN (Continued)

F. Net Pension Liability

The net pension liability (i.e., the Plan’s liability determined in accordance with GASB No. 68 less the fiduciary net position) as of June 30, 2020 and 2019 is as shown below:

	2020	2019
Total Pension Liability	\$ 2,340,773	\$ 2,220,978
Plan Fiduciary Net Position	(1,792,124)	(1,716,478)
Employer Net Pension Liability	\$ 548,649	\$ 504,500
Plan Fiduciary Net Position as a		
Percentage of Total Pension Liability	76.56%	77.28%
Covered Payroll	\$ 203,541	\$ 193,717
Liability as a Percentage of Covered Payroll	269.55%	260.43%

Actuarial valuation of the ongoing System involve estimates of the reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment mortality and future salary increases. Amounts determined regarding the net pension liability are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The Schedule of Employers’ net pension liability presents multi-year trend information about whether the plan fiduciary net positions are increasing or decreasing over time relative to the total pension liability. These schedules are presented in the Required Supplementary Information section. The net pension liability were measured as of June 30, 2019 and 2018 and are not adjusted or rolled forward to the June 30, 2020 and 2018 reporting dates, respectively.

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NOTE 9 – EMPLOYEES’ RETIREMENT PLAN (Continued)

For the year ended June 30, 2020, the District recognized pension expense as follows:

	Water	Wastewater	Total
Contributions made after measurement date	\$ (66,621)	\$ (11,024)	\$ (77,645)
Current year changes in the net pension liability:			
Service cost	38,272	6,439	44,711
Interest on total pension liability	132,588	22,308	154,896
Member contributions	(15,135)	(2,546)	(17,681)
Projected earnings on investments	(102,384)	(17,226)	(119,610)
Difference in expected and actual earnings	4,865	818	5,683
Other	21,643	2,526	24,169
Total current year activity	79,849	12,319	92,168
Total pension expense	\$ 13,228	\$ 1,295	\$ 14,523

At June 30, 2020, the District reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources		Deferred Inflows of Resources	
	Water	Wastewater	Water	Wastewater
Pension contributions subsequent to measurement date	\$ 66,621	\$ 11,024	\$ -	\$ -
Differences between expected and actual experiences	44,953	7,564	8,350	1,405
Changes of assumption	17,423	2,931	-	-
Change in proportion and difference between employer contributions and proportionate share of contributions	1,563	12	12	1,563
Net difference between projected and actual earnings on pension plan investments	-	-	15,631	2,630
Total	\$ 130,560	\$ 21,531	\$ 23,993	\$ 5,598

A total of \$77,645 was reported as deferred outflows of resources related to contributions subsequent to the measurement date and will be recognized as a reduction of the net pension liability in the year ended June 30, 2021. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized as pension expense as follows:

Year Ended June 30	Water	Wastewater
2021	\$ 18,266	\$ 2,343
2022	(4,230)	(1,196)
2023	12,551	1,828
2024	12,038	1,785
2025	1,321	149

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NOTE 9 – EMPLOYEES’ RETIREMENT PLAN (Continued)

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

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

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Domestic Large Cap Equity	22.5%	5.32%
Domestic Small Cap Equity	2.5%	6.07%
Developed International Large Cap Equity	20.0%	6.67%
Emerging Market Equity	5.0%	8.87%
Core Bond	20.0%	1.04%
High-Yield Bond	2.5%	3.31%
Bank Loan	2.5%	3.14%
Real Estate	5.0%	4.68%
Covered Calls	20.0%	4.00%
Total	100.0%	

The discount rates used to measure the total pension liability was 7.00% as of June 30, 2019 and 7.00% as of June 30, 2018. The projection of cash flows used to determine the discount rate assumed 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 of current plan members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs of 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 both June 30, 2019 and June 30, 2018.

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NOTE 9 – EMPLOYEES’ RETIREMENT PLAN (Continued)

Changes in the net pension liability for fiscal year ended June 30, 2020 were as follows:

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (c) = (a) - (b)
Beginning Balance	\$ 2,220,977	\$ 1,716,477	\$ 504,500
Changes Recognized during the Measurement Period:			
Service cost	44,711	-	44,711
Interest on total pension liability	154,896	-	154,896
Changes in benefit terms	-	-	-
Difference between expected and actual experience	25,974	-	25,974
Changes of assumptions	-	-	-
Contributions from the employer	-	74,033	(74,033)
Contributions from the employee	-	17,681	(17,681)
Net investment income	-	91,194	(91,194)
Benefit payments, including refunds of employee contributions	(105,785)	(105,785)	-
Administrative expenses	-	(1,476)	1,476
Net Changes during the Measurement Period	119,796	75,647	44,149
Ending Balance	\$ 2,340,773	\$ 1,792,124	\$ 548,649

In accordance with GASB 68 regarding the disclosure of the sensitivity of the net pension liability to changes in the discount rate, the following table presents the net pension liability of the Plan as of June 30, 2020, calculated using the discount rate of 7.00%, as well as what the Plan’s 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:

	1% Decrease (6.00%)	Current Discount (7.00%)	1% Increase (8.00%)
Net Pension Liability	\$ 846,917	\$ 548,649	\$ 300,151

H. Net OPEB Liability

The net OPEB liability (The Plan’s liability determined according to GASB 75) as of June 30, is shown below:

	2020	2019
Total OPEB Liability	\$ 173,712	\$ 167,770
Plan Fiduciary Net Position	(40,841)	(36,762)
Employer Net OPEB Liability	\$ 132,871	\$ 131,008
Plan Fiduciary Net Position as a Percentage of Total OPEB Liability	23.51%	21.91%

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NOTE 9 – EMPLOYEES’ RETIREMENT PLAN (Continued)

The actuarial assumptions used in the June 30, 2019 valuation were based on the July 1, 2012 through June 30, 2016 Actuarial Experience Study report dated November 10, 2016, the Review of Economic Actuarial Assumptions report dated September 12, 2018, and the Retiree Health assumptions letter dated December 17, 2019. They are the same as the assumptions used in the June 30, 2019 funding actuarial valuation except the discount rate is calculated as a blend of the investment return on plan assets and municipal bond rate in accordance with GASB 74, and implicit subsidy benefit payments are based on the age-based costs. The net OPEB liability is measured as of June 30, 2019 and 2018 and is not adjusted or rolled forward to the June 30, 2020 and 2019 reporting dates.

A summary of the actuarial assumptions as of the latest actuarial valuation is shown below:

Valuation date	June 30, 2019
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Level percent of payroll
Remaining amortization period	Plan changes, assumption changes, and experience gains/losses prior to July 1, 2011 are amortized over separate decreasing 30-year amortization periods. On or after July 1, 2011, plan changes are amortized over separate decreasing 15-year periods; assumption changes are amortized over separate decreasing 25-year periods; and experience gains/losses are amortized over separate decreasing 20-year periods.
Assets valuation method	Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the market value, and is recognized over a five year period, further adjusted, if necessary, to be within 30% of the market value.
Actuarial assumptions:	
Net Investment Return	5.23%, net of investment and administrative expenses.
Average projected salary increases*	Ranges from 3.75% to 9.25% based on years of service*
Inflation rate	2.75%
Health Care Trend	Non-Medicare: 6.625% graded to ultimate 4.50% over 9 years Medicare: 6.125% graded to ultimate 4.50% over 7 years
HIB increases	0.00%
Mortality	Pre-retirement: Headcount-Weighted RP-2014 Employee Mortality Table projected 20 years with the two-dimensional improvement scale MP-2015, set forward two years for males and two years for females. After Service Retirement and All Beneficiaries: Headcount-Weighted RP-2014 Healthy Annuitant Mortality Table projected 20 years with the two-dimensional improvement scale MP-2015, set forward two years for males and one year for females. After Disability Retirement: Headcount-Weighted RP-2014 Healthy Annuitant Mortality Table projected 20 years with the two-dimensional improvement scale MP-2015, set forward nine years for males and

*Includes inflation of 2.75% plus across the board salary increase of 0.50% plus merit and promotional increases.

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NOTE 9 – EMPLOYEES’ RETIREMENT PLAN (Continued)

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

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

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Domestic Large Cap Equity	22.5%	5.32%
Domestic Small Cap Equity	2.5%	6.07%
Developed International Large Cap Equity	20.0%	6.67%
Emerging Market Equity	5.0%	8.87%
Core Bond	20.0%	1.04%
High-Yield Bond	2.5%	3.31%
Bank Loan	2.5%	3.14%
Real Estate	5.0%	4.68%
Covered Calls	20.0%	4.00%
Total	100.0%	

The municipal bond rates used to determine the blended discount rate, as discussed below, were 3.50% and 3.87% which are based on the 20-year municipal bond rate for the Bond Buyer 20-Bond GO Index as of June 30, 2020 and June 30, 2019, respectively.

The discount rates used to measure the total OPEB liability were 5.23% and 5.59% as of June 30, 2020 and June 30, 2019, respectively. The projection of cash flows used to determine the discount rate assumed 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 the \$450/\$550 HIB Subsidy excluding the implicit subsidy that will continue to be paid on a pay-as-you-go basis. For this purpose, only employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs of future plan members and their beneficiaries, as well as projected contributions from future plan members, are not included

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NOTE 9 – EMPLOYEES’ RETIREMENT PLAN (Continued)

Change in Net OPEB liability for fiscal year ended June 30, 2020 were as follows:

	Increase (Decrease)		
	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability
	(a)	(b)	(c) = (a) - (b)
Beginning Balance	\$ 167,770	\$ 36,762	\$ 131,008
Changes Recognized during the Measurement Period:			
Service cost	4,693	-	4,693
Interest on total OPEB liability	9,331	-	9,331
Changes in benefit terms	-	-	-
Difference between expected and actual experience	(2,783)	-	(2,783)
Changes of assumptions	5,753	-	5,753
Contributions from the employer	-	10,518	(10,518)
Contributions from the employee	-	184	(184)
Net investment income	-	2,060	(2,060)
Administrative expenses	-	(33)	33
Benefit payments, including implicit subsidies*	(11,052)	(11,052)	-
Other**	-	2,402	(2,402)
Net Changes during the Measurement Period	<u>5,942</u>	<u>4,079</u>	<u>1,863</u>
Ending Balance	<u>\$ 173,712</u>	<u>\$ 40,841</u>	<u>\$ 132,871</u>

* Sum of cash benefit payments (\$8,650) and estimated implicit subsidy benefit payments (\$2,402)

** The total employer contributions for estimated implicit subsidy

In accordance with GASB 75 regarding the disclosure of the sensitivity of the net OPEB liability to changes in the discount rate, the following table presents the net OPEB liability of the Plan as of June 30, 2020, calculated using the discount rate of 5.23%, as well as what the Plan’s net OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (4.23%) or

1-percentage point higher (6.23%) than the current rate:

	1% Decrease (4.23%)	Current Discount (5.23%)	1% Increase (6.23%)
Net OPEB Liability	\$ 150,673	\$ 132,871	\$ 117,641

Additionally, in accordance with GASB 75 regarding disclosure of the sensitivity of the net OPEB liability to changes in the trend rate (only applied to implicit subsidy and not the \$450/\$550 cash subsidy), the following table presents the net OPEB liability of the Plan as of June 30, 2020, calculated using the current trend rates as well as what the Plan’s net OPEB liability would be if it were calculated using a trend rate that is 1-percentage-point lower or 1- percentage-point higher than the current rate:

	1% Decrease	Current Trend	1% Increase
Net OPEB Liability	\$ 130,405	\$ 132,871	\$ 135,666

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NOTE 9 – EMPLOYEES’ RETIREMENT PLAN (Continued)

For the year ended June 30, 2020, the District recognized OPEB expense as follows:

	<u>Water</u>	<u>Wastewater</u>	<u>Total</u>
Contributions made after measurement date	\$ (9,510)	\$ (1,579)	\$ (11,089)
Current year changes in the net OPEB liability:			
Service cost	4,017	676	4,693
Interest on total OPEB liability	7,988	1,344	9,332
Member contributions	(157)	(27)	(184)
Projected earnings on investments	(1,807)	(304)	(2,111)
Difference in expected and actual earnings	9	1	10
Other	(3,869)	(765)	(4,634)
Total current year activity	<u>6,181</u>	<u>925</u>	<u>7,106</u>
Total OPEB Expense	<u>\$ (3,329)</u>	<u>\$ (654)</u>	<u>\$ (3,983)</u>

Components of deferred outflows and resources and deferred inflows of resources related to OPEB at June 30, 2020 were as follows:

	<u>Deferred Outflows of Resources</u>		<u>Deferred Inflows of Resources</u>	
	<u>Water</u>	<u>Wastewater</u>	<u>Water</u>	<u>Wastewater</u>
OPEB contributions subsequent to measurement date	\$ 9,510	\$ 1,579	\$ -	\$ -
Differences between expected and actual experiences	-	-	4,420	744
Changes of assumption	4,040	680	2,658	447
Change in proportion and difference between employer contributions and proportionate share of contributions	366	-	-	366
Net difference between projected and actual earnings on OPEB plan investments	-	-	1,320	222
Total	<u>\$ 13,916</u>	<u>\$ 2,259</u>	<u>\$ 8,398</u>	<u>\$ 1,779</u>

\$11,089 reported as deferred outflows of resources related to contributions subsequent to the measurement date will be recognized as a reduction of the OPEB liability in the year ended June 30, 2021. Amounts reported as deferred outflows and resources and deferred inflows of resources related to OPEB will be recognized as future OPEB expense as follows:

Year Ended <u>June 30</u>	<u>Water</u>	<u>Wastewater</u>
2021	\$ (1,831)	\$ (424)
2022	(1,831)	(424)
2023	(836)	(232)
2024	214	(31)
2025	292	12

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NOTE 9 – EMPLOYEES’ RETIREMENT PLAN (Continued)

I. Public Employees’ Pension Reform Act (PEPRA)

Assembly Bill 340 (AB 340) created the Public Employees’ Pension Reform Act (PEPRA) that implemented new benefit formulas and final compensation periods, as well as new contribution requirements for new employees hired on or after January 1, 2013, who meet the definition of a new member under PEPRA. In the System, Members covered under PEPRA are 2013 Plan Members.

The table below provides the details of the 2013 Plan provisions in accordance with PEPRA.

Benefit Formula	2.5% at Age 67
Final Compensation Period	Average of last 3 years
Employer Normal Cost Contribution Rate as a percentage payroll	9.04% of Reportable Compensation
Member Normal Cost Contribution Rate as a percentage of payroll	8.75% of Reportable Compensation

The employer contribution rate listed above was in effect as of June 30, 2020. In accordance with the provisions of AB 340, the member contribution rate shown above was set at 50 percent of the expected total normal cost rate for the benefits that will apply to new members on January 1, 2013. The total normal cost rate used for this calculation is 17.79% of payroll for new members. Under AB 340, the member contributions rate is adjusted when the normal cost deviates by 1% or more.

**EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO BASIC FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2020 AND 2019
(Dollars in Thousands)**

NOTE 10 – RISK MANAGEMENT

The District has purchased commercial insurance for general, property, public officials’ liability and workers’ compensation. During the fiscal year ended June 30, 2020, the District paid \$1,828 for current year coverage.

The District’s liability, property, and workers’ compensation risks are insured by commercial insurance carriers, all of which are subject to the District’s self-insurance retentions, which vary by type of coverage.

Selected other coverages are:

Coverage	Policy Limit	Self-insurance retention
Workers' Compensation	Statutory Limit	\$5,000
All risk property (except flood)	\$200,000	500
Flood	25,000	1,500
Liability	90,000	10,000 Water/ 10,000 Wastewater
Crime	10,000	25
Boiler and Machinery	25,000	25
Pardee and Camanche Dams	25,000	25
Main Wastewater Treatment Plant	25,000	25

Settled claims have not exceeded the District’s policy limits in any of the past five fiscal years.

Claim expenses and liabilities are recorded when it is probable that a loss has occurred and the amount of that loss can be reasonably estimated. As of June 30, 2020, the amount of these liabilities was \$47,331. This amount (which has not been discounted) has been actuarially determined and includes an estimate of incurred but not reported losses. Changes in the reported liability are as follows:

	<u>2020</u>	<u>2019</u>
Liability at beginning of year	\$49,391	\$51,001
Current year claims and changes in estimates	9,252	8,161
Payments of claims	<u>(11,312)</u>	<u>(9,771)</u>
Liability at end of year	<u>\$47,331</u>	<u>\$49,391</u>
Estimated liability:		
Due within one year	\$10,838	\$10,193
Due in more than one year	<u>36,493</u>	<u>39,198</u>
	<u>\$47,331</u>	<u>\$49,391</u>

**EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO BASIC FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2020 AND 2019
(Dollars in Thousands)**

NOTE 11 – KNOWN ENVIRONMENTAL LIABILITIES

GASB Statement No. 49, Accounting and Financial Reporting for Pollution Remediation Obligations, provides guidance on accounting and financial reporting for pollution remediation obligations to address the current or potential detrimental effects of existing pollution by participating in pollution remediation activities. Pollution remediation activities include: pre-cleanup activities, cleanup activities, external government oversight and enforcement, and operation and maintenance of the remedy. The following is a summary of the District's known environmental liabilities as of July 29, 2020, that may meet the requirements of GASB Statement No. 49:

- Under a NPDES permit issued by the San Francisco Regional Water Quality Control Board, discharges from the District's wet weather facilities are prohibited. In 2014, the District signed a Consent Decree on this matter that focuses on the excess wet weather flow entering the District's system and allows discharges to continue while work to reduce them is performed. The Consent Decree requires the District and its seven satellite agencies to do a range of work to reduce flows, including working with property owners to address leaks in their private sewer laterals. The Consent Decree is expected to be in place until 2036, at which time discharges will have ceased. The District's cost to meet the requirements in the Consent Decree is approximately \$5million/year.
- In summer 2016, the Central Valley Regional Water Quality Control Board (CVRWQCB) requested that the District produce a technical report to reexamine the groundwater network at the Camanche North Shore (CANS) and Camanche South Shore (CASS) Wastewater Treatment Plants including the effectiveness of existing monitoring wells and hydraulic connections between the wastewater ponds and the aquifers. The technical report was provided in March 2017. The CVRWQCB stated in its winter 2018 response that it agreed with the CANS recommendations in the technical report and subsequently required the District to submit a work plan for new well installations as well as conduct additional monitoring. In May 2018, the District submitted its response to the CVRWQCB, including the work plan for the new CANS wells. The CVRWQCB has not yet responded to the District's May 2018 submittal of an updated work plan for installation of additional groundwater wells at CANS. In August 2018, the District submitted a required technical memorandum for CASS. In September 2018, the District submitted an assessment report for the cap on the closed CASS landfill also required by the CVRWQCB. The CVRWQCB has not responded to either submittal. The CVRWQCB requested additional analysis for the CASS facility which is ongoing. It is possible that the CVRWQCB could mandate the District to construct wastewater treatment pond upgrades. At this preliminary planning stage, it is estimated that the cost would be approximately \$6.6 million to upgrade the existing facilities or, alternatively, approximately \$7.8 million to construct a joint wastewater project with Amador County.

**EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO BASIC FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2020 AND 2019
(Dollars in Thousands)**

NOTE 11 – KNOWN ENVIRONMENTAL LIABILITIES (Continued)

- The Alameda County Environmental Health Agency (County) requested that the District conduct site investigations at the Adeline Maintenance Center (AMC) Shops to define the extent of petroleum hydrocarbons in soil and groundwater associated with former underground storage tanks (USTs). The District completed site investigations in accordance with an approved work plan in 2009. The results indicated that elevated concentrations of petroleum hydrocarbons remain in soil and groundwater in localized areas near the former USTs. In June 2016, the County then requested that the District conduct a Sensitive Receptor Survey for the AMC Shops parcel as well as a Site Conceptual Model for the Anderson Building (located within the AMC complex parcel but regulated as a separate site by the County). They requested that all environmental data collected during previous investigations be posted to the State’s GeoTracker website, after which a meeting would be scheduled to agree upon final actions necessary to obtain regulatory closure of the site under the State Water Resource Control Board’s Low Threat Closure Policy. The District has submitted the requested Sensitive Receptor Survey, Site Conceptual Model, as well as a Site Investigation Work Plan for the Anderson Building and the AMC Shops parcel. The County met with the District in July 2018 to discuss next steps towards site closure. The County concurred with the submittals with some conditions, and additional sampling was performed per their request during the fall of 2018. Based on the most recent sampling results, the County requested that the District perform a final drinking water well survey for the Anderson Building site. The District is awaiting further direction from the County in order to determine regulatory closure status of both of the sites.

- The District operates many facilities throughout Northern California that have NPDES permits, waste discharge requirements, and air permits. The total estimated liability for all known violations, excluding the items detailed above, is less than \$350.

NOTE 12 - CONTINGENT LIABILITIES

In the normal course of operations, the District is a party to various claims, legal actions and complaints, including challenges over certain rates and charges. The ultimate outcome of these matters is not presently determinable. In the opinion of the District, these actions when finally adjudicated will not have a material adverse effect on the financial position of the District.

**EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO BASIC FINANCIAL STATEMENTS
FOR THE YEARS ENDED JUNE 30, 2020 AND 2019
(Dollars in Thousands)**

NOTE 13 – COMMITMENTS AND CONTINGENCIES

Central Valley Project

In December 1970, the District entered into a contract with the US Bureau of Reclamation for access to up to 150,000 acre feet per year of Central Valley Project (CVP) water from a diversion point on the American River. The successor contract, the Long Term Renewal Contract, was executed in April 2006 with a 40 year term. The Long Term Renewal Contract provides for delivery of up to 133,000 acre feet per year of CVP water in dry years to supplement the District's surface water supplies. Deliveries to the District are limited to a 165,000 acre foot total over any three successive dry years. In years in which the District takes delivery of CVP water, the District's allocated CVP capital cost and the District's operations and maintenance deficit balance will be paid down commensurately with the quantity of water delivered. For example, if the District had to take delivery of 80,000 acre feet in fiscal year 15, the District's CVP capital and deficit balances would each be reduced by approximately 20%. The balances must be paid off by 2030.

COVID-19 Pandemic

The District is assessing the effects of the ongoing pandemic (known as the COVID 19 pandemic) caused by a novel strain of coronavirus and the disease it causes on the District and its business and operations.

Current and potential economic and fiscal impacts to the District related to the COVID 19 pandemic include, but are not limited to, a slowdown in development activity in the District's service areas and decline in the collection of capacity fees; reduced operating revenues due to lower-water sales and associated reductions in wastewater service revenue and/or increases in delinquencies or non-payment of utility bills; increased operating costs to support modified working arrangements and other COVID 19 related activities; reductions in property tax receipts of the District as a result of declines in assessed valuations in the District's service area or increases in property tax delinquencies or non-payment; and/or reductions in investment income or increases in required pension and other post-employment benefit plan contributions as a result of ongoing volatility in the financial markets or a sustained decline in the value of plan assets.

The degree of impact to the District's finances and operations is difficult to predict due to the evolving nature of the COVID 19 pandemic. The ultimate duration and severity of the pandemic, the ramifications of future actions that may be taken or required by governmental authorities to contain and respond to the pandemic, and the severity of an associated economic recession and extent to which a recovery may be prolonged, are not yet known. In light of the uncertainties surrounding the COVID 19 pandemic and its impacts, management is unable to reasonably quantify the effect on future finances of the District at this time.

REQUIRED SUPPLEMENTAL INFORMATION

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**EAST BAY MUNICIPAL UTILITY DISTRICT
REQUIRED SUPPLEMENTARY INFORMATION
FOR THE YEAR ENDED JUNE 30, 2020
(Dollars in thousands)**

(1) Pension Plan

Schedule of Changes in Employer's Net Pension Liability (in thousands):

	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
Total Pension Liability						
Service cost	\$ 44,710	\$ 40,636	\$ 41,106	\$ 37,828	\$ 36,791	\$ 34,987
Interest	154,896	149,324	144,392	138,135	131,595	127,558
Change of benefit terms	-	-	-	-	-	-
Differences between expected and actual experience	25,974	48,581	(22,641)	5,278	(1,390)	438
Changes of assumptions	-	12,484	-	52,596	-	18,421
Benefit payments, including refunds of employee contributions	(105,785)	(98,062)	(90,705)	(83,886)	(77,790)	(71,232)
Net change in total pension liability	119,795	152,963	72,152	149,951	89,206	110,172
Total pension liability - beginning	<u>2,220,978</u>	<u>2,068,015</u>	<u>1,995,863</u>	<u>1,845,912</u>	<u>1,756,706</u>	<u>1,646,534</u>
Total pension liability - ending (a)	<u>\$ 2,340,773</u>	<u>\$ 2,220,978</u>	<u>\$ 2,068,015</u>	<u>\$ 1,995,863</u>	<u>\$ 1,845,912</u>	<u>\$ 1,756,706</u>
Plan fiduciary net position						
Contributions - employer	\$ 74,033	\$ 71,221	\$ 67,096	\$ 65,218	\$ 64,177	\$ 61,660
Contributions - employee	17,681	16,860	15,820	14,741	13,260	11,963
Net investment income	91,194	147,424	197,977	13,934	59,288	216,601
Benefit payments, including refunds of employee contributions	(105,785)	(98,062)	(90,705)	(83,886)	(77,790)	(71,232)
Administrative expense	(1,477)	(1,521)	(1,403)	(1,289)	(1,269)	(1,233)
Net change in plan fiduciary net position	75,646	135,922	188,785	8,718	57,666	217,759
Plan fiduciary net position - beginning	<u>1,716,478</u>	<u>1,580,556</u>	<u>1,391,771</u>	<u>1,383,053</u>	<u>1,325,387</u>	<u>1,107,628</u>
Plan fiduciary net position - ending (b)	<u>\$ 1,792,124</u>	<u>\$ 1,716,478</u>	<u>\$ 1,580,556</u>	<u>\$ 1,391,771</u>	<u>\$ 1,383,053</u>	<u>\$ 1,325,387</u>
Plan's net pension liability - ending (a) - (b)	<u>\$ 548,649</u>	<u>\$ 504,500</u>	<u>\$ 487,459</u>	<u>\$ 604,092</u>	<u>\$ 462,859</u>	<u>\$ 431,319</u>

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Unaudited

**EAST BAY MUNICIPAL UTILITY DISTRICT
REQUIRED SUPPLEMENTARY INFORMATION
FOR THE YEAR ENDED JUNE 30, 2020
(Dollars in thousands)**

(2) Pension Plan

Schedule of Employer's Net Pension Liability (in thousands):

	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability	\$ 2,340,773	\$ 2,220,978	\$ 2,068,015	\$ 1,995,863	\$ 1,845,912	\$ 1,756,706	\$ 1,646,534
Plan fiduciary net position	(1,792,124)	(1,716,478)	(1,580,556)	(1,391,771)	(1,383,053)	(1,325,387)	(1,107,628)
Net pension liability	<u>\$ 548,649</u>	<u>\$ 504,500</u>	<u>\$ 487,459</u>	<u>\$ 604,092</u>	<u>\$ 462,859</u>	<u>\$ 431,319</u>	<u>\$ 538,906</u>
Plan fiduciary net position as a percentage of total pension liability	76.56%	77.28%	76.43%	69.73%	74.93%	75.45%	67.27%
Covered payroll*	\$ 203,541	\$ 193,717	\$ 182,032	\$ 174,586	\$ 166,886	\$ 159,513	\$ 153,707
Plan net pension liability as a percentage of covered payroll	269.55%	260.43%	267.79%	346.01%	277.35%	270.40%	350.61%

*In accordance with GASB 82, the covered payroll amounts are defined as the payroll on which contributions to a pension plan are based. The covered payroll amounts for fiscal year 2014 through fiscal year 2016, were updated to adopt the provisions of GASB 82.

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

(3) Pension Plan

Schedule of Employer's Contributions (in thousands):

Year ended June 30	Actuarially determined contributions	relation to the actuarially determined contributions	Contributions deficiency (excess)	Covered payroll*	Contributions as a percentage of covered payroll
2010	\$ 44,031	\$ 44,031	\$ -	\$ 161,641	27.24%
2011	50,987	50,987	-	160,336	31.80%
2012	52,156	52,156	-	158,481	32.91%
2013	53,795	53,795	-	153,707	35.00%
2014	61,660	61,660	-	159,513	38.66%
2015	64,177	64,177	-	166,886	38.46%
2016	65,218	65,218	-	174,586	37.36%
2017	67,096	67,096	-	182,032	36.86%
2018	71,221	71,221	-	193,717	36.77%
2019	74,033	74,033	-	203,541	36.37%
2020	77,645	77,645	-	216,549	35.86%

*Derived by dividing the contributions in relation to the actuarial determined contributions by the contributions as a percentage of covered employee payroll. These amounts may there be different from the actual payroll of the District. However, in accordance with GASB 82, the covered payroll amounts for the actuarial valuations for fiscal year 2013 through current are defined as the payroll on which contributions to the pension plan are based.

Unaudited

**EAST BAY MUNICIPAL UTILITY DISTRICT
REQUIRED SUPPLEMENTARY INFORMATION
FOR THE YEAR ENDED JUNE 30, 2020
(Dollars in thousands)**

(4) Pension Plan

Schedule of Investment Returns:

	2020	2019	2018	2017	2016	2015	2014
Annual money weighted rate of return, net of investment expense	2.27%	5.37%	9.29%	14.46%	0.91%	4.40%	19.42%

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

(5) Post-Employment Healthcare Plan

Schedule of Changes in Employer's Net OPEB Liability (in thousands):

	2020	2019	2018	2017	2016
Total OPEB Liability					
Service cost	\$ 4,692	\$ 4,827	\$ 5,276	\$ 4,514	\$ 4,460
Interest	9,332	9,265	8,797	9,374	9,159
Change of benefit terms	-	-	-	-	-
Differences between expected and actual experience	(2,783)	(3,299)	(1,711)	(3,286)	(309)
Changes of assumptions	5,753	(527)	(6,107)	12,471	-
Benefit payments - cash*	-	-	-	(7,685)	(7,394)
Benefit payments - estimated implicit subsidy	(11,052)	(10,390)	(9,804)	(2,164)	(2,241)
Net change in total OPEB liability	5,942	(124)	(3,549)	13,224	3,675
Total OPEB liability - beginning	167,770	167,894	171,443	158,219	154,544
Total OPEB liability - ending (a)	<u>\$ 173,712</u>	<u>\$ 167,770</u>	<u>\$ 167,894</u>	<u>\$ 171,443</u>	<u>\$ 158,219</u>
Plan fiduciary net position					
Employer contributions - cash	\$ 10,518	\$ 9,875	\$ 9,764	\$ 9,454	\$ 8,964
Employer contributions - estimated implicit subsidy	-	-	-	2,164	2,241
Employer contributions - total	10,518	9,875	9,764	11,618	11,205
Employee contributions	184	219	198	184	167
Net investment income	2,060	2,925	3,706	271	938
Benefit payments - cash*	-	-	-	(7,685)	(7,394)
Benefit payments - estimated implicit subsidy	(11,052)	(10,390)	(9,804)	(2,164)	(2,241)
Administrative expense	(33)	(30)	(26)	(22)	(20)
Other	2,402	2,075	1,892	-	-
Net change in plan fiduciary net position	4,079	4,674	5,730	2,202	2,655
Plan fiduciary net position - beginning	36,762	32,088	26,358	24,156	21,501
Plan fiduciary net position - ending (b)	<u>\$ 40,841</u>	<u>\$ 36,762</u>	<u>\$ 32,088</u>	<u>\$ 26,358</u>	<u>\$ 24,156</u>
Plan's net OPEB liability - ending (a) - (b)	<u>\$ 132,871</u>	<u>\$ 131,008</u>	<u>\$ 135,806</u>	<u>\$ 145,085</u>	<u>\$ 134,063</u>

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

* Benefit Payments and Employer contributions - cash and estimated implicit subsidy report together starting fiscal year 2018.

Unaudited

**EAST BAY MUNICIPAL UTILITY DISTRICT
REQUIRED SUPPLEMENTARY INFORMATION
FOR THE YEAR ENDED JUNE 30, 2020
(Dollars in thousands)**

(6) Post-Employment Healthcare Plan

Schedule of Employer's Net OPEB Liability (in thousands):

	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>
Total OPEB Liability	\$ 173,712	\$ 167,770	\$ 167,894	\$ 171,443	\$ 158,219
Plan fiduciary net position	<u>(40,841)</u>	<u>(36,762)</u>	<u>(32,088)</u>	<u>(26,358)</u>	<u>(24,156)</u>
Net OPEB liability	<u>\$ 132,871</u>	<u>\$ 131,008</u>	<u>\$ 135,806</u>	<u>\$ 145,085</u>	<u>\$ 134,063</u>
Plan fiduciary net position as a percentage of total OPEB liability	23.51%	21.91%	19.11%	15.37%	15.27%
Covered-employee payroll	\$ 203,541	\$ 193,717	\$ 182,032	\$ 174,586	\$ 166,886
Plan net OPEB liability as a percentage of covered-employee payroll	65.28%	67.63%	74.61%	83.10%	80.33%

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

(7) Post-Employment Healthcare Plan

Schedule of Employer's Contributions (in thousands):

Year ended June 30	Actuarially determined contributions	Contributions in relation to the actuarially determined contributions	Contributions deficiency (excess)	Covered-employee payroll*	Contributions as a percentage of covered employee payroll
2010	\$ 7,725	\$ 7,725	\$ -	\$ 161,641	4.78%
2011	7,494	7,494	-	160,336	4.67%
2012	7,495	7,495	-	158,481	4.73%
2013	7,772	7,772	-	153,707	5.06%
2014	8,457	8,457	-	159,513	5.30%
2015	8,964	8,964	-	166,886	5.37%
2016	9,454	9,454	-	174,586	5.42%
2017	9,764	9,764	-	182,032	5.36%
2018	9,875	9,875	-	193,717	5.10%
2019	10,518	10,518	-	203,541	5.17%
2020	11,089	11,089	-	216,549	5.12%

*Derived by dividing the contributions in relation to the actuarial determined contributions by the contributions as a percentage of covered employee payroll. These amounts may there be different from the actual payroll of the District. However, in accordance with GASB 82, the covered payroll amounts for the actuarial valuations for fiscal year 2013 through current are defined as the payroll on which contributions to the post-employment healthcare plan are based.

Unaudited

**EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO REQUIRED SUPPLEMENTARY INFORMATION
FOR THE YEAR ENDED JUNE 30, 2020
(Dollars in thousands)**

(8) Notes to Required Supplementary Information

The pension-related information presented in the required supplementary schedules was determined as part of the Pension actuarial valuation at the date indicated. Additional information as of the latest Pension actuarial valuation is as follows:

Valuation date	June 30, 2017
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Level percent of payroll
Remaining amortization period	Plan changes, assumption changes, and experience gains/losses prior to July 1, 2011 are amortized over separate decreasing 30-year amortization periods. On or after July 1, 2011, plan changes are amortized over separate decreasing 15-year periods; assumptions changes are amortized over separate decreasing 25-year periods; and experience gains/losses (including year-to-year health assumption changes) are amortized over separate decreasing 20-year periods.
Assets valuation method	Market value of assets less unrecognized returns in each last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the market value, and is recognized over a five year period, further adjusted, if necessary, to be within 30% of the market value.
Actuarial assumptions:	
Investment Rate of Return	7.25%, net of investment and administrative expenses
Average projected salary increases*	Ranges from 4.00% to 9.50% based on years of service*
Inflation rate	3.00%
Cost-of-living adjustments	3.00% per annum
Mortality	<i>Pre-retirement</i> : Headcount-Weighted RP-2014 Employee Mortality Table projected 20 years with the two-dimensional improvement scale MP-2015, set forward two years for males and one year for females. <i>After Service Retirement and All Beneficiaries</i> : Headcount-Weighted RP-2014 Healthy Annuitant Mortality Table projected 20 years with the two-dimensional improvement scale MP-2015, set forward two years for males and one year for females. <i>After Disability Retirement</i> : Headcount-Weighted RP-2014 Healthy Annuitant Mortality Table projected 20 years with the two-dimensional improvement scale MP-2015, set forward nine years for males and females.

*Includes inflation of 3.00% plus across the board salary increases of 0.50% plus merit and promotional increases.

Unaudited.

**EAST BAY MUNICIPAL UTILITY DISTRICT
NOTES TO REQUIRED SUPPLEMENTARY INFORMATION
FOR THE YEAR ENDED JUNE 30, 2020
(Dollars in thousands)**

(8) Notes to Required Supplementary Information (Continued)

The OPEB-related information presented in the required supplementary schedules was determined as part of the OPEB actuarial valuation at the date indicated. Additional information as of the latest OPEB actuarial valuation is as follows:

Valuation date	June 30, 2017
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Level percent of payroll
Remaining amortization period	Plan changes, assumption changes, and experience gains/losses prior to July 1, 2011 are amortized over separate decreasing 30-year amortization periods. On or after July 1, 2011, plan changes are amortized over separate decreasing 15-year periods; assumptions changes are amortized over separate decreasing 25-year periods; and experience gains/losses (including year-to-year health assumption changes) are amortized over separate decreasing 20-year periods.
Assets valuation method	Market value of assets less unrecognized returns in each last five years. Unrecognized return is equal to the difference between the actual market return and the of the expected return on the market value, and is recognized over a five year period, further adjusted, if necessary, to be within 30% of the market value.
Actuarial assumptions:	
Investment Rate of Return	7.25%, net of OPEB Plan investment expense, including inflation
Average projected salary increases*	Ranges from 4.00% to 9.50% based on years of service*
Inflation rate	3.00%
Health care trend	Non-Medicare: 6.75% graded to ultimate 4.50% over 10 years Medicare: 6.25% graded to ultimate 4.50% over 8 years
HIB increases	0.00%
Mortality	<i>Pre-retirement</i> : Headcount-Weighted RP-2014 Employee Mortality Table projected 20 years with the two-dimensional improvement scale MP-2015, set forward two years for males and one year for females. <i>After Service Retirement and All Beneficiaries</i> : Headcount-Weighted RP-2014 Healthy Annuitant Mortality Table projected 20 years with the two-dimensional improvement scale MP-2015, set forward two years for males and one year for females. <i>After Disability Retirement</i> : Headcount-Weighted RP-2014 Healthy Annuitant Mortality Table projected 20 years with the two-dimensional improvement scale MP-2015, set forward nine years for males and females.

**Includes inflation of 3.00% plus across the board salary increases of 0.50% plus merit and promotional increases.*

Unaudited.

SUPPLEMENTAL INFORMATION

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**EAST BAY MUNICIPAL UTILITY DISTRICT
EMPLOYEES' RETIREMENT SYSTEM TRUST FUND
COMBINING BALANCE SHEET**

June 30, 2020

(With summarized comparative financial information as of June 30, 2019)
(DOLLARS IN THOUSANDS)

	2020			2019 Total
	Pension plan benefits	Post- employment healthcare benefits	Total	
Assets:				
Cash and cash equivalents, at fair value (Note 2)	\$ 56,506	\$ 1,346	\$ 57,852	\$ 42,729
Invested securities lending collateral	78,852	1,879	80,731	48,857
Prepaid expenses	-	575	575	560
Receivables:				
Brokers, securities sold	464	11	475	1,647
Employer	1,960	286	2,246	1,674
Plan members	484	-	484	357
Interest, dividends and recoverable taxes	4,597	110	4,707	4,300
Total Receivables	7,505	407	7,912	7,978
Investments, at fair value (Note 2):				
U.S. government obligations	140,566	3,349	143,915	95,799
Municipal bonds	689	16	705	1,871
Domestic corporate bonds	292,017	6,958	298,975	342,052
International bonds	19,332	461	19,793	23,291
Domestic stocks	830,047	19,779	849,826	819,025
International stocks	388,176	9,250	397,426	415,642
Real estate	93,423	2,226	95,649	98,133
Total Investments	1,764,250	42,039	1,806,289	1,795,813
Total Assets	1,907,113	46,246	1,953,359	1,895,937
Liabilities:				
Accounts payable and accrued expenses	2,341	55	2,396	2,757
Payables to brokers, securities purchased	12,329	294	12,623	11,358
Securities lending collateral (Note 2)	78,852	1,879	80,731	48,857
Total Liabilities	93,522	2,228	95,750	62,972
Net position restricted for pension benefits and post-employment healthcare benefits	1,813,591	44,018	1,857,609	1,832,965
Total Net Position	\$ 1,813,591	\$ 44,018	\$ 1,857,609	\$ 1,832,965

See Accompanying Notes to Financial Statements

**EAST BAY MUNICIPAL UTILITY DISTRICT
EMPLOYEES' RETIREMENT SYSTEM TRUST FUND
COMBINING STATEMENT OF CHANGES IN NET POSITION**

For the Year Ended June 30, 2020

**(With summarized comparative financial information for the year ended June 30, 2019)
(DOLLARS IN THOUSANDS)**

	2020			2019 Total
	Pension plan benefits	Post- employment healthcare benefits	Total	
Additions:				
Contributions:				
Employers	\$ 77,645	\$ 11,089	\$ 88,734	\$ 84,551
Plan members	18,690	195	18,885	17,865
Total Contributions	96,335	11,284	107,619	102,416
Investment Income:				
Net appreciation (depreciation) in fair value investments:				
Traded securities	12,961	290	13,251	67,474
Real estate	673	15	688	1,667
Interest	14,027	314	14,341	11,295
Dividends	16,002	358	16,360	17,785
Real estate operating income, net	1,946	44	1,990	1,245
Total Investment Income	45,609	1,021	46,630	99,466
Less:				
Investment expense	(4,753)	(111)	(4,864)	(4,993)
Borrowers' rebates and other agent fees on securities lending transactions	(883)	(20)	(903)	(1,219)
Net Investment Income	39,973	890	40,863	93,254
Total Additions, net	136,308	12,174	148,482	195,670
Deductions:				
Benefits paid	112,926	8,963	121,889	114,168
Refunds of contributions	462	-	462	267
Administrative expenses	1,453	34	1,487	1,510
Total Deductions	114,841	8,997	123,838	115,945
Changes in Net Position	21,467	3,177	24,644	79,725
Net Position - Beginning of the Year	1,792,124	40,841	1,832,965	1,753,240
Net Position - End of the Year	\$ 1,813,591	\$ 44,018	\$ 1,857,609	\$ 1,832,965

See Accompanying Notes to Financial Statements



INDEPENDENT AUDITORS' 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
East Bay Municipal Utility District
Oakland, 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 basic financial statements of the East Bay Municipal Utility District, as of and for the year ended June 30, 2020, and the related notes to the financial statements, which collectively comprise the District's basic financial statements, and have issued our report thereon dated August 31, 2020.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered the District'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 opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the District's internal control. Accordingly, we do not express an opinion on the effectiveness of the District'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 the entity'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.



To the Board of Directors
East Bay Municipal Utility District
Oakland, California

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the District'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 the District's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the District's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

A handwritten signature in black ink that reads "Lance, Solt & Lughard, LLP". The signature is written in a cursive, flowing style.

Sacramento, California
August 31, 2020



FINANCIAL REVIEW OF FISCAL YEAR 2020

Memorandum on Internal Controls And Required Communication



August 31, 2020

To the Board of Directors
East Bay Municipal Utility District
Oakland, California

We have audited the financial statements of each major fund and the aggregate remaining fund information, of the East Bay Municipal Utility District (the District) for the year ended June 30, 2020. Professional standards require that we provide you with information about our responsibilities under generally accepted auditing standards, *Government Auditing Standards* and the Uniform Guidance, 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 date May 15, 2020. Professional standards also require that we communicate to you the following information related to our audit.

Significant Audit Findings

Qualitative Aspects of Accounting Practices

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by the District are described in the notes to the financial statements. No new accounting policies were adopted, and the application of existing policies was not changed during fiscal year 2019-2020.

We noted no transactions entered into by the District 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 the District's financial statements were:

Management's estimates of its net pension liability and net other post-employment benefits liability based on actuarial valuation specialist assumptions. The District's claims liability is based on the District Attorney's estimate of current and potential litigation, as well as actuarial studies provided for the District. We evaluated the key factors and assumptions used to develop the net pension liability, net other postemployment benefits liability and claims liability in determining that they are reasonable in relation to the financial statements taken as a whole.

The financial statement disclosures are neutral, consistent, and clear.





To the Board of Directors
East Bay Municipal Utility District
Oakland, California

Difficulties Encountered in Performing the Audit

We encountered no significant 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. Management has corrected all such misstatements. In addition, none of the misstatements detected as a result of audit procedures and corrected by management 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 August 31, 2020.

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 the District'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 the District'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 management discussion and analysis, the schedule of changes in employer's net pension liability, the schedule of employer's net pension liability, the schedule of employer's contributions – pension plan, the schedule of investment returns, the schedule of changes in employer's net OPEB liability, the schedule of employer's net OPEB liability, and the schedule of employer's contributions – post-employment healthcare plan which are required supplementary information (RSI) that supplements 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



To the Board of Directors
East Bay Municipal Utility District
Oakland, California

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 balance sheet and combining statement of changes in net position for the Employees' Retirement System Trust Fund 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.

New Accounting Standards

The following new Governmental Accounting Standards Board (GASB) pronouncements were effective for fiscal year 2019-2020 audit:

GASB Statement No. 95, *Postponement of Effective Dates of Certain Authoritative Guidance* – The following pronouncements have been postponed as a temporary relieve to governments and other stakeholders in light of the COVID-19 pandemic and the new effective date are reflected in the following fiscal years.

GASB Statement No. 88, *Certain Disclosure Related to Debt, including Direct Borrowing and Direct Placements*.

The following Governmental Accounting Standards Board (GASB) pronouncements are effective in the following fiscal year audit and should be reviewed for proper implementation by management:

Fiscal year 2021

GASB Statement No. 84, *Fiduciary Activities*.

GASB Statement No. 90, *Majority Equity Interests - an Amendment of GASB Statement Nos. 14 and 61*.

Fiscal year 2022

GASB Statement No. 87, *Leases*.

GASB Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*.

Fiscal year 2023

GASB Statement No. 91, *Conduit Debt Obligations*.



To the Board of Directors
East Bay Municipal Utility District
Oakland, California

Restriction on Use

This information is intended solely for the use of the Finance Committee, Board of Directors and management of East Bay Municipal Utility District and is not intended to be, and should not be, used by anyone other than these specified parties.

Very truly yours,

Lance, Soll & Loughard, LLP

Sacramento, California



FINANCIAL REVIEW OF FISCAL YEAR 2020

Annual Budget Performance



FY20 ANNUAL BUDGET PERFORMANCE

This section details the Fiscal Year 2020 budget performance for the Water and Wastewater Systems including an analysis of operating revenues and expenditures, major capital expenses, and a summary of grant / loan activities.

District-wide Overview

On March 17, 2020, the District declared an emergency to ensure its ability to respond rapidly to the changing circumstances related to COVID-19. The second half of FY20 was impacted by the COVID-19 pandemic and shelter-in-place orders which caused a reduction in revenues and increased expenses. In spite of the pandemic, FY20 ended with actual net revenue and expense savings greater than budget for both the water and wastewater systems. At the time of this report, much is still evolving and the potential impacts may be greater in FY21. Therefore the use of FY20 positive net revenue will help to offset possible FY21 shortfalls.

Water System Overview

- **Revenues:** Total revenues were greater than budget by \$47.7 million.
- **Operating Expenses:** Total operating expenses were less than budget by \$36.1 million.
- **Capital Expenses:** Total capital expenses were less than budget by \$52.0 million.

Wastewater System Overview

- **Revenues:** Total revenues were greater than budget by \$4.0 million.
- **Operating Expenses:** Total operating expenses were less than budget by \$5.7 million.
- **Capital Expenses:** Total capital expenses were less than budget by \$6.7 million.



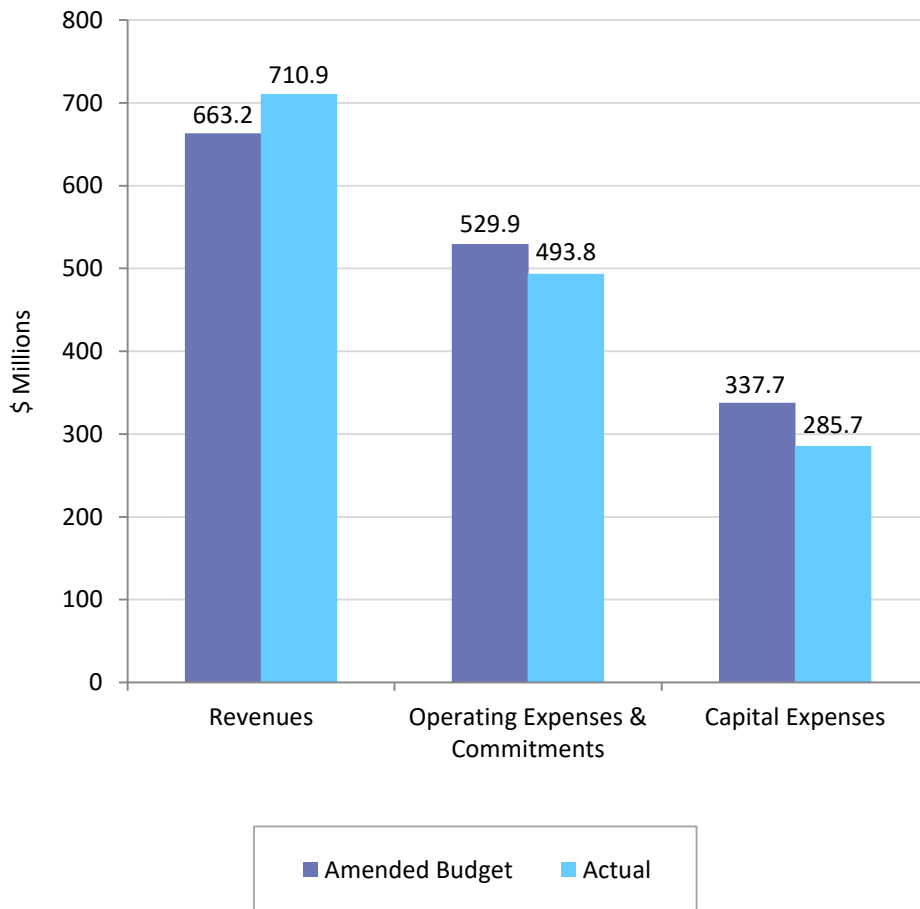
FY20 ANNUAL BUDGET PERFORMANCE

WATER SYSTEM

Summary of Revenues & Expenses

The following chart compares budget to actuals.

- Total revenues were \$710.9 million or 107 percent of budgeted revenues of \$663.2 million.
- Total operating expenses and commitments were \$493.8 million or 93 percent of the total amended budget of \$529.9 million.
- Total capital expenses were \$285.7 million or 85 percent of the total budgeted cash flow of \$337.7 million.
- Actual net revenues and expense savings were stronger than forecasted, and could be used to offset possible deficits in Fiscal Year 2021 that may result from the COVID-19 pandemic.

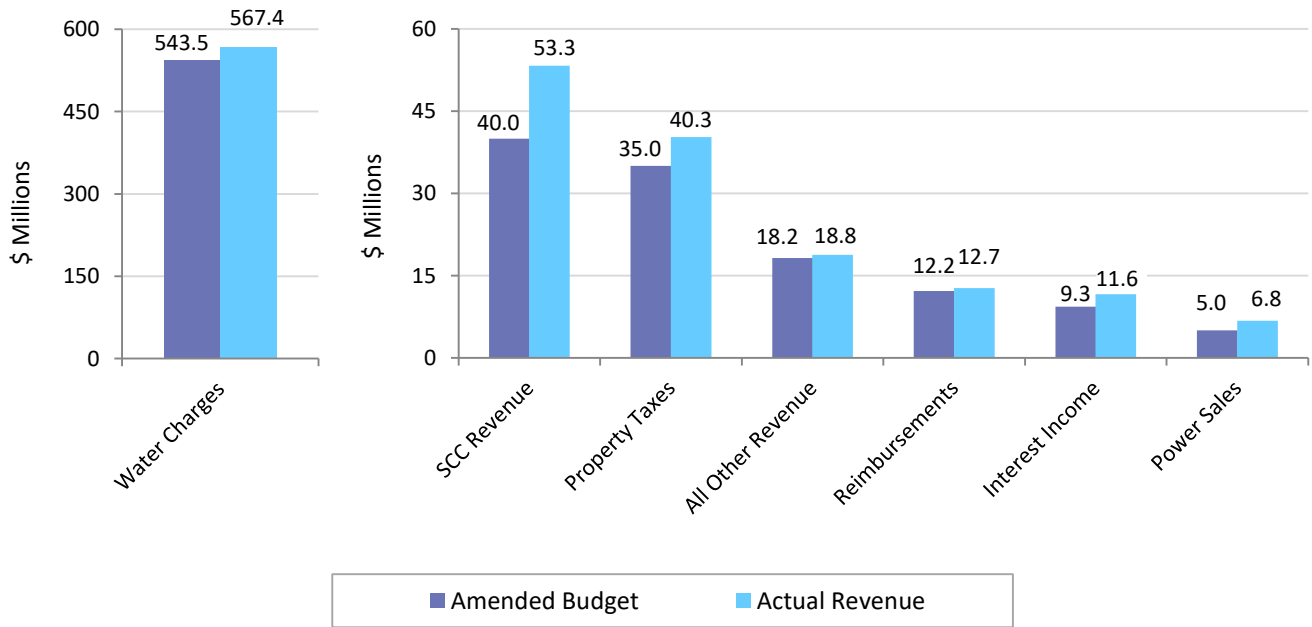




FY20 ANNUAL BUDGET PERFORMANCE

Water System Revenues

The following charts show the various sources of Water System revenue in comparison to budget.



Water System Revenues (\$ Millions)				
	Amended Budget	Actuals	Over / (Under)	%
Water Charges	543.5	567.4	23.9	104%
SCC Revenue	40.0	53.3	13.3	133%
Property Taxes	35.0	40.3	5.3	115%
All Other Revenue	18.2	18.8	0.6	103%
Reimbursements	12.2	12.7	0.5	104%
Interest Income	9.3	11.6	2.3	125%
Power Sales	5.0	6.8	1.8	135%
Total Revenues	663.2	710.9	47.7	107%



FY20 ANNUAL BUDGET PERFORMANCE

At year-end, all revenue sources were greater than budgeted. Major revenue variances were:

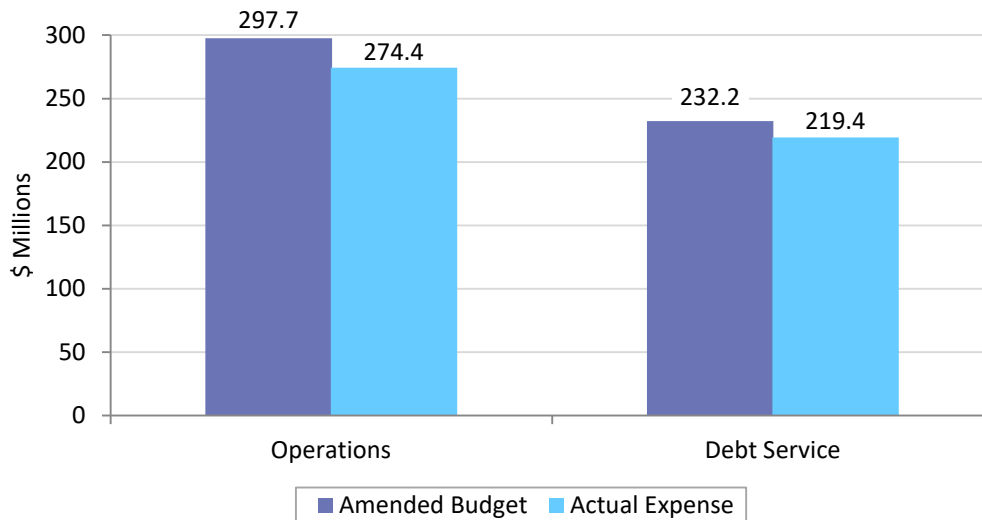
- **Water Charges** were \$567.4 million or 104 percent of budget. The FY20 budget was based on billed water consumption of 141 million gallons per day (MGD). Actual water consumption was 147.8 MGD or 6.8 MGD greater than budget, and an increase of 3.6 percent compared to FY19 billed consumption of 142.7 MGD.
- **SCC Revenues** were \$53.3 million or 133 percent of budget. The FY20 budget was increased by \$12 million or 43 percent from the prior year in anticipation of continued significant building activity. A strong third quarter yielding \$22.1 million mitigated impacts of the shelter-in-place order in the fourth quarter.
- **Property Taxes** were \$40.3 million or 115 percent of budget due to conservative assumptions of property tax growth and a \$1.17 million delayed payment of FY19 revenues.
- **Interest Income** was \$11.6 million or 125 percent of budget due to proceeds from bonds issued at the end of FY19 available for investment which compensated for lower interest rates. In the fourth quarter rates reached low levels not experienced since the third quarter of FY16, and interest earnings recorded declined to the lowest level since the fourth quarter of FY17 but were offset due to the size of the portfolio.
- **Power Sales** were \$6.8 million or 135 percent of budget due to high reservoir levels at the end of FY19 which resulted in additional power generation.



FY20 ANNUAL BUDGET PERFORMANCE

Water System Operating Expenses and Commitments

The following charts depict operating budget spending by type for the Water System. Total operating expenses and commitments were \$493.8 million or 93 percent of the total amended budget of \$529.9 million.



Water System Operating Expenses & Commitments (\$ Millions)				
	Amended Budget	Actuals	Over / (Under)	%
Operations	297.7	274.4	(23.3)	92%
Debt Service	232.2	219.4	(12.8)	94%
Total Operating	529.9	493.8	(36.1)	93%

Total operating expenses were 7.0 percent less than budget. Major variances were:

- Operations** savings were \$23.3 million primarily attributable to the recruitment lead time to fill vacancies; lower than planned spending such as energy, Chevron operations and hatchery operations; suspension or reduction of some operations due to COVID including contract work, paving, training conferences, and travel; higher than budgeted reimbursement for the administration of capital which decreases operating expense by a like amount; and unspent contingency. Savings were partially offset due to increased expenses associated with the pandemic such as the temporary assignment of field staff that normally performs capital-related work assigned to rotation shifting labor costs from capital to operating and the settlement of a significant self-insured liability claim.
- Debt Service** savings were \$12.8 million primarily due to lower interest rates than assumed in the budget and lower interest expenses in the fourth quarter resulting from the pay-down of commercial paper in the second half of the fiscal year.

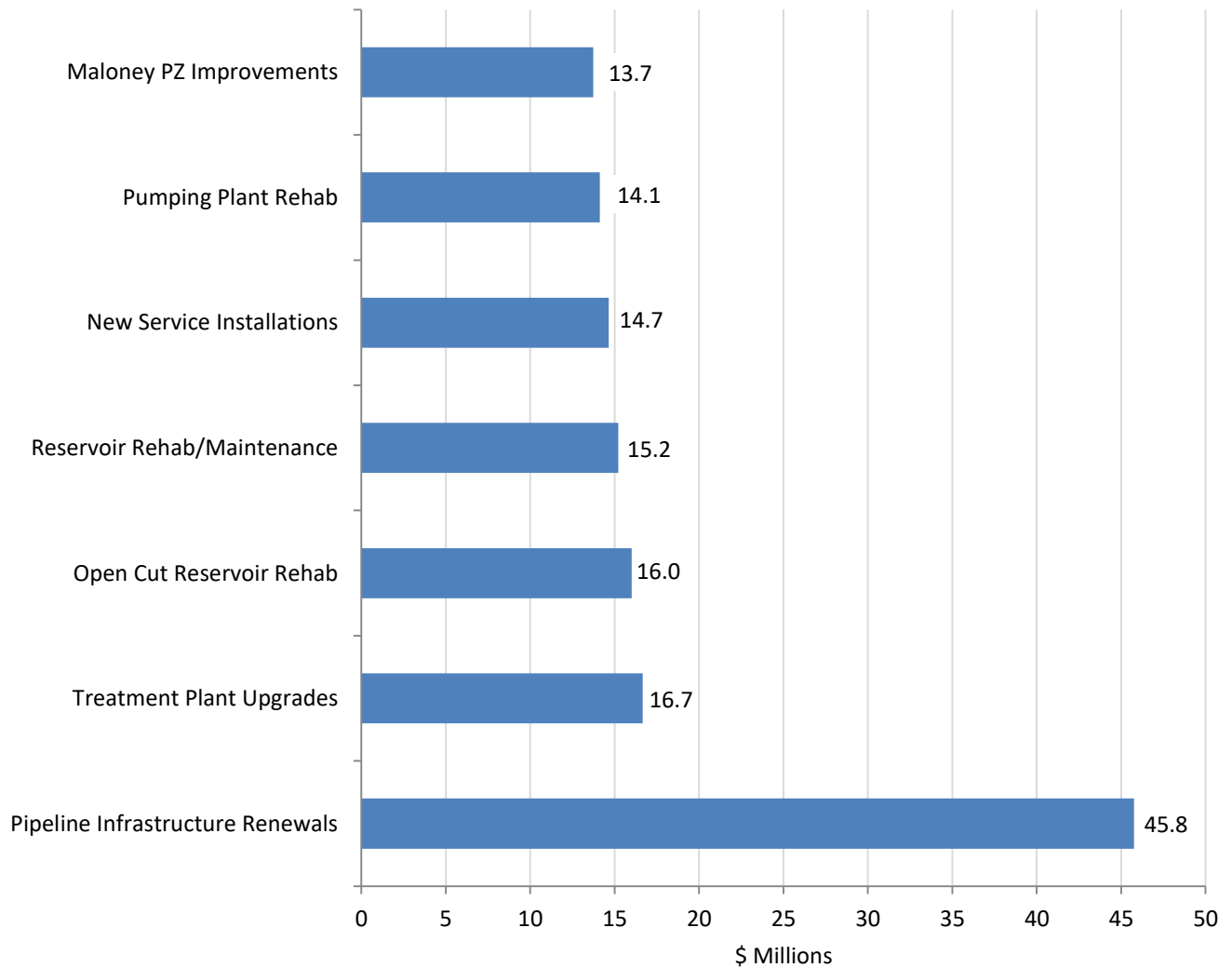


FY20 ANNUAL BUDGET PERFORMANCE

Water System Capital Cash Flow Expenses

Capital expenditures totaled \$285.7 million or 85 percent of budgeted cash flow of \$337.7 million. Of this amount, direct costs totaled \$230.3 million and the remaining \$55.4 million represents the administration of capital expenses. Spending was less than planned due to various project delays and impacts from the shelter-in-place orders.

The chart below illustrates the direct capital spending for major projects.





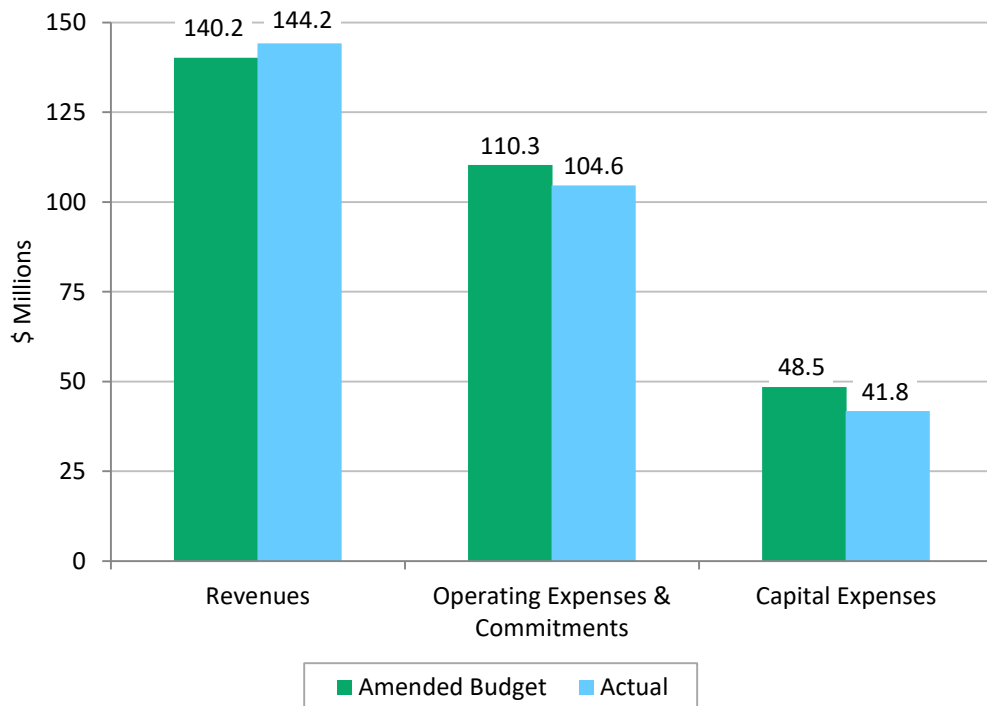
FY20 ANNUAL BUDGET PERFORMANCE

WASTEWATER SYSTEM

Summary of Revenues & Expenses

The following chart compares budget to actuals for revenues, operating expenses and commitments and capital expenses.

- Total Wastewater System revenues were \$144.2 million or 103 percent of budgeted revenues of \$140.2 million.
- Total operating expenses and commitments were \$104.6 million or 95 percent of the amended budget of \$110.3 million.
- Total capital expenses were \$41.8 million or 86 percent of the budgeted cash flow of \$48.5 million.
- Similar to the Water System, actual net revenues and expense savings were stronger than forecasted, and could be used to offset possible deficits in Fiscal Year 2021 that may result from the COVID-19 pandemic.

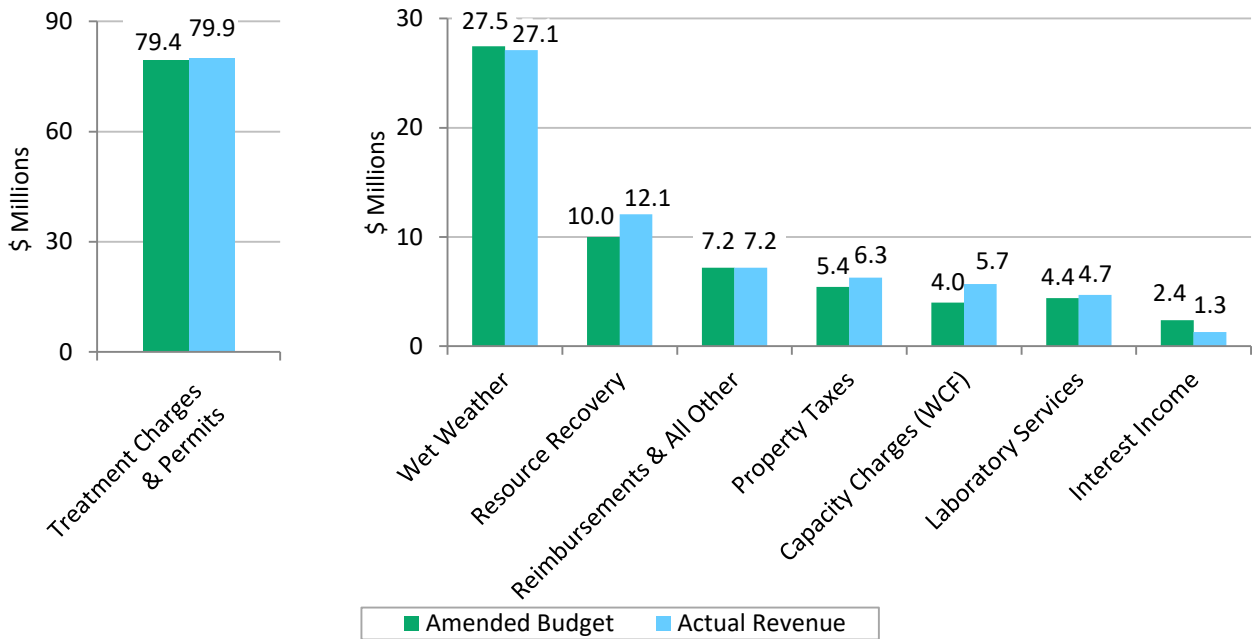




FY20 ANNUAL BUDGET PERFORMANCE

Wastewater System Revenues

The following charts show the various sources of Wastewater System revenue in comparison to budget.



Wastewater System Revenues (\$ Millions)				
	Amended Budget	Actuals	Over / (Under)	%
Treatment Charges & Permits	79.4	79.9	0.5	101%
Wet Weather	27.5	27.1	(0.3)	99%
Resource Recovery	10.0	12.1	2.1	121%
Reimbursements & All Other	7.2	7.2	0.0	100%
Property Taxes	5.4	6.3	0.9	116%
Capacity Charges (WCF)	4.0	5.7	1.7	142%
Laboratory Services	4.4	4.7	0.3	107%
Interest Income	2.4	1.3	(1.1)	55%
Total Revenues	140.2	144.2	4.0	103%



FY20 ANNUAL BUDGET PERFORMANCE

At year-end, most revenue sources were greater than budgeted. Major revenue variances were:

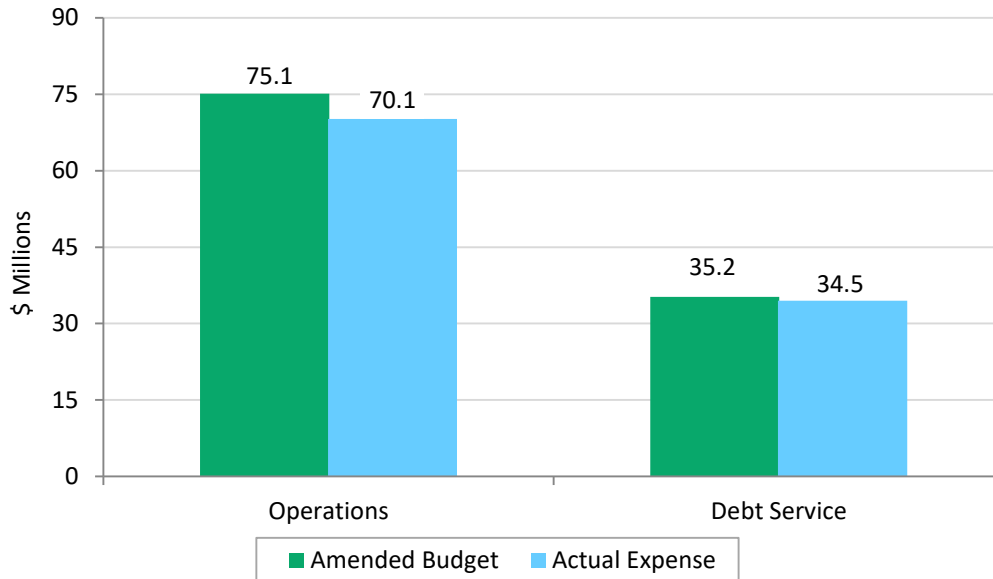
- **Resource Recovery** revenue was \$12.1 million or 121 percent of budget due to a conservative approach to budgeting as these revenues are anticipated to decline over time.
- **Capacity Charges (WCF)** revenue was \$5.7 million or 142 percent of budget due to a conservative approach to budgeting and relatively more building activity in the SD-1 portion of the service area. The FY20 budget was increased by \$2.1 million or 110 percent of the prior year in anticipation of continued significant building activity. Strong WCF revenues sustained through the third quarter mitigated impacts of shelter-in-place orders in the fourth quarter.
- **Property Taxes** were \$6.3 million or 116 percent of budget due to conservative assumptions of property tax growth.
- **Interest Income** was \$1.3 million or 55 percent of budget due to interest rates being lower than assumed in the budget. In the fourth quarter rates reached low levels not experienced since the third quarter of FY16, and interest earnings recorded declined to the lowest level since the third quarter of FY19.



FY20 ANNUAL BUDGET PERFORMANCE

Wastewater System Operating Expenses and Commitments

The following charts depict operating budget spending by type for the Wastewater System. Total operating expenses and commitments were \$104.6 million or 95 percent of the total amended budget of \$110.3 million.



Wastewater System Operating Expenses & Commitments (\$ Millions)				
	Amended Budget	Actuals	Over / (Under)	%
Operations	75.1	70.1	(4.9)	93%
Debt Service	35.2	34.5	(0.8)	98%
Total Operating	110.3	104.6	(5.7)	95%

Total operating expenses were 5.0 percent less than budget. Major variances were:

- **Operations** savings of \$4.9 million were primarily attributable to the recruitment lead time to fill vacancies, higher than budgeted reimbursement for the administration of capital which decreases operating expenses by a like amount, and unspent contingency. Savings were partially offset by increases in chemical costs as market prices were higher than projected at the time the budget was developed.
- **Debt Service** savings of \$0.8 million were primarily due to lower interest rates than assumed in the budget and lower interest expenses in the fourth quarter resulting from the pay-down of commercial paper in the second half of the fiscal year.

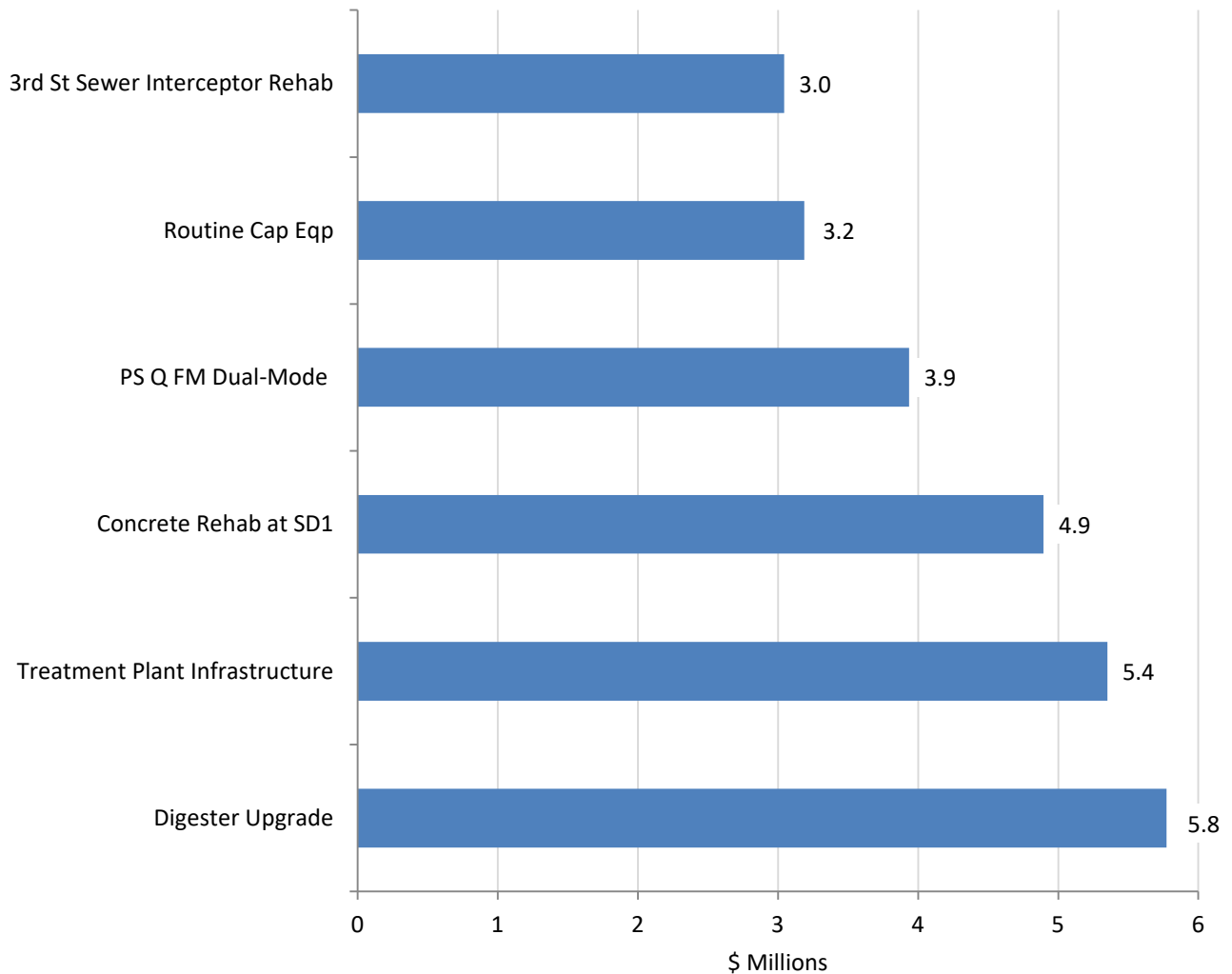


FY20 ANNUAL BUDGET PERFORMANCE

Wastewater System Capital Cash Flow Expenses

Capital expenditures totaled \$41.8 million or 86 percent of the budgeted cash flow of \$48.5 million. Of this amount, direct costs associated with capital projects totaled \$37.8 million and the remaining \$4.0 million represents administration of capital expenses. Spending for certain projects was deferred to address higher priority work.

The following chart illustrates the direct capital spending for the major projects.





FY20 ANNUAL BUDGET PERFORMANCE

GRANTS AND LOANS SUMMARY

GRANTS

In FY20, the District received four grant awards totaling \$4.94 million. The table below is a summary of all grant activities for the fiscal year.

Grant Project	Submittal Year	Amount (\$)	Status as of 6/30/20
East Bay Plain Subbasin Characterization and Data Management	FY20	758,467	Awarded and Accepted
Wastewater Treatment Plant Tour Busing	FY20	950	Awarded and Accepted
Bay Area Regional Water Conservation Program ¹	FY20	4,177,875	Awarded and Accepted
Wellness - Association of California Water Agencies Joint Powers Insurance Authority's (ACWA JPIA)	FY20	1,600	Awarded and Accepted
Mokelumne Coast to Crest Trail - Camanche Extension	FY20	709,500	Denied
Regional Water/Wastewater Apprenticeship Program ²	FY20	500,000	Denied

Note:

¹ EBMUD is administering the Proposition 1 Integrated Regional Water Management grant on behalf of 11 Bay Area water agencies. EBMUD will receive approximately \$1.0 million in grant funding for water conservation programs.

² The Peralta Community College District was the lead applicant for the California Apprenticeship Initiative Grant. The District provided a letter of support for this grant application.

The following is a description of the grant awards:

East Bay Plain Subbasin Characterization and Data Management: Gathering essential data and managing various data to complete a robust groundwater model to develop the East Bay Plain Groundwater Sustainable Plan.

Wastewater Treatment Plant Tour Busing: Charter buses to transport students from a Title One school within the wastewater service area to the Main Wastewater Treatment Plant for a plant tour and a career development panel to give students insight into water/wastewater career opportunities, treatment plant operations, and the importance of pollution prevention.

Bay Area Regional Water Conservation Program: Water conservation programs in the Bay Area. EBMUD is administering and managing this grant on behalf of eleven Bay Area water agencies.

Wellness - Association of California Water Agencies Joint Powers Insurance Authority's (ACWA JPIA): Wellbeing month initiatives that improve employee health and wellbeing.

LOANS

One loan is pending an award decision by the State for the \$20.4 million for the South Interceptor / 3rd Street Rehabilitation Project which was submitted in Fiscal Year 2017.



FINANCIAL REVIEW OF FISCAL YEAR 2020

Financial Indicators



FY20 FINANCIAL INDICATORS

This section provides a trend analysis for Water and Wastewater Systems from FY11 to FY20.

Water System Overview

- **Financial Goals** exceeded targets stated in Cash Reserves Policy 4.02 and Debt Management Policy 4.27.
- **Financial Position** remained sound with an increase in assets and decrease in liabilities. Capital contributions decreased due to slowdown in local development.
- **Operating Indicators** remained strong with a stable customer base and solid collection controls, while rates increased above the median for comparable agencies.

Wastewater System Overview

- **Financial Goals** exceeded targets stated in Cash Reserves Policy 4.02 and Debt Management Policy 4.27.
- **Financial Position** remained sound with an increase in assets and decrease in liabilities. Capital contributions decreased due to slowdown in local development.
- **Operating Indicators** remained strong with a stable customer base and solid collection controls, while rates remained above the median for comparable agencies.

Employees Retirement System

- **Retirement System** funded ratio is comparable to other similarly sized agencies.

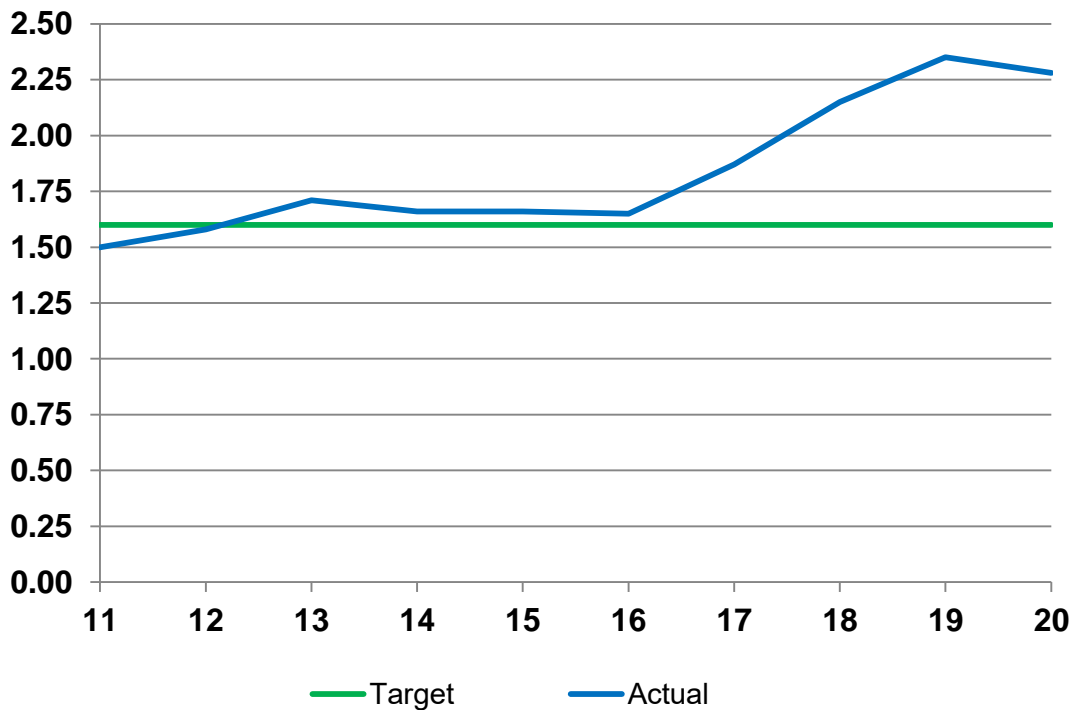


FY20 FINANCIAL GOALS (Policy 4.27)

Water - Revenue Debt Service Coverage Ratio

This ratio shows net revenue divided by bond debt service cost. Coverage ratios are used to measure the ability to meet revenue bond principal and interest payments. The higher the ratio, the stronger the security for the bonds.

The FY20 water system debt service coverage ratio of 2.28 exceeds the KPI target, and has consistently exceeded the policy goal since FY13.



Coverage Ratio										
Fiscal Year	11	12	13	14	15	16	17	18	19	20
Actual	1.5	1.58	1.71	1.66	1.66	1.65	1.87	2.15	2.35	2.28
Target	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Performance	-	-	+	+	+	+	+	+	+	+

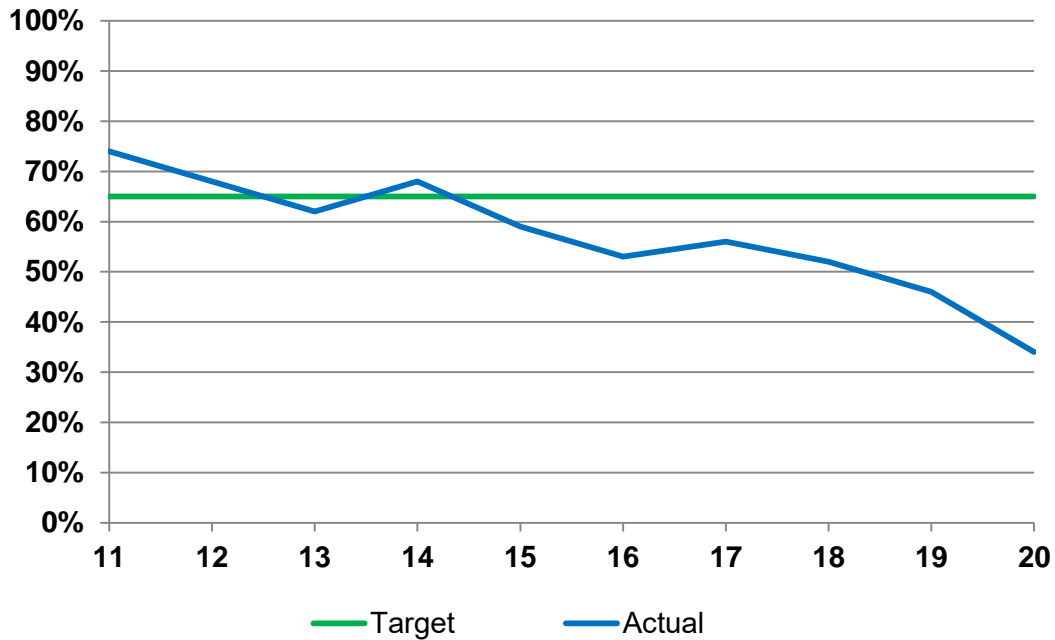


FY20 FINANCIAL GOALS (Policy 4.27)

Water - Percentage of Debt Funded Capital Spending

This percentage shows the amount of debt used to fund capital programs divided by total capital spending for each five-year planning period. The District's goal is to limit debt-funded capital spending to no more than 65 percent. The District's practice is to reimburse the prior 18 months capital spending when issuing new debt and reflect the reimbursement in the year the funds are spent.

In FY20, the percentage of debt funded capital spending decreased from 46 percent to 34 percent. FY20 represents the sixth consecutive year the District has met this policy goal.



Percentage of Debt Funded Capital Spending										
Fiscal Year	11	12	13	14	15	16	17	18	19	20
Actual	74%	68%	62%	68%	59%	53%	56%	52%	46%	34%
Target	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%
Performance	-	-	+	-	+	+	+	+	+	+

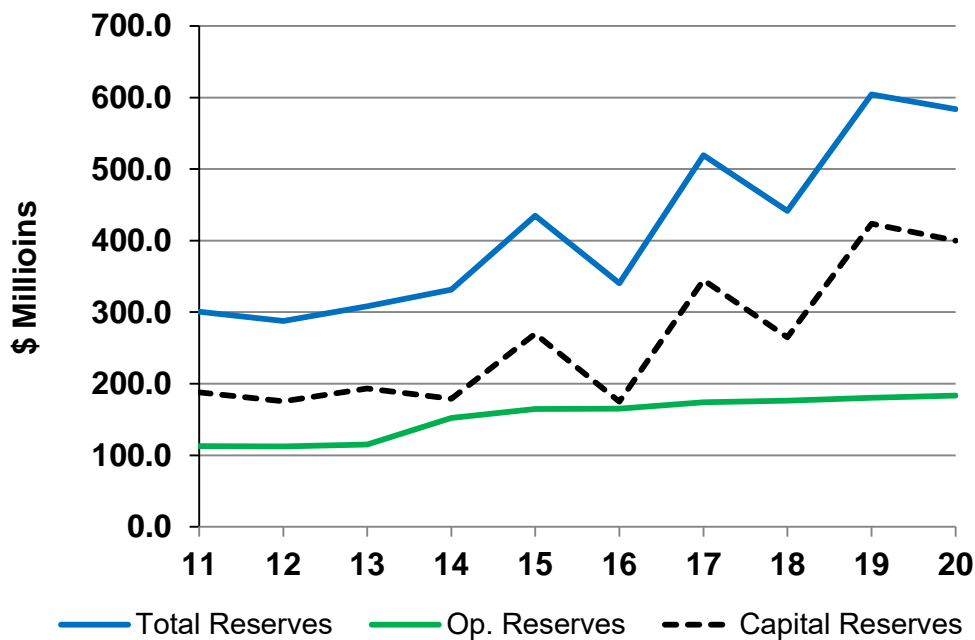


FY20 FINANCIAL GOALS (Policy 4.02)

Water - Unrestricted Reserve Balances

The Unrestricted Reserve Balances indicate the District's ability to meet unanticipated revenue declines or expenditure increases. Unrestricted reserves are committed by the Board of Directors. This is distinct from restricted reserves which are legally constrained by law or by third party.

The District goal is to meet or exceed the target operating reserve. The FY20 unrestricted reserve balance of \$583.8 million exceeds the operating reserve balances of \$183.7 million established by the District's Financial Reserve Policy. Balances in excess of the operating reserves will be used to fund the Water System Capital Projects.



Reserve Balances (in millions)										
Fiscal Year	11	12	13	14	15	16	17	18	19	20
Total Reserves	300.8	287.8	308.3	331.6	434.7	340.4	519.1	441.3	604.2	583.8
Op. Reserves	112.7	112.3	114.9	152.4	164.9	165.3	174.3	176.5	180.5	183.7
Capital Reserves	188.1	175.5	193.4	179.2	269.8	175.1	344.8	264.8	423.7	400.1
Performance	+	+	+	+	+	+	+	+	+	+

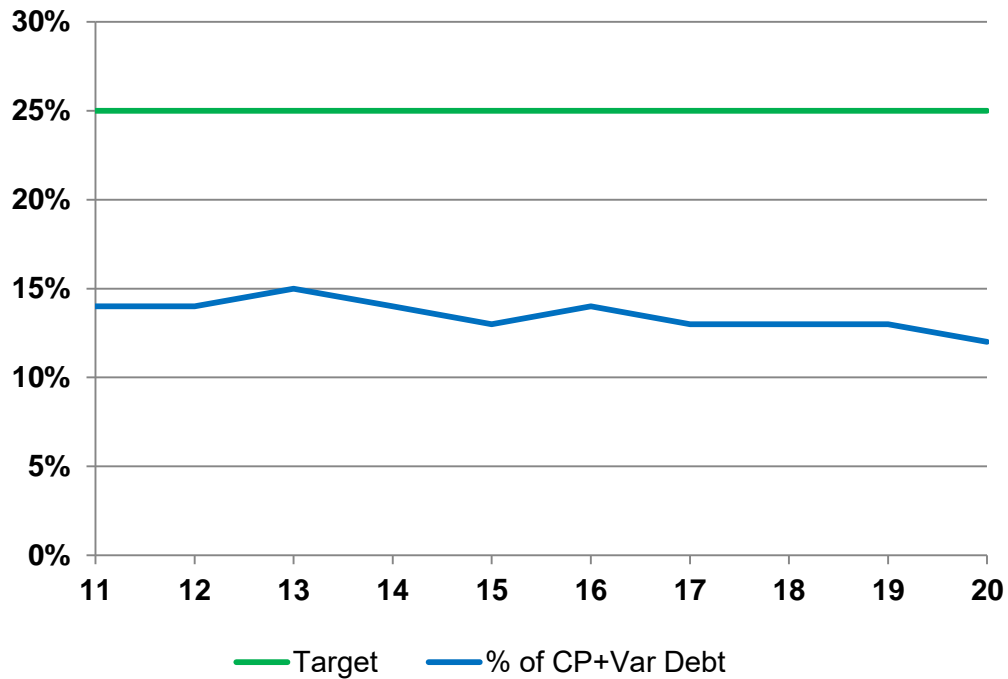


FY20 FINANCIAL GOALS (Policy 4.27)

Water - Percentage of Extended Commercial Paper and Un-hedged Variable Rate Debt

This percentage represents the total amount of commercial paper and un-hedged variable rate debt divided by the total outstanding long-term debt for each fiscal year period. The District's goal is to limit the commercial paper and un-hedged variable rate debt to no more than 25 percent of the total outstanding long-term debt.

In FY20, the water system met the KPI target with 12 percent.



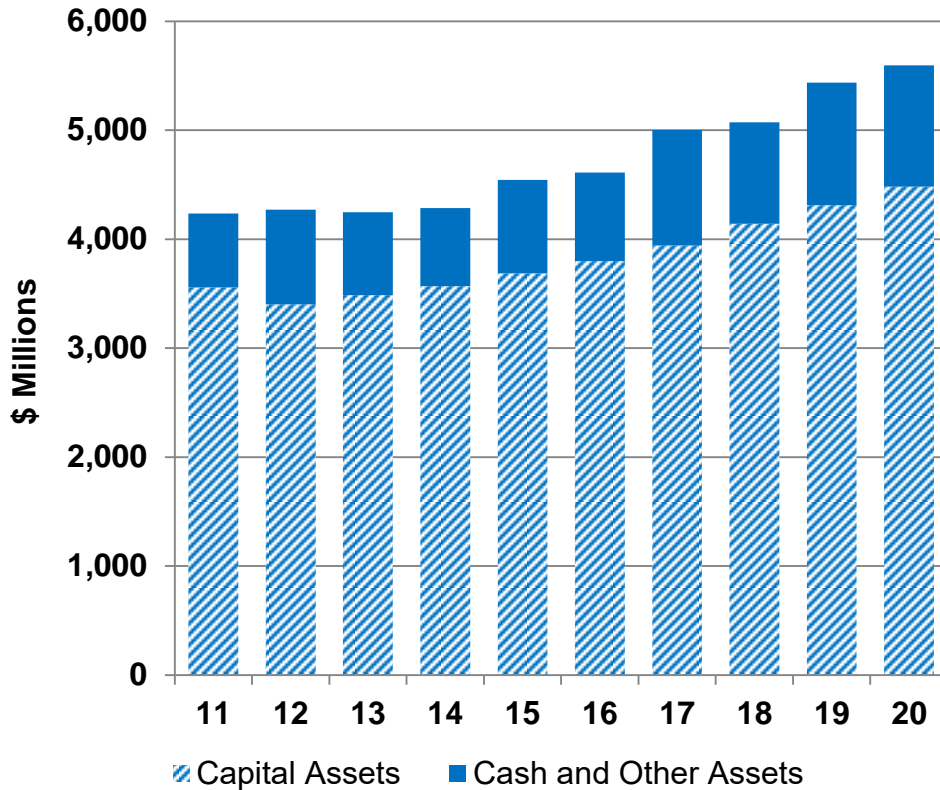
Percentage of Commercial Paper and Variable Rate Debt										
Fiscal Year	11	12	13	14	15	16	17	18	19	20
% of CP+Var Debt	14%	14%	15%	14%	13%	14%	13%	13%	13%	12%
Target	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
Performance	+	+	+	+	+	+	+	+	+	+



FY20 FINANCIAL POSITION

Water - Total Assets

Total Assets have increased in the past ten years from \$4.2 billion to \$5.6 billion. The amount of Capital Assets (e.g., buildings, pipelines, reservoirs) increased in FY20 to \$4.5 billion, or 80 percent of Total Assets.



Total Assets (in millions)										
Fiscal Year	11	12	13	14	15	16	17	18	19	20
Capital Assets	3,556	3,400	3,485	3,568	3,684	3,796	3,941	4,140	4,310	4,480
Cash and Other Assets	679	869	761	715	859	814	1,060	932	1,126	1,112
Total Assets	4,235	4,269	4,246	4,283	4,543	4,610	5,001	5,072	5,436	5,592
% of Capital to Total Assets	84%	80%	82%	83%	81%	82%	79%	82%	79%	80%

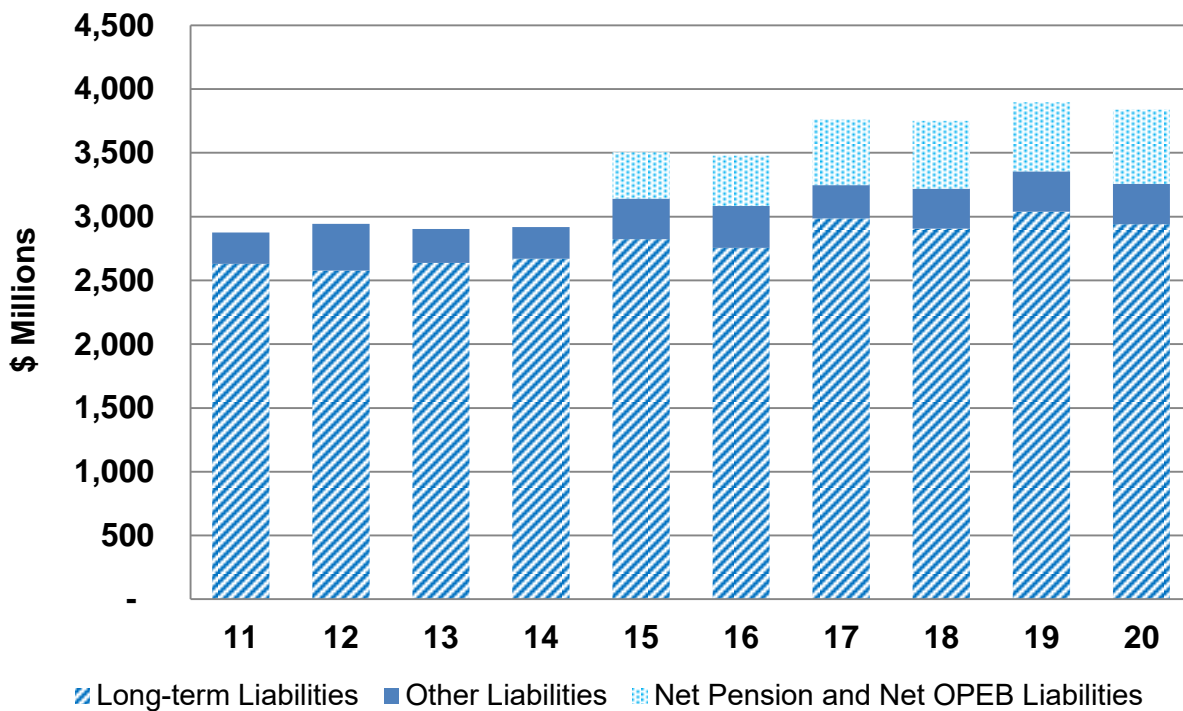


FY20 FINANCIAL POSITION

Water - Total Liabilities

Total Liabilities over the last ten years have increased from \$2.9 billion in FY11 to \$3.8 billion in FY20. The increases are in line with increased capital spending to improve the Water System’s infrastructure, meet more stringent regulations, secure future water supply, and upgrade the water distribution system.

The percentage of debt to total liabilities decreasing trend provides more debt capacity.



Total Liabilities (in millions)										
Fiscal Year	11	12	13	14	15	16	17	18	19	20
Net Pension and Net OPEB Liabilities					365	393	515	532	543	583
Other Liabilities	246	364	266	249	318	329	261	314	315	316
Long-term Liabilities	2,630	2,579	2,637	2,671	2,823	2,756	2,986	2,905	3,040	2,941
Total Liabilities	2,876	2,943	2,903	2,919	3,506	3,478	3,762	3,751	3,898	3,840
% of LT Debt to Total Liabilities	91%	88%	91%	91%	81%	79%	79%	77%	78%	77%

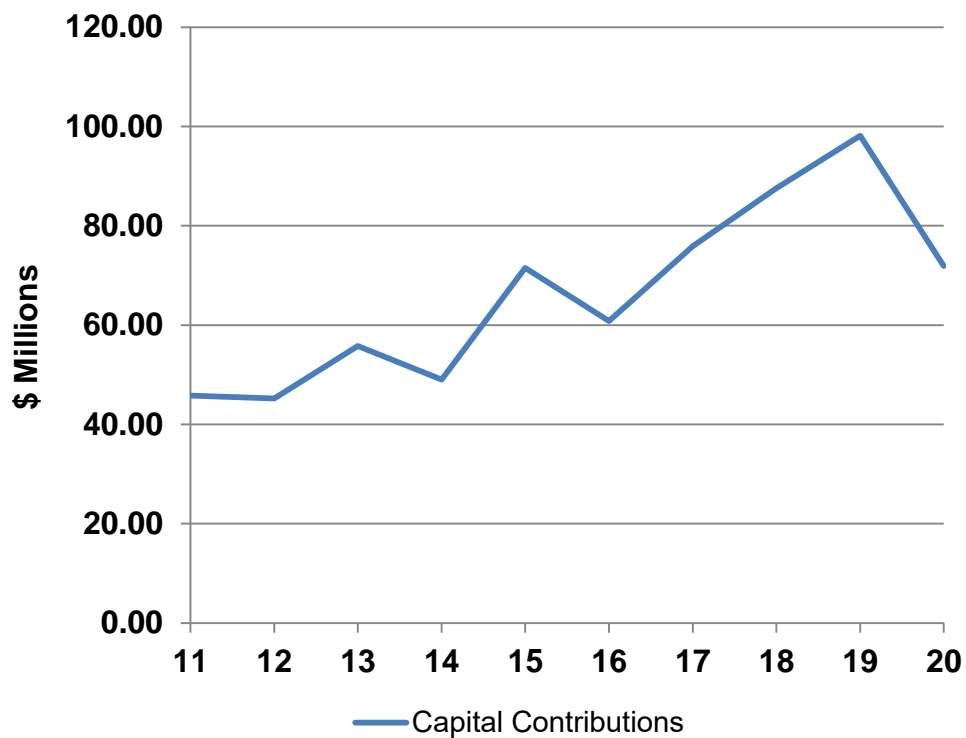


FY20 FINANCIAL POSITION

Water - Capital Contributions

Capital Contributions primarily consists of System Capacity Charges (SCC) and contributions when the District's facilities need to be relocated during construction projects. The District also receives state and federal grants to fund capital projects.

In FY20, Capital Contributions decreased from \$98.14 million in FY19 to \$71.92 million reflecting a slowdown in property development and constructions projects, particularly in the Oakland and Berkeley service areas.



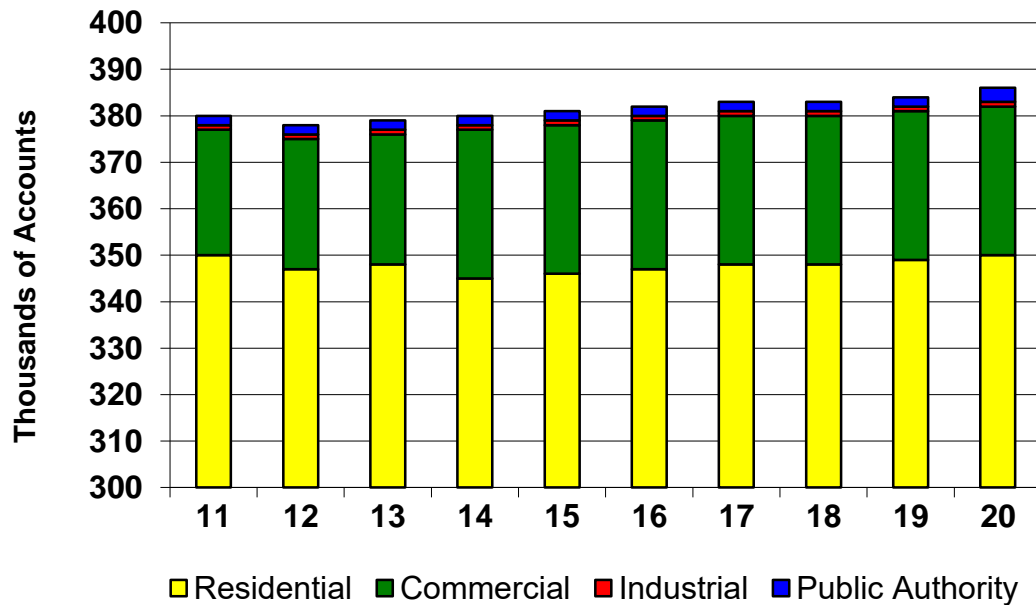
Capital Contributions (in millions)										
Fiscal Year	11	12	13	14	15	16	17	18	19	20
System Capacity Charges	17.63	16.08	22.67	20.37	29.73	39.32	51.46	69.27	73.50	53.30
Earned Contributions on Construction	6.48	5.87	4.54	5.24	17.08	17.05	14.36	15.52	23.74	17.78
Seismic Improvement Surcharge	18.10	19.17	20.59	22.68	22.16	0.03	0.01	0.00	0.00	0.00
Grants and Other Reimbursements	3.61	4.09	7.99	0.75	2.56	4.40	10.08	2.77	0.90	0.84
Capital Contributions	45.82	45.21	55.79	49.04	71.53	60.80	75.91	87.56	98.14	71.92



FY20 OPERATING INDICATORS

Water - Number of Accounts

The District provides water to approximately 385,067 accounts and a population of 1.4 million. The number of accounts has slightly increased over the past ten years. Accounts are classified as Residential, Commercial, Industrial, and Public Authority (Institutional/Public Agencies).



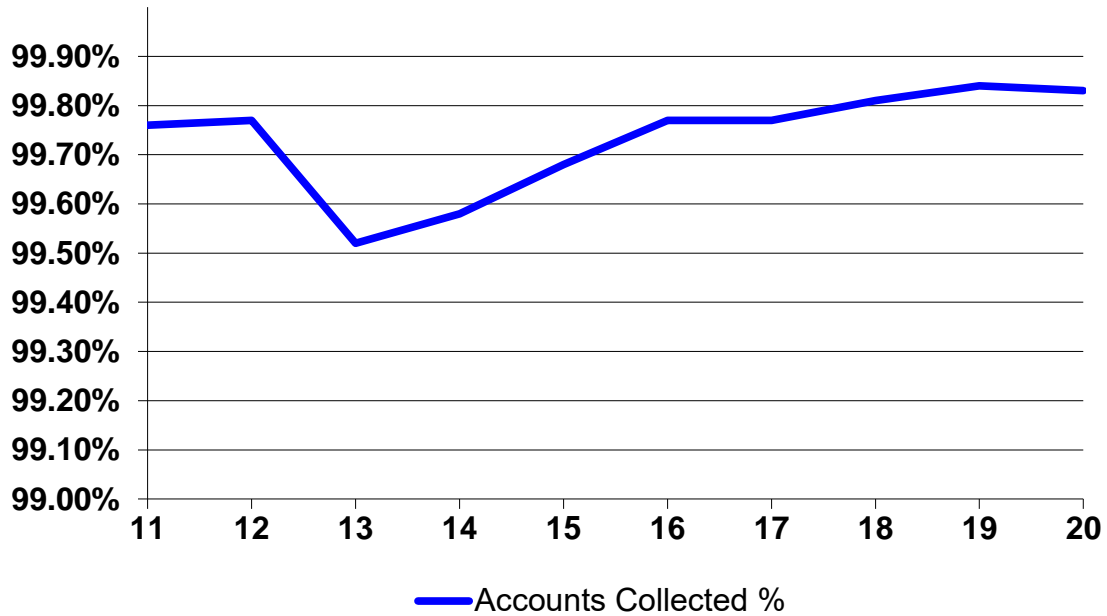
Number of Accounts (in thousands)										
Fiscal Year	11	12	13	14	15	16	17	18	19	20
Residential	350	347	348	345	346	347	348	348	349	350
Commercial	27	28	28	32	32	32	32	32	32	32
Industrial	1	1	1	1	1	1	1	1	1	1
Public Authority	2	2	2	2	2	2	2	2	2	3
Total accounts	380	378	379	380	381	382	383	383	384	386



FY20 OPERATING INDICATORS

Water - Percentage of Billed Revenue Collected

The District's strong billing and collection process is reflected in the continuous high percentage of collections for all years. The uncollectible amount continues to be less than 0.5 percent of total revenue.



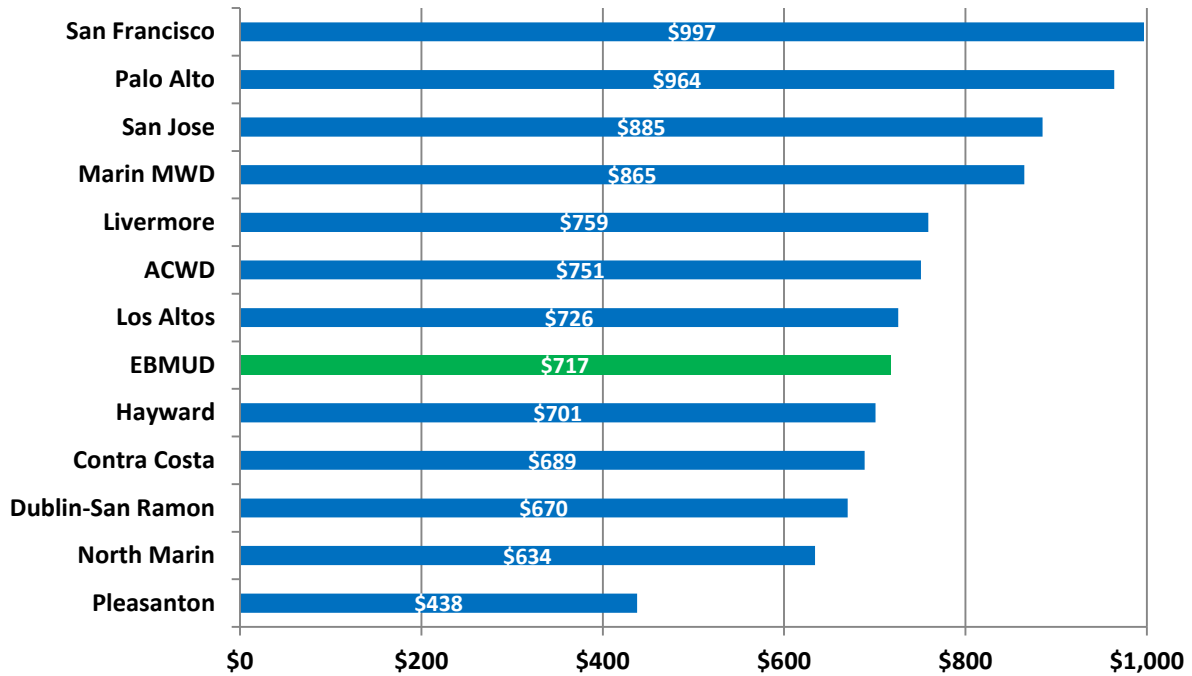
Percentage of Billed Revenue Collected										
Fiscal Year	11	12	13	14	15	16	17	18	19	20
Net Loss %	0.24%	0.23%	0.48%	0.42%	0.32%	0.23%	0.23%	0.19%	0.16%	0.17%
Accounts Collected %	99.76%	99.77%	99.52%	99.58%	99.68%	99.77%	99.77%	99.81%	99.84%	99.83%



FY20 OPERATING INDICATORS

Water - Comparative FY20 Single Family Residential Bills for Bay Area Agencies

The comparative annual charges are for a typical single family residential (SFR) account using 8.0 centum cubic feet (ccf) per month. The water system met the target to be “at or below the median” of other Bay Area agencies.



Comparison of SFR Bills (8 Ccf per month)	
Agency	Agency Bills
Pleasanton	438
North Marin	634
Dublin-San Ramon	670
Contra Costa	689
Hayward	701
EBMUD	717
Los Altos	726
ACWD	751
Livermore	759
Marin MWD	865
San Jose	885
Palo Alto	964
San Francisco	997

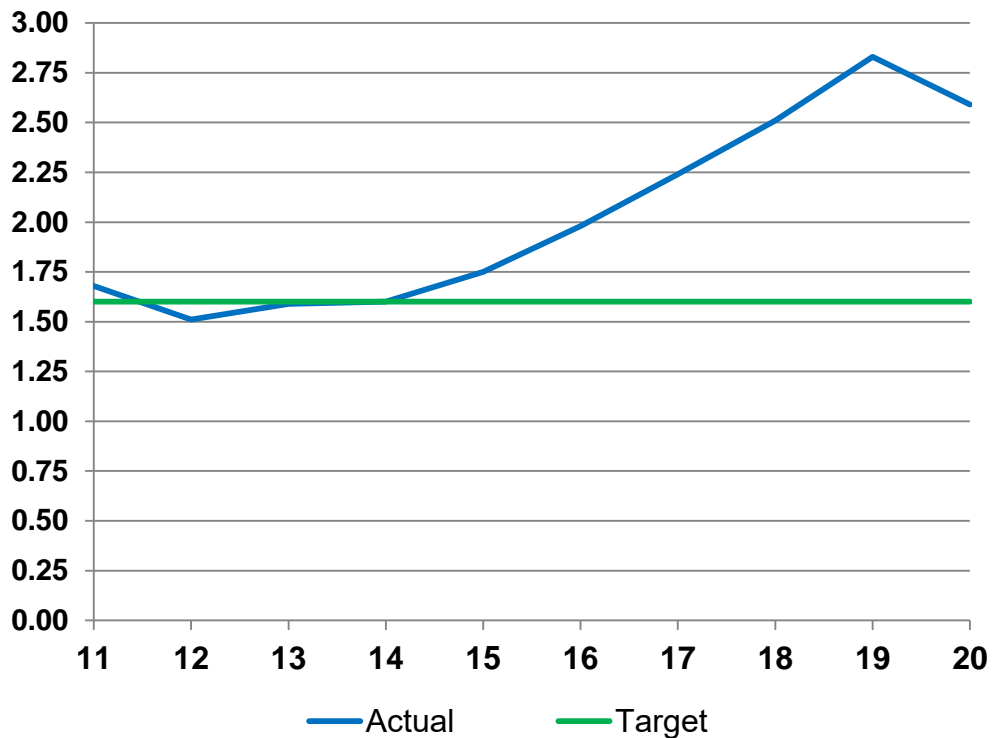


FY20 FINANCIAL GOALS (Policy 4.27)

Wastewater - Revenue Debt Service Coverage Ratio

This ratio shows the net revenue divided by the bond debt service cost. Coverage ratios are used to measure the ability to meet revenue bond principal and interest payments. The higher the ratio, the stronger the security for the bonds.

The FY20 wastewater system debt service coverage ratio of 2.59 exceeds the KPI target, and has consistently met or exceeded the policy goal since FY14.



Coverage Ratio										
Fiscal Year	11	12	13	14	15	16	17	18	19	20
Actual	1.68	1.51	1.59	1.6	1.75	1.98	2.24	2.51	2.83	2.59
Target	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Performance	+	-	-	+	+	+	+	+	+	+

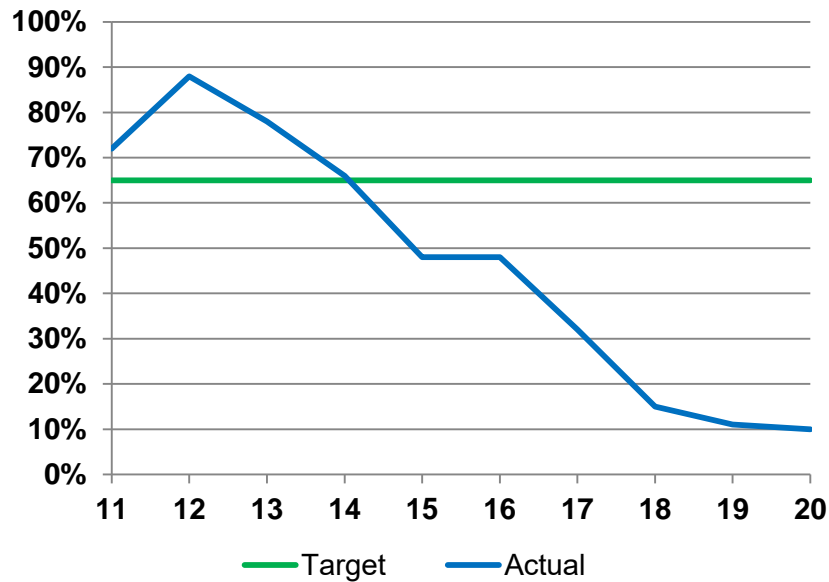


FY20 FINANCIAL GOALS (Policy 4.27)

Wastewater - Percentage of Debt Funded Capital Spending

This percentage shows the amount of debt used to fund capital programs divided by total capital spending for each five-year planning period. The District's goal is to limit debt-funded capital spending to no more than 65 percent.

In FY20, the percentage of debt-funded capital spending decreased to 10 percent. FY20 represents the sixth consecutive year the District has met this policy goal.



Percentage of Debt Funded Capital Spending										
Fiscal Year	11	12	13	14	15	16	17	18	19	20
Actual	72%	88%	78%	66%	48%	48%	32%	15%	11%	10%
Target	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%
Performance	-	-	-	-	+	+	+	+	+	+

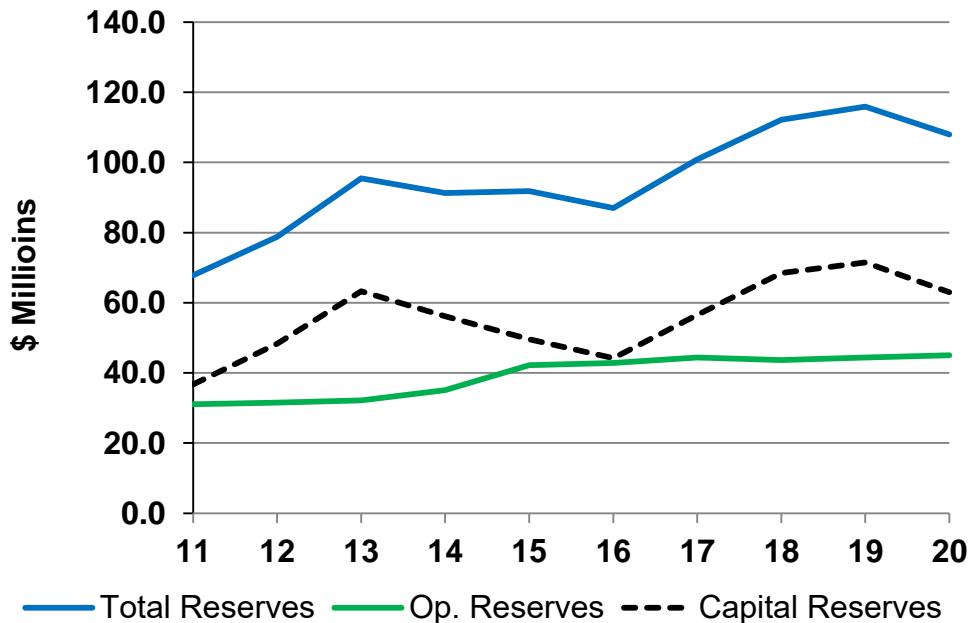


FY20 FINANCIAL GOALS (Policy 4.02)

Wastewater - Unrestricted Reserve Balances

The Unrestricted Reserve Balances indicate the District's ability to meet unanticipated revenue declines or expenditure increases. Unrestricted reserves are committed by the Board of Directors. This is distinct from restricted reserves which are legally constrained by law or by third party.

The District goal is to meet or exceed the target operating reserve. The FY20 unrestricted reserve balance of \$108.0 million exceeds the operating reserve balances of \$45.0 million established by the District's Financial Reserve Policy. Balances in excess of the operating reserves will be used to fund the Wastewater System Capital Projects.



Reserve Balances (in millions)										
Fiscal Year	11	12	13	14	15	16	17	18	19	20
Total Reserves	67.8	78.8	95.5	91.3	91.8	87.0	100.9	112.2	115.9	108.0
Op. Reserves	31.1	31.5	32.2	35.1	42.2	42.8	44.4	43.7	44.4	45.0
Capital Reserves	36.7	48.3	63.3	56.2	49.6	44.2	56.5	68.5	71.5	63.0
Performance	+	+	+	+	+	+	+	+	+	+

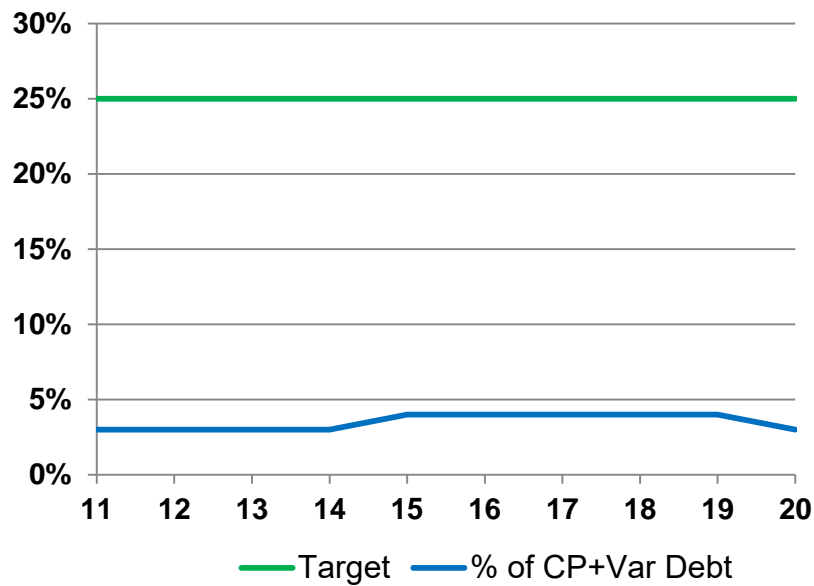


FY20 FINANCIAL GOALS (Policy 4.27)

Wastewater - Percentage of Commercial Paper and Variable Rate Debt

This percentage represents the total amount of commercial paper and un-hedged variable rate debt divided by the total outstanding long-term debt for each fiscal year period. The District's goal is to limit the commercial paper and un-hedged variable rate debt to no more than 25 percent of the total outstanding long-term debt.

In FY20, the wastewater system met the KPI target with a percentage of 3.0 percent. Currently the wastewater system only has extendable commercial paper.



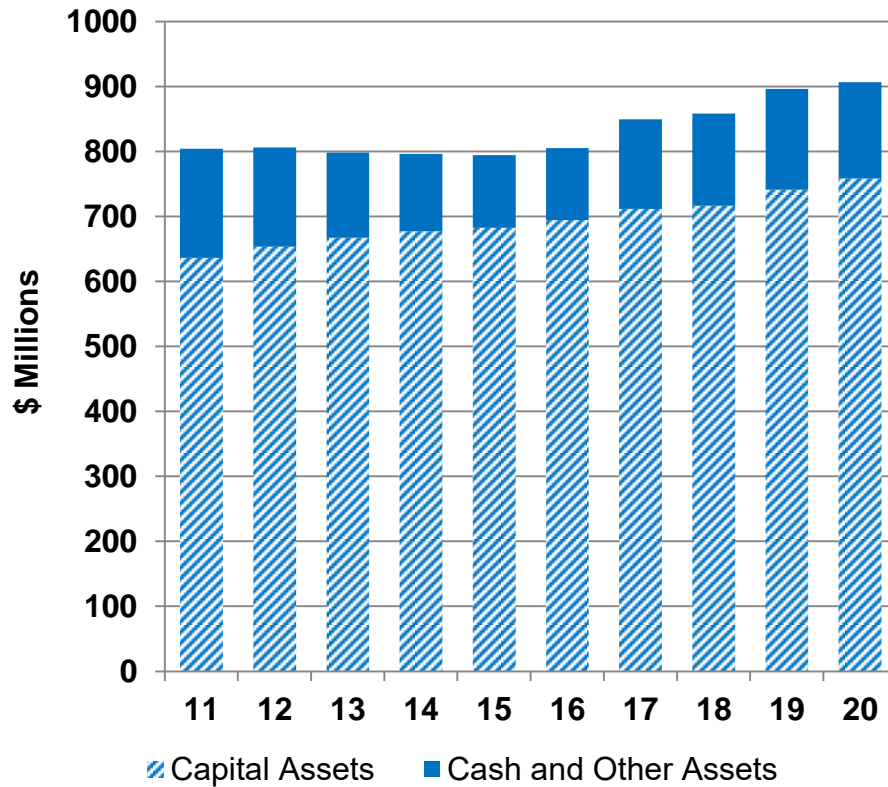
Percentage of Commercial Paper and Variable Rate Debt										
Fiscal Year	11	12	13	14	15	16	17	18	19	20
% of CP+Var Debt	3%	3%	3%	3%	4%	4%	4%	4%	4%	3%
Target	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
Performance	+	+	+	+	+	+	+	+	+	+



FY20 FINANCIAL POSITION

Wastewater - Total Assets

Total Assets increased in the last ten years from \$804 million in FY11 to \$906 million in FY20. The amount of Capital Assets increased in FY20 to \$758 million, or 84 percent of Total Assets.



Total Assets (in millions)										
Fiscal Year	11	12	13	14	15	16	17	18	19	20
Capital Assets	636	653	667	677	682	694	711	716	741	758
Cash and Other Assets	168	153	131	119	112	111	138	142	155	148
Total Assets	804	806	798	796	794	805	849	858	896	906
% of Capital to Total Assets	79%	81%	84%	85%	86%	86%	84%	83%	83%	84%

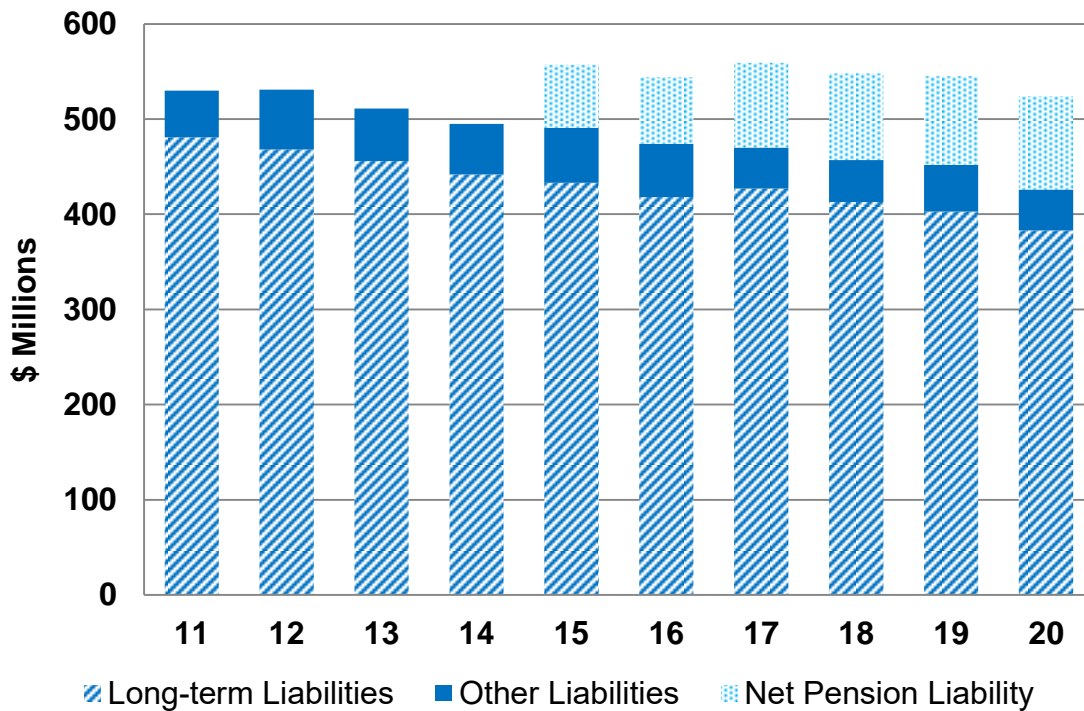


FY20 FINANCIAL POSITION

Wastewater - Total Liabilities

Total Liabilities over the last ten years have decreased from \$530 million in FY11 to \$524 million in FY20.

The percentage of debt to total liabilities decreasing trend provides more debt capacity.



Total Liabilities (in millions)										
Fiscal Year	11	12	13	14	15	16	17	18	19	20
Net Pension and Net OPEB Liabilities					66	70	89	91	93	98
Other Liabilities	49	63	55	53	58	56	43	44	49	43
Long-term Liabilities	481	468	456	442	433	418	427	413	403	383
Total Liabilities	530	531	511	495	557	544	559	548	545	524
% of LT Debt to Total Liabilities	91%	88%	89%	89%	78%	77%	76%	75%	74%	73%

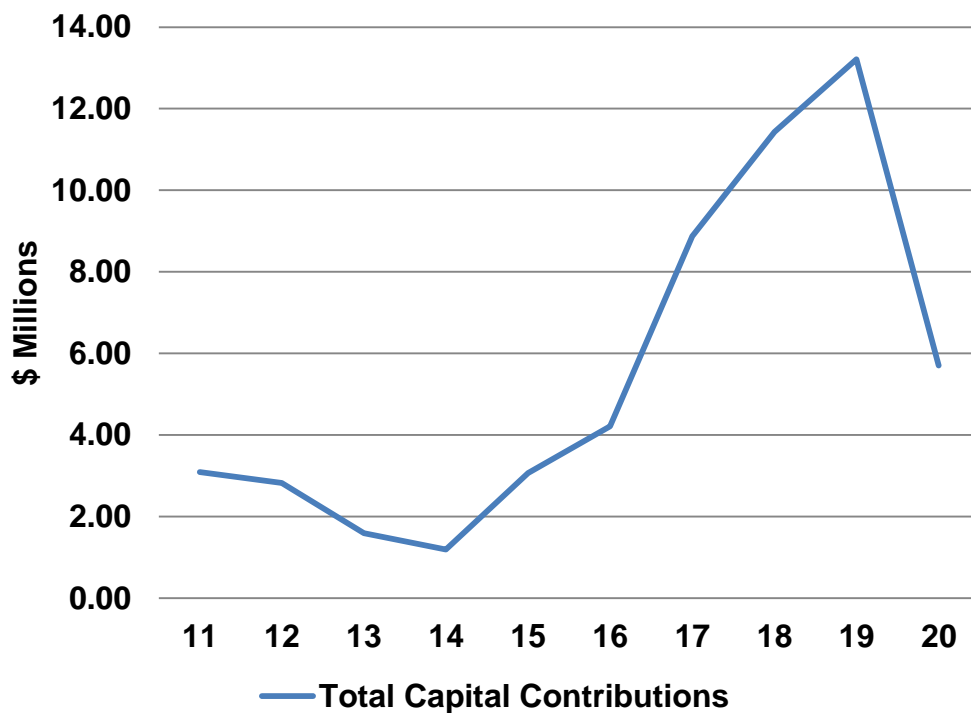


FY20 FINANCIAL POSITION

Wastewater - Capital Contributions

Capital Contributions primarily consists of Wastewater Capacity Fees (WCF). Additionally, the District receives contributions when the facilities need to be relocated during construction projects. The District also receives state and federal grants to fund capital projects.

In FY20, wastewater system capital contributions decreased to \$5.7 million reflecting a slowdown in property development and constructions projects, particularly in the Oakland and Berkeley service areas.



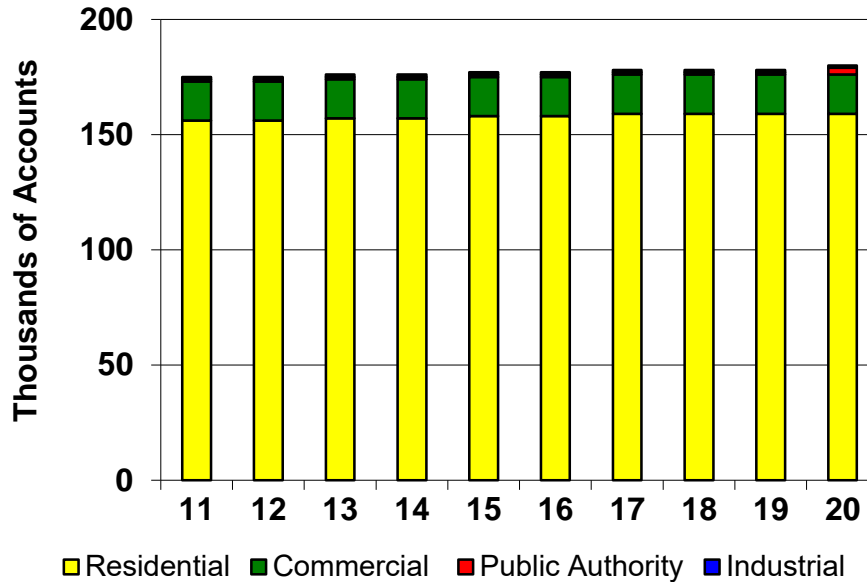
Capital Contributions (in millions)										
Fiscal Year	11	12	13	14	15	16	17	18	19	20
System Capacity Charges	2.42	2.82	1.26	0.81	2.79	3.10	7.97	11.42	13.21	5.70
Earned Contributions Misc. Agreements	0.67	-	-	-	-	0.75	0.71	0.01	-	-
Grants and Other Reimbursements	-	-	0.33	0.39	0.28	0.32	0.19	-	-	-
Total Capital Contributions	3.09	2.82	1.59	1.19	3.07	4.21	8.87	11.43	13.21	5.70



FY20 OPERATING INDICATORS

Wastewater - Number of Accounts

The District provides wastewater treatment and sewage disposal service to approximately 179,341 accounts and a population of 680,000. The number of accounts has remained stable over the past ten years.



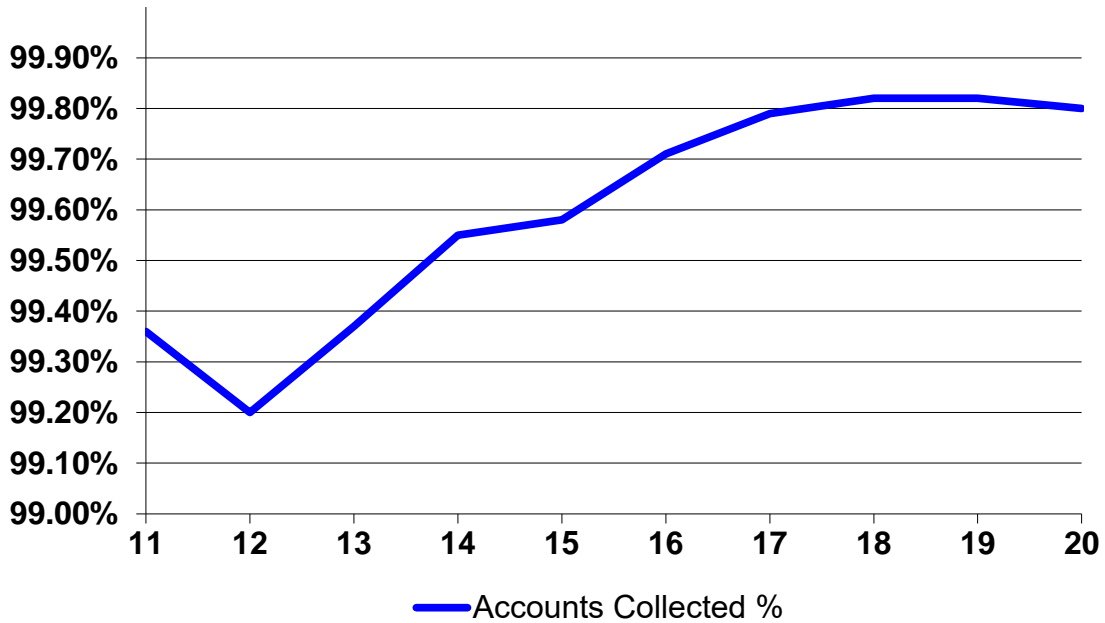
Number of Accounts (in thousands)										
Fiscal Year	11	12	13	14	15	16	17	18	19	20
Residential	156	156	157	157	158	158	159	159	159	159
Commercial	17	17	17	17	17	17	17	17	17	17
Public Authority	1	1	1	1	1	1	1	1	1	3
Industrial	1	1	1	1	1	1	1	1	1	1
Total accounts	175	175	176	176	177	177	178	178	178	180



FY20 OPERATING INDICATORS

Wastewater - Percentage of Billed Revenue Collected

The District's strong billing and collection process is reflected in the continuous high percentage of collections for all years. The uncollectible amount continues to be less than 0.5 percent of total revenue.



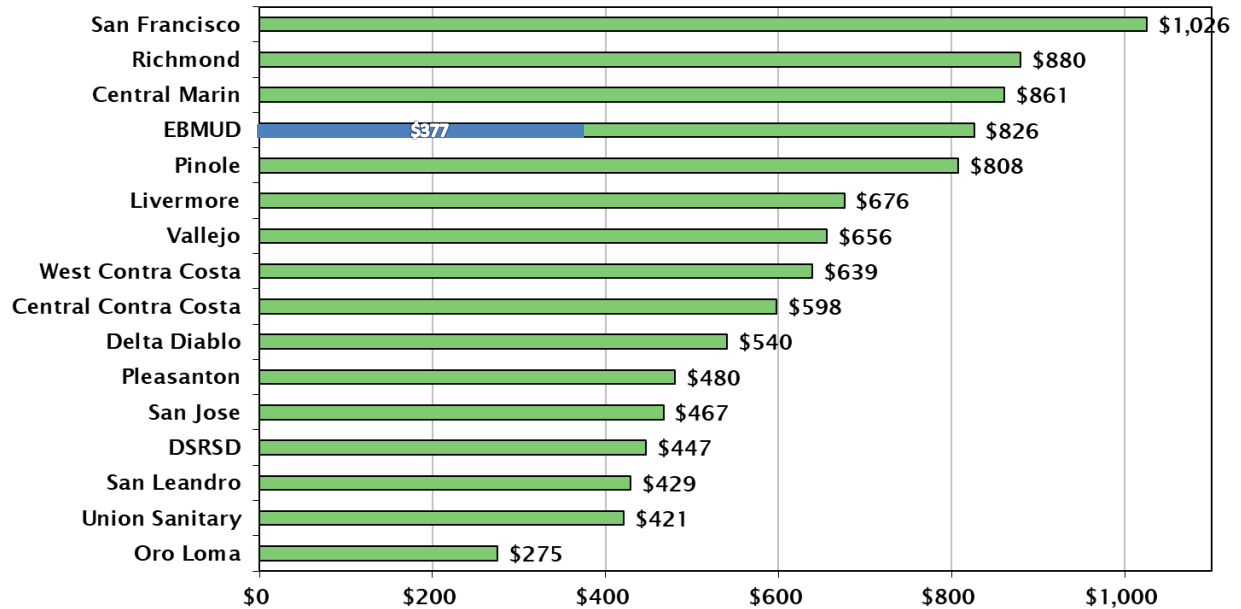
Percentage of Billed Revenue Collected										
Fiscal Year	11	12	13	14	15	16	17	18	19	20
Net Loss %	0.64%	0.80%	0.63%	0.45%	0.42%	0.29%	0.21%	0.18%	0.18%	0.20%
Accounts Collected %	99.36%	99.20%	99.37%	99.55%	99.58%	99.71%	99.79%	99.82%	99.82%	99.80%



FY20 OPERATING INDICATORS

Wastewater - Comparative FY20 Single Family Residential Bills for Bay Area Agencies

The comparative annual charges are for a typical single family residential (SFR) account based on flow of 6.0 centum cubic feet (ccf) per month. The EBMUD rate is based on Treatment rate, SF Bay Residential Pollution Prevention Fee and Wet Weather Fee, \$377 plus average community collection charge of \$449; the resulting total did not meet the target to be “at or below the median” of other Bay Area agencies.



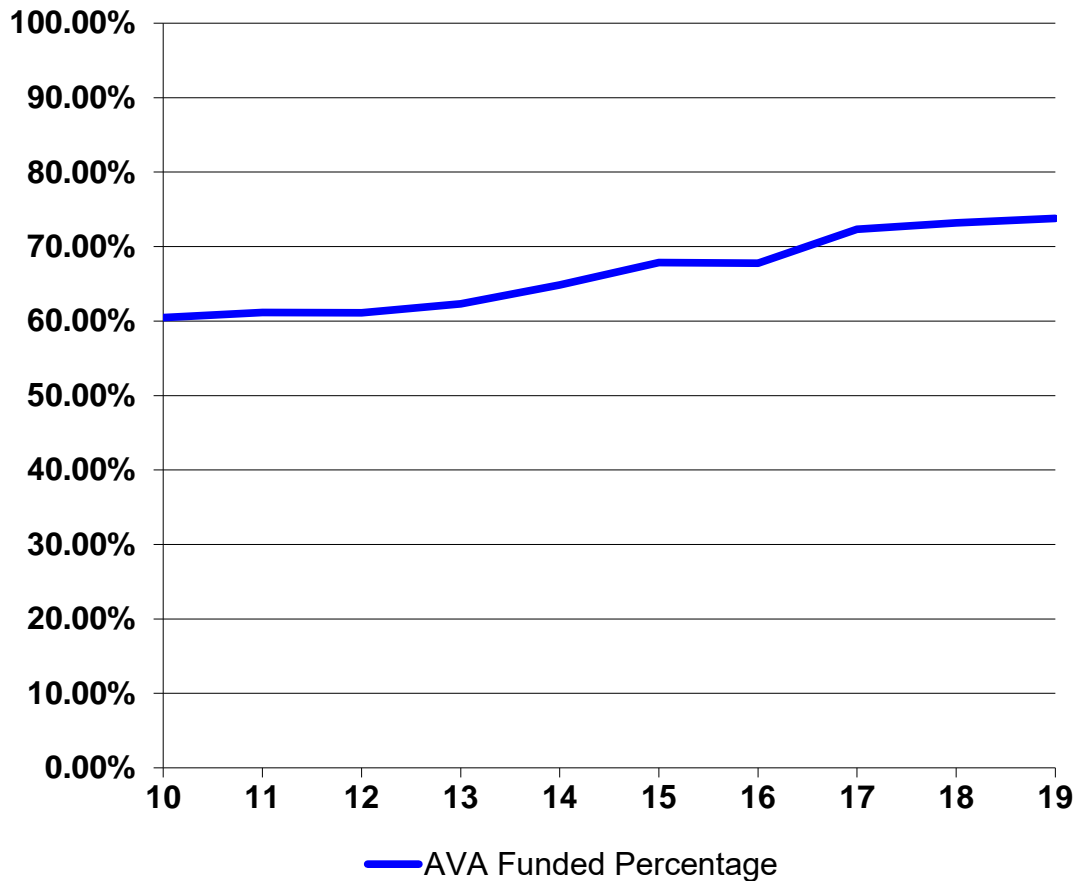
Comparison of SFR Bills (6 Ccf per month)	
Agency	Agency Bills
Oro Loma	275
Union Sanitary	421
San Leandro	429
DSRSD	447
San Jose	467
Pleasanton	480
Delta Diablo	540
Central Contra Costa	598
West Contra Costa	639
Vallejo	656
Livermore	676
Pinole	808
EBMUD	826
Central Marin	861
Richmond	880
San Francisco	1026



FY19 RETIREMENT SYSTEM

Funded Pension and Health Benefit Obligation Percentage

The funded percentage of the pension and health benefit obligation reflects the difference between the actuarial accrued liability and the actuarial valuation of assets (AVA) held by the retirement system. Figures shown are through the year ended June 30, 2019, the date of the last completed actuarial valuation report. As of that date, the funded percentage of combined pension and health benefits has increased from 73.2 percent to 73.78 percent.



Funded Pension Benefit and Health Obligation Percentage										
Fiscal Year	10	11	12	13	14	15	16	17	18	19
Health Insurance Benefit	7.43%	8.90%	10.30%	11.96%	13.98%	16.10%	18.30%	26.73%	29.70%	32.99%
Pension	65.60%	66.02%	65.62%	66.55%	68.90%	71.89%	71.44%	74.91%	75.57%	75.92%
AVA Funded Percentage	60.46%	61.13%	61.11%	62.33%	64.83%	67.86%	67.78%	72.32%	73.20%	73.78%

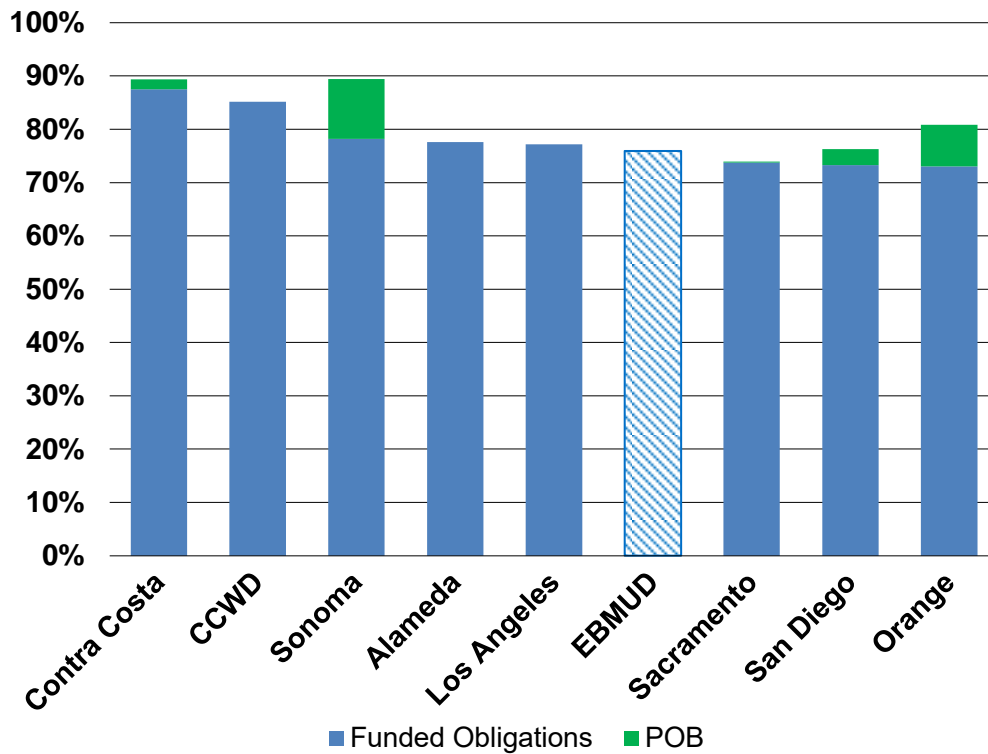


FY19 RETIREMENT SYSTEM

Comparative FY19 Funded Pension Obligation for Selected Agencies

The comparative funded ratio of pension obligation reflects the most current actuarial valuation as of FY19. Many of the listed government agencies issued pension obligation bonds (POB) to increase their funding levels. The chart allows the reader to see the relative funding level of the agencies without those bonds.

As of the latest respective valuation data available, the assumed rate of return on investments for the agencies listed below was: 7.25 percent for the Alameda County Employees' Retirement Association; and 7.0 percent for the retirement system of Contra Costa County, Contra Costa Water District (FY18 data), Los Angeles County, Orange County, Sacramento County, San Diego County, Sonoma County and the District's.



Agency	% of Funded w/o POB
Contra Costa County	88%
Contra Costa Water District	85%
Sonoma County	78%
Alameda County	78%
LA County	77%
EBMUD	76%
Sacramento County	74%
San Diego County	73%
Orange County	73%

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EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: October 22, 2020
MEMO TO: Board of Directors
THROUGH: Clifford C. Chan, General Manager *CC*
FROM: Sophia D. Skoda, Director of Finance *SDS*
SUBJECT: Fiscal Year 2020 Key Performance Indicators Report

SUMMARY

The Fiscal Year 2020 (FY20) Key Performance Indicators (KPIs) and targets were adopted by the Board as part of the July 2018 Strategic Plan to measure progress in meeting the six Strategic Plan goals. Attached is the FY20 KPI report, which will be discussed at the October 27, 2020 Finance/Administration Committee meeting.

DISCUSSION

Strategic Plan

The Strategic Plan outlines the goals, strategies and objectives the District will pursue to achieve its mission to provide reliable and high-quality services, manage the precious natural resources, and preserve and protect the environment for future generations. The plan also contains a set of criteria to assess whether the goals are being met. The 2018 Strategic Plan is the basis for the FY20 KPI report.

Key Performance Indicators

The District met or was on track to meet the targets for 94 percent of its FY20 KPIs where targets were achieved, in spite of the shelter-in-place orders issued on March 19, 2020. This is greater than the 90 percent met in FY19. A total of four targets were not met: pumping plant rehabilitation; wastewater rates; Contact Center customer rating; and leadership program graduates who place on promotional lists. Details on these KPI results are provided in the attached report.

CCC:SDS:DM

Attachment

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Strategic Plan

**Key Performance Indicators
for Fiscal Year 2020**

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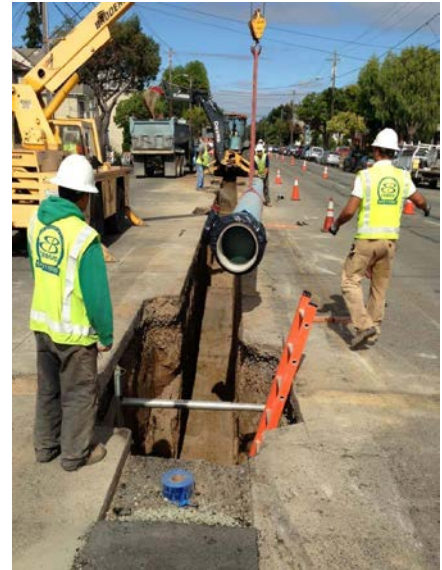
INTRODUCTION

The Key Performance Indicators (KPIs) track progress towards achieving the strategies within the July 2018 Strategic Plan goals, and include performance targets for each KPI. Performance against the targets is measured annually and enables staff to evaluate progress in meeting the Strategic Plan goals. Typically, the Strategic Plan is updated every two years and some KPIs may be changed as part of the update.

STRATEGIC PLAN OVERVIEW

The Strategic Plan incorporates the District's mission and principles, and identifies its goals, strategies, objectives and key performance indicators. The Plan influences and guides staff in the management and allocation of resources and assets.

Our **mission** is to manage the natural resources with which the District is entrusted; to provide reliable, high quality water and wastewater services at fair and reasonable rates for the people of the East Bay; and to preserve and protect the environment for future generations.



Our **principles** provide the foundation of the Strategic Plan and form the basis of our business approach which strives to minimize waste, conserve energy and natural resources, promote long-term economic viability, protect the environment, operate within high standards to serve our customers and the community, and support safety and well-being for employees, communities, and customers. Our principles are:

- 💧 Exercise responsible financial management
- 💧 Ensure fair and reasonable rates and charges
- 💧 Provide responsive quality customer service
- 💧 Promote ethical behavior in the conduct of District business
- 💧 Ensure fair and open processes involving the public
- 💧 Provide a healthy work environment
- 💧 Promote diversity and equality in personnel matters and contracting
- 💧 Promote environmental, economic, and social sustainability

Our **goals** define what the District wants to achieve; they explain 'what' not 'how', and tell where we are going rather than how we will get there. **Strategies** define which actions to take to reach each goal, and may take several years to implement. **Objectives** reflect what we need to accomplish in the near term. **Key performance indicators** (KPIs) measure how well we are doing in achieving our goals.

Our Values

In 2013, EBMUD’s management team anticipated a looming retirement bubble and changing District demographics would lead to significant turnover in the organization’s employees. This realization led to a discussion of what organizational values would be key to ensuring the District could best assimilate new talent to carry out its mission. The District undertook an intensive process to develop its organizational values, recruiting a team of employee volunteers to lead the effort. This team, including staff from all levels of the organization, worked to identify and define the core values that characterize EBMUD as an agency and a workplace. With extensive input from staff and support from management, the team developed the following four values that were adopted by EBMUD in support of its employees:



STEWARDSHIP

“I am a steward of our resources and committed to public service.”



INTEGRITY

“I act with integrity.”



RESPECT

“I treat others with respect.”



TEAMWORK

“We are EBMUD and we are one team.”

These values guide EBMUD staff as they pursue the goals identified in the Strategic Plan. It is our belief that working better together will enable us to achieve our mission to serve our customers, manage our natural resources, and protect our environment.



KEY PERFORMANCE INDICATOR SUMMARY

The FY20 KPI results are summarized in the table below. The District met or was on target to meet 94 percent of its KPIs where targets were set and data was available in spite of impacts from the shelter-in-place order issued on March 19, 2020.

Key	FY20 Results	# KPIs
++	Target met	54
+	Target not met, but on track	11
--	Target not met	4
n/a	Target/Data not available	1
■	Performance measure only	4
	Total KPIs	74



A summary of the performance of each current KPI from FY18 through FY20, along with its FY20 target is shown in the following table.

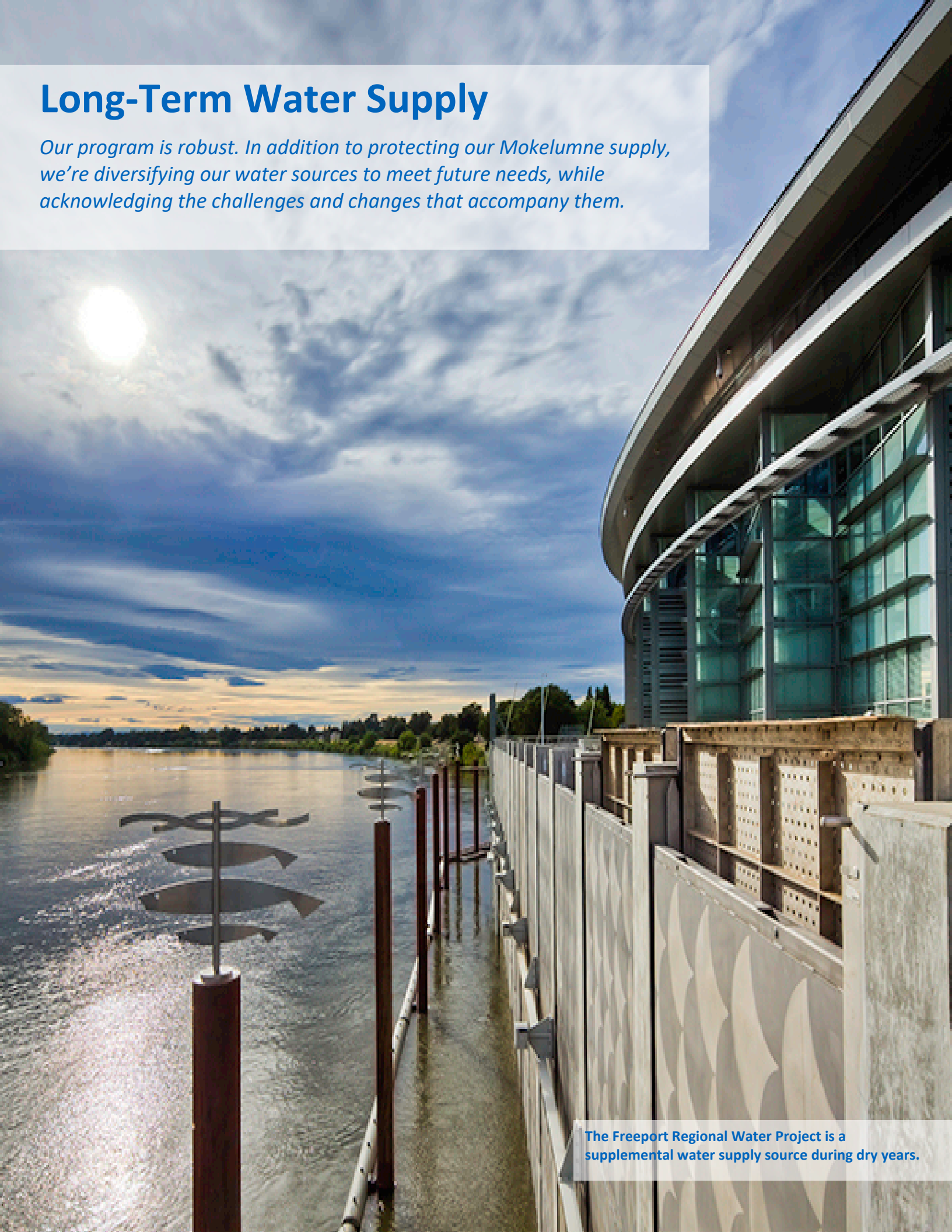
KEY PERFORMANCE INDICATOR – SUMMARY	FY20 TARGET	FY20	FY19	FY18
Long-Term Water Supply				
Additional supply by 2040 to provide 85% reliability under design drought conditions and diversify through regional partnerships	Various	+	+	++
62 MGD savings from conservation programs / natural replacement by 2040 (baseline yr. 1995)	Various	++	++	++
20 MGD of recycled water capability by 2040	Various	++	+	+
Update the Climate Change Monitoring and Response Plan. Explore approaches for how to adapt to potential future conditions	Risk Assessments	n/a	n/a	n/a
Water Quality and Environmental Protection				
Mokelumne River fall-run Chinook salmon escapement (long-term avg.)	5,452	++	++	++
% of water quality goals met	100%	+	+	+
% of water quality regulations met	100%	++	++	++
Number of NPDES and Waste Discharge Permit Notices of Violation received	0	+	+	++
Reduce indirect GHG emissions to zero by 2040 and direct emissions by 50% by 2040 compared to the 2000 baseline	≤33,497 MT CO ₂	++	++	++
Capture biogas sufficient to produce on-site energy in excess of MWWTP electric power demand	130% of demand	+	--	++
Implement Private Sewer Lateral Program to reduce wet weather flows and achieve a high compliance rate at point of sales	90%	++	++	++
Meet JSA Mokelumne River minimum flow releases 100% of the time	100%	++	++	++

KEY PERFORMANCE INDICATOR – SUMMARY	FY20 TARGET	FY20	FY19	FY18
Long-Term Infrastructure Investment				
Number of water system pipeline breaks per 100 miles of pipe	≤ 20	+	--	--
% of water system corrective work order hours classified high priority	≤ 10%	++	++	++
Miles of pipe surveyed	800	++	++	++
% of water system valves exercised	10%	++	++	--
Infrastructure leakage index	< 2.5	++	+	n/a
% of high priority meter repair orders completed in 60 days	90%	++	++	++
Miles of distribution pipe replaced	17.5	++	++	++
Design errors and omission change orders on construction contracts	< 3%	+	++	++
Number of steel water tanks rehabilitated	3	++	++	++
Number of concrete wastewater treatment tanks and sewer interceptor reaches rehabilitated	2	++	++	n/a
Number of pumping plants rehabilitated	3	--	++	++
Long-Term Financial Stability				
Water rates as compared to other Bay Area agencies	≤ median	++	++	++
Wastewater rates as compared to other Bay Area agencies	≤ median	--	--	--
Water % of capital program funded from debt	≤65%	++	++	++
Wastewater % of capital program funded from debt	≤65%	++	++	++
Water debt service coverage	≥ 1.6 times	++	++	++
Wastewater debt service coverage	≥ 1.6 times	++	++	++
Water actual reserves as % of target	≥ 100%	++	++	++
Wastewater actual reserves as % of target	≥ 100%	++	++	++
% of planned audits completed	100%	+	+	++
% of audit findings resolved within 90 days	100%	++	++	++
Cyber Security Operational Readiness <ul style="list-style-type: none"> Planned patch cycles met Security controls reviews Database security reviews Business recovery exercises Security awareness events 	> 90% Annually Annually 2 per year 4 per year	++ ++ ++ ++ ++	++ ++ ++ ++ ++	n/a
Water operating expenditures as a % of operating budget	≤ 100%	++	++	++
Wastewater operating expenditures as a % of operating budget	≤ 100%	++	++	++
Water capital expenditures as a % of budgeted cash flow	90% and 110%	+	++	--
Wastewater capital expenditures as a % of budgeted cash flow	90% and 110%	+	--	--
Customer and Community Services				
Unify K-12 school education schools program	Complete	++	++	n/a
Conduct outreach campaign	3	++	++	n/a

KEY PERFORMANCE INDICATOR – SUMMARY	FY20 TARGET	FY20	FY19	FY18
% of customers rating the District’s services as “Good” or “Excellent”: <ul style="list-style-type: none"> • Field Services • Contact Center • New Business • Water Quality • Recreation 	90%	++ -- ++ ++ ++	++ -- ++ ++ +	n/a
Average speed of answer to calls coming into the Contact Center	≤ 60 seconds	++	++	++
% of calls answered within the target of ≤ 60 seconds	80%	++	++	++
Abandonment rate	3%	++	++	++
Timely billing of customer statements as scheduled	99%	++	++	++
Notify customers 48 hours in advance of shut-off for non-payment; provide information on CAP and payment plans to avoid shut-off	≥ 99%	++	++	n/a
Reduce shut-offs for CAP participants by 10% over two years while increasing CAP enrollment	Performance Measure Only	■	■	n/a
Review shut-off guidelines and customer assistance programs	Annually	++	++	n/a
% of time customer dependent systems are available	99.9%	++	++	++
Unplanned water service interruptions per 1,000 active accounts: <ul style="list-style-type: none"> • <4 hours • 4-12 hours • >12 hours 	≤ 10 ≤ 5 ≤ 2	++ ++ ++	++ ++ ++	++ -- ++
Odor complaints near the MWWTP	≤ 30 complaints	++	++	++
Update the District's Emergency Operation Plan every two years and conduct an EOT exercise annually	100%	++	++	++
Update all Business Continuity plans every two years and conduct an exercise for each annually	100%	+	++	++
Review specific emergency communication plans	Annually	++	++	++
Workforce Planning and Development				
% of competing Leadership Program graduates who place on applicable promotional lists	75%	--	--	+
Annual average training hours per employee	30	++	++	++
Number of employees in development programs (academies, rotations, internships, mentorships)	Performance Measure Only	■	■	■
% of performance plans completed on time	>99%	+	++	++
% of performance appraisals completed on time	>99%	++	++	++
Number of injury & illness incidents resulting in time away from work per 100 employees	≤3.0	++	++	++
Annually implement outreach campaigns on wellness ("Well Being")	4	++	++	++
% of exams resulting in hiring lists within 60 days or less	80%	++	++	++
% of minorities and % of women on District eligibility lists	Performance Measure Only	■	■	■
Number of internships	Performance Measure Only	■	■	■

Long-Term Water Supply

Our program is robust. In addition to protecting our Mokelumne supply, we're diversifying our water sources to meet future needs, while acknowledging the challenges and changes that accompany them.



The Freeport Regional Water Project is a supplemental water supply source during dry years.

Goal: We ensure a reliable high quality water supply for the future.

Strategy 1

Preserve current water rights and entitlements and augment the District's successful water supply projects by obtaining supplemental supplies to meet customer demands.

Strategy 2

Reduce potable water demand through water efficiency and conservation and build on past water savings success to help ensure a reliable water supply.

Strategy 3

Reduce potable water demand through water recycling and build on past success to achieve a diversified and reliable water supply.

Strategy 4

Maintain a Climate Change Monitoring and Response Plan to inform the District's planning efforts for future water supply, water quality and infrastructure and support sound water and wastewater infrastructure investment decisions.

Long-Term Water Supply Key Performance Indicators

Key Performance Indicator	FY20 Target	FY20 Performance	Target Met?
Supplemental Supply			
Additional supply by 2040 to provide 85% reliability under design drought conditions and diversify through regional partnerships	Negotiate a Warren Act contract with the Bureau of Reclamation for a long-term water transfer with PCWA	Draft Environmental Assessment and Biological Assessment for Long-Term Warren Act Contract was submitted to USBR for review in May 2020.	++
	Conduct technical and environmental studies to support a second long-term water transfer arrangement with YCWA	A project description for developing a water transfer project with Yuba Water Agency was prepared in May 2020. A draft feasibility study for a potential water transfer with Sycamore Mutual Water Company was completed in May 2020.	+
	Continue operation of the DREAM Project in San Joaquin County	EBMUD made additional releases of DREAM project water to North San Joaquin Water Conservation District. The detailed design of the facilities needed to convey groundwater to the Mokelumne Aqueducts was completed in January 2020.	++
	Continue development of BARR Regional Water Market Program	EBMUD worked with its BARR partners to select two pilot water transfer projects and initiate stakeholder engagement. Obtained approval from USBR to extend the grant schedule to September 2022.	+
	Conduct need-for-water analysis with new demand study results	Completed the update of the need-for-water analysis using water use projections and revised Drought Management Program.	++
Water Conservation			
62 MGD savings from conservation programs / natural replacement by 2040 (baseline yr. 1995)	1.2MGD average annual conservation savings	Conservation savings continued to exceed the target as a result of District programs and customer demand reduction trends.	++

Key Performance Indicator	FY20 Target	FY20 Performance	Target Met?
Water Conservation (continued)	19% reduction in per capita demand by 2019	Had a greater than 23% reduction in FY20 water use compared to 1995 base year.	++
	Implement Water Conservation Master Plan	Implemented home water reports, leak notifications, landscape water budget services, system water loss control, new water service plan check review, rebates and incentives, and more.	++
Water Recycling			
20 MGD of recycled water capability by 2040	Begin implementation of the updated Recycled Water Master Plan	Customer connections continued in San Ramon and Emeryville. Purchased a property in San Ramon for a future recycled water pump station in February 2020. A new supply agreement with West County Wastewater District was finalized in February 2020. An implementation plan for a new residential landscape fill station pilot was completed.	++
	Implement near-term DERWA supplemental supply options	Preliminary design was completed on the Nursery Groundwater Well Project. Design was completed on the Central Contra Costa Sanitary District Wastewater Diversion Project and the construction contractor was selected in December 2019.	++
	Implementation of the East Bayshore water quality and treatment improvements if appropriate	A Request for Proposals was advertised in May 2020 for a water quality improvements pilot project, and three firms submitted proposals.	++
Climate Change			
Update the Climate Change Monitoring and Response Plan. Explore approaches for how to adapt to potential future conditions and identify "no regrets" infrastructure investment decisions	Using EPA's CREAT Model Version 3, conduct a broad climate risk assessment on major District infrastructure and operations	The development of a large-scale photovoltaic project continues; updating the District's Energy Policy 7.07; and advanced additional efforts in support of the District's climate change and sustainability efforts.	N/A

Key Performance Indicator	FY20 Target	FY20 Performance	Target Met?
Climate Change (continued)	Complete Wastewater climate change evaluation	The Wastewater Climate Change Plan was completed. Updated standards will be included when the Sixth Assessment Report by the Intergovernmental Panel on Climate Change is completed.	++

Supplemental Supply: The Water Supply Management Program (WSMP) identified a portfolio of resources to secure additional supplemental supply. In FY20, progress continued on obtaining approvals to implement a long-term water transfer arrangement with the Placer County Water Agency. In May 2020, the draft Environmental Assessment and Biological Assessment supporting the Long-Term Warren Act Contract with the U.S. Bureau of Reclamation (USBR) were submitted to USBR for review. Coordination with USBR has been ongoing.

A revised project description with Yuba Water Agency was developed in May 2020 to support the evaluation of a long-term water transfer project. Discussions continued with several Sacramento River settlement contractors to explore another potential long-term transfer agreement. In May 2020, a feasibility study was drafted with Sycamore Mutual Water Company to develop a framework for a multi-year water transfer project based on water conserved by fallowing rice fields on a rolling basis.

Progress continued toward developing a groundwater banking demonstration project in partnership with North San Joaquin Water Conservation District (NSJWCD) and San Joaquin County. In FY20, EBMUD released 238 acre-feet (AF) of water for NSJWCD customers, and has released a total of 342 AF since 2018. The detailed design of EBMUD facilities necessary to convey extracted ground water to the Mokelumne Aqueducts in the future was also completed in FY20, and construction is anticipated to be completed in FY21.

EBMUD continues to partner with the Contra Costa Water District (CCWD) to evaluate participation in the Los Vaqueros Reservoir Expansion Project. In FY20, EBMUD, CCWD and other potential partners made significant progress negotiating terms for a Joint Powers Authority agreement and completed an amendment to the existing Multiparty Agreement.

EBMUD and its partner, the City of Hayward, made significant progress toward completion of a Groundwater Sustainability Plan (GSP) for the East Bay Plain Sub-basin. In FY20, EBMUD and the City of Hayward held two technical advisory committee meetings helping stakeholders understand groundwater modeling and management, and to share results of a technical analysis associated with the modeling. EBMUD and the City of Hayward also secured a \$758,467 State grant to further support field investigations and develop a data management system.

The water supply and projected demand is assessed as part of long term water resources planning to provide 85 percent reliability during design drought periods. The need-for-water modeling analysis was completed using water use projections from the 2050 Demand Study, revised Drought Management Program guidelines, and development of a range of scenarios. This analysis was incorporated into the Draft 2020 Urban Water Management Plan.

Water Conservation: In FY20, the Water Conservation Program (the Program) continued to implement activities identified in the 2011 Water Conservation Master Plan (WCMP). The Program offered rebates and incentives, including rebates for lawn conversion and efficient irrigation equipment, and a pilot flow meter rebate program launched in September 2019. A continued area of focus for the Program is the expansion of tools to help customers manage water use, including residential and commercial water reports, irrigation landscape water budgets, and leak notifications. Working in coordination with ten other Bay Area water agencies, the consortium was awarded a \$4 million Proposition 1 Integrated Regional Water Management grant for a Regional Water Conservation Project, of which \$1 million will go to the District to fund rebates, training and other activities.

Education and outreach remain an important component of the District's water conservation efforts. While the global pandemic impacted activities such as in-person water audits and community events, the Program pivoted to offering more services remotely, such as hosting the District's first virtual meeting of the Landscape Advisory Committee. Staff conducted extensive phone outreach to customers with leaks and high water use to minimize financial impacts to customers. Also, digital tools are being used to reach customers and process rebate applications.

During FY20, an effort to update the WCMP commenced. This document is anticipated to be completed in 2021 and will serve as a roadmap to meeting emerging regulatory requirements and achieving the new water conservation target of 70 MGD in savings in the year 2050.

Water Recycling: The target for water recycling is to reduce potable water demand by 20 MGD by the year 2040. Recycled water capability of more than 9 MGD has been achieved through a combination of irrigation and industrial reuse projects which include refinery processes, irrigation, and commercial applications in Richmond, Oakland, Emeryville and San Ramon.

In May 2020, a request for proposals was issued for a water quality improvements pilot study for the East Bayshore project to carry out recommendations to expand recycled water use. Recycled water irrigation customer conversions continued in Emeryville. An implementation plan for a residential landscape pilot fill station was completed.

In December 2019, a contractor was hired by Dublin San Ramon Services District on behalf of DERWA to construct the Central Contra Costa Sanitary District wastewater diversion project to supplement DERWA's supply. On behalf of DERWA, EBMUD prepared preliminary design for the Nursery Groundwater Supplemental Supply Project. Work is also underway to evaluate potable water backup supply options during non-drought years. Customer retrofit work continued in San Ramon to connect more users to the recycled water system. The property purchase for EBMUD's proposed future recycled water pump station in San Ramon was completed in February 2020. A grant reimbursement request for the property purchase was submitted to the Army Corps of Engineers in March 2020 under the Water Resources Development Act.

In January 2020, the reverse osmosis membrane replacement project at the Richmond Advanced Recycled Expansion (RARE) Plant was completed. EBMUD negotiated a new supply agreement with West County Wastewater District (WCWD), completed in February 2020, to continue to supply secondary effluent to both the RARE and North Richmond Recycled Water Plants.

Climate Change: This KPI ensures the District’s future water supply and infrastructure planning incorporates adaptation to and mitigation of climate change. The Intergovernmental Panel on Climate Change’s (IPCC’s) Sixth Assessment Report will not be released until 2021. In FY20, the District completed the Wastewater Climate Change Plan, continued support for the Climate Registry’s development of the Water Energy Nexus protocol, and became a founder of the Water Energy Nexus Registry. New or revised recommended actions include:

- Continuing development of a large-scale photovoltaic project,
- Reviewing the District’s Energy Policy 7.07, and
- Reviewing the District’s GHG reduction goals to achieve net-zero carbon emissions.

Water Quality and Environmental Protection

Our employees strive every day to provide high quality water to our customers and protect the environment.

Carr Ranch is a conservation partnership between EBMUD & John Muir Land Trust.

Goal: We meet or surpass environmental and public health standards and protect public trust values.

Strategy 1

Manage the Mokelumne and East Bay watersheds to ensure a high quality water supply and protect natural resources while providing appropriate public access.

Strategy 2

Operate and maintain District facilities to surpass federal and state drinking water regulations.

Strategy 3

Operate and maintain District facilities to anticipate and meet all water discharge, air emission, and land disposal requirements to protect and enhance the environment.

Strategy 4

Minimize impacts to the environment by reducing, recycling, reusing and reclaiming waste, and by conserving natural resources.

Strategy 5

Ensure protection and stewardship of San Francisco Bay.

Strategy 6

Operate Pardee and Camanche Reservoirs and facilities jointly as an integrated system to achieve multiple objectives including municipal water supply, stream flow regulation, environmental protection, flood control, hydropower, and releases for downstream requirements.

Water Quality and Environmental Protection

Key Performance Indicators

Key Performance Indicator	FY20 Target	FY20 Performance	Target Met?
Watershed Protection			
Mokelumne River fall-run Chinook salmon escapement (long-term average)	5,452	14,025	++
Compliance with Drinking Water Regulations			
% of water quality goals met	100%	96%	+
% of water quality regulations met	100%	100%	++
Compliance with Wastewater Regulations			
Number of NPDES and Waste Discharge Permit Notices of violation received	0	2	+
Sustainable Resource Management			
Reduce indirect GHG emissions to zero by 2040 and reduce direct emissions by 50% by 2040 compared to the 2000 baseline	≤ 33,497 MT CO ₂	28,645 MT CO ₂	++
Capture biogas sufficient to produce on-site energy in excess of Main Wastewater Treatment Plant electric power demand	130% of plant power demand	129% of plant power demand	+
Protect SF Bay			
Implement Private Sewer Lateral Program to reduce wet weather flows and achieve a high compliance rate at point of sales	90%	96%	++
Operate Pardee and Camanche			
Meet JSA Mokelumne River minimum flow releases 100% of the time	100%	100%	++

Watershed Protection: The salmon escapement target is the average number of fish returning since 1940, while performance is the average escapement over the past six-years (2 cohorts or life cycles). The FY20 escapement alone was 12,869 fish, and eight of the last nine years saw escapements well over 10,000. The Mokelumne River Fish Hatchery produced roughly 6 million juvenile Chinook salmon including 2 million fish grown specifically for ocean enhancement. The majority of the escapement on the Mokelumne is comprised of hatchery origin fish.

Compliance with Drinking Water Regulations: The District met 100 percent of state and federal drinking water regulations, and 96 percent of its voluntary water quality goals, similar to FY19 and FY18. The District’s water quality goals are more stringent than government regulations to ensure the highest quality drinking water. Levels of three chlorinated disinfection byproducts; trihalomethanes (THMs), haloacetic acids (HAAs), and n-nitrosodimethylamine (NDMA)) exceeded District goals but remained below regulatory levels, and the goal to maintain high disinfectant residuals and very low coliform bacteria throughout the entire distribution system was not met. Balancing the competing objectives of disinfecting water while minimizing disinfection byproducts continues to be a challenge.

Operations and Maintenance staff continue to work with Engineering staff on design modifications to the water treatment plants to provide more tools to accomplish these water quality objectives. Staff analyzed alternatives to optimize chemical doses at the treatment plants to produce high quality drinking water.

Efforts were also continued to minimize potential exposure to lead in water. The customer lead sampling voucher program is operating successfully, and a four-year effort was completed to characterize the materials used for each individual service line. Water Quality and Public Affairs staff developed educational materials and reached out to businesses preparing to re-open as COVID-19 restrictions were eased, providing guidance to ensure the safety of premise plumbing inside buildings that had been closed for extended periods. Timely technical training was provided to various District work units regarding emerging water quality issues such as legionella, lead control efforts, regulatory changes, and polyfluoroalkyl substances (PFAS), a broad class of man-made chemicals linked to health issues.

These issues are detailed in the September 2020 Water Quality Program Semi-Annual Update presented to the Planning Committee.

Compliance with Wastewater Regulations: The District did not experience any permit violations with the interceptor system, and there were no violations in FY20 at the Main Wastewater Treatment Plant, demonstrating 250 consecutive months of continued compliance.

The District experienced one violation of a National Pollutant Discharge Elimination System Permit (NPDES) and paid a stipulated penalty of \$3,000 in June 2020 for a pH violation at the San Antonio Creek Wet Weather Facility that occurred on February 13, 2019. The violation was caused by unusually low influent pH during a significant storm.

On September 27, 2019, the Central Valley Regional Water Quality Control Board (CVRWQCB) issued a Notice of Violation of a Waste Discharge Requirements (WDR) permit for an April 13, 2019 pH exceedance on the backwash effluent discharge at the Pardee Recreation Area Water Treatment Plant. The exceedance was due to a failure of the facility's main programmable logic computer, which was replaced shortly after the incident. The backwash effluent discharge soaked into the ground and did not enter any surface or groundwater into which wastewater is discharged (a receiving water).

Sustainable Resource Management: District policy established a 2040 goal to be carbon-free for indirect emissions, and to reduce direct emissions by 50 percent compared to the 2000 baseline. The District's 2019 direct and indirect emissions were less than the target and overall emissions reductions are in line with the long-term goals. The emissions are reported for the Water and Wastewater Systems combined.

Producing energy on-site at the Main Wastewater Treatment Plant (MWWTP) in excess of the electric power demand will reduce costs, increase revenues and minimize greenhouse gas emissions. Through energy conservation efforts and the Resource Recovery program, on-site power generation provided 129 percent of MWWTP energy demand, which is just under the target of 130 percent due to reduced high-strength waste deliveries during the start of the COVID-19 pandemic.

Protect SF Bay: Cracks in Private Sewer Laterals (PSLs) lead to infiltration during wet weather, which cause discharges of partially treated wastewater into SF Bay through the Wet Weather Facilities. Compliance with the District's point-of-sale PSL Program reduces wet weather discharges and protects the Bay. Over time the program will also position the District to comply with the Wet Weather Consent Decree. In FY20, the PSL Program achieved 96 percent compliance based on the most recent 12-months of data, exceeding the KPI of 90 percent, and similar to the 95 percent in FY19.

Long-Term Infrastructure Investment

It's essential to invest in our infrastructure to make sure that each of our customers receives the safest, highest quality water from their tap at all times.



Delivering pipe by helicopter is an innovative cost-efficient method that minimizes community impacts.

Goal: We maintain and improve the District’s infrastructure in a cost-effective manner to ensure sustainable delivery of reliable, high quality service now and in the future, addressing economic, environmental, and social concerns.

Strategy 1

Maintain coordinated master plans for all facilities and assets.

Strategy 2

Meet operational needs and reliability goals by effectively maintaining the infrastructure.

Strategy 3

Implement the master plans and set priorities in the operating and capital budget process to reflect the needs identified in those plans.

Long-Term Infrastructure Investment Key Performance Indicators


Key Performance Indicator	FY20 Target	FY20 Performance	Target Met?
Effective Management of Infrastructure			
Number of water system pipeline breaks per 100 miles of pipe	≤ 20	20.1	+
% of water system corrective work order hours classified high priority	≤ 10%	4.4%	++
Miles of pipe surveyed	800	942	++
% of water system valves exercised	10%	11.5%	++
Infrastructure Leakage Index *(ILI)	< 2.5	2.15	++
% of high priority meter repair orders completed in 60 days	90%	97%	++
Capital Budget Priorities			
Miles of distribution pipe replaced	17.5	17.6	++
Design errors and omission change orders on construction contracts	< 3%	3.3%	+
Number of steel water tanks rehabilitated	3	3	++
Number of concrete wastewater treatment tanks and sewer interceptor reaches rehabilitated	2	3	++
Number of pumping plants rehabilitated	3	0	--

*ILI = Actual System Leakage/Ideal System Leakage (perfect score = 1.0)

Effective Management of Infrastructure: For the nearly 4,200 miles of distribution pipeline there were 842 breaks, less than the 935 breaks in FY19, and the 891 in FY18. The number of breaks has been coming down from the high of 1,189 experienced in FY16 and is approaching the target level of 20 or fewer breaks per 100 miles. In the long run, as the miles of pipe replaced under the Pipeline Rebuild Program increases the number of breaks is expected to decrease further.

A total of 7,882 corrective work orders were completed, of which 347 or 4.4 percent were high priority. While this was more than the 3.9 percent in FY19 and the 3.4 percent in FY18, it met the target of having less than 10 percent of water system corrective work orders classified as high priority.

A total of 942 miles of pipe was surveyed, again exceeding the target as EBMUD continues to pilot satellite imagery, and 1,000 leak detection loggers on hydrants to monitor water distribution pipes near creeks. Other loggers throughout the distribution system monitor leaks before they surface in high risk areas, such as pipes in slide areas or near fault lines.



In FY20, 6,616 or 11.4 percent of system valves were exercised, greater than the 10.8 percent in FY19 and the 6.1 percent exercised in FY18. This KPI covers only the valves used to isolate leaks and other maintenance activities.

The Infrastructure Leakage Index (ILI) is a benchmark for distribution system water loss and is the ratio of leaks in the system to the theoretical lowest leakage possible using the best available technologies. The median ILI value for North American utilities is 2.2, and the lower the number the better. The District's 2019 calendar year index of 2.15 was slightly below the median, an improvement from the 2.6 in 2018. The State Water Resources Control Board (SWRCB) is developing a water loss performance standard for each urban retail water supplier in California under Senate Bill 555. Once the District's performance standard is finalized, the ILI KPI will be replaced with the SWRCB performance standard.

In FY20, the target for meter repair orders completed within 60 days was met with 97 percent completed, similar to the past three years.

Capital Budget Priorities: Pipeline replacements again exceeded the target totaling 17.6 miles in FY20, greater than the 17.5 mile target despite the impacts from COVID-19. The amount replaced was similar to the 17.7 miles replaced in FY19, and greater than the 15.1 miles in FY18.

Design errors and omissions change orders on combined Water and Wastewater System contracts were 3.3 percent, an increase from the 1.8 percent in FY19, and the 3.0 percent in FY18. The Water System was 4.2 percent on contracts worth \$81.5 million; and Wastewater was 0.4 percent on contracts worth \$25.6 million. The high Water System percentage was related to changes during construction of the large and complex Ozone System Improvements at the Sobrante and Upper San Leandro Water Treatment Plants.

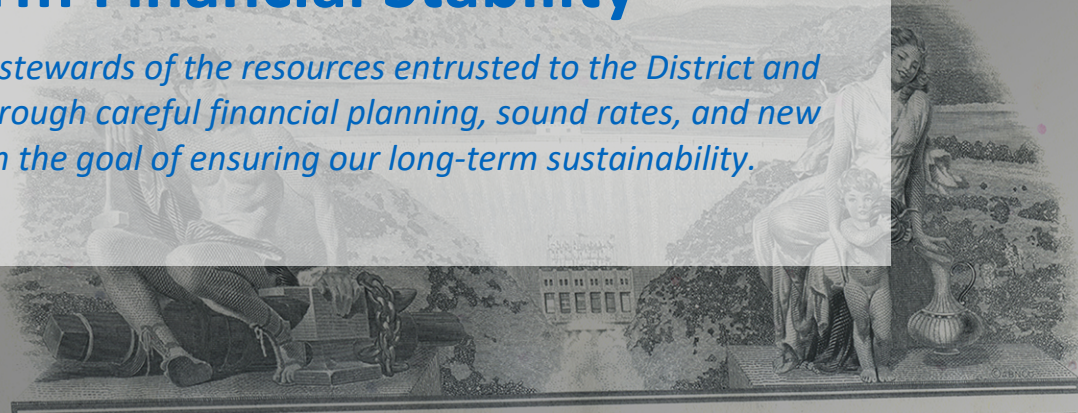
In FY20, contracts were completed for improving three steel reservoirs: the rehabilitation of Scenic and Scenic East Reservoirs in Danville and the replacement of Derby Reservoir in San Ramon with a smaller tank which will improve water quality. The work includes replacing an oversized steel tank with a properly sized steel tank; installing new aluminum dome roofs, exterior stairs and platforms for safe access; recoating the interior of the tanks; rehabilitating or replacing existing valve vaults with new mechanical piping, valves, and appurtenances; and painting the exterior and installing security fencing.

The Wastewater Department achieved its FY20 capital budget KPI with the rehabilitation of three concrete treatment tanks. Recoating the concrete wall and steel dome surfaces of Digester No. 11 was completed in December 2019. Rehabilitation of the concrete and equipment for Primary Sedimentation Tank Nos. 14 and 16 was completed in November 2019.

While the District did not award any contracts to replace or rehabilitate pumping plants in FY20, the program will exceed an average of 3 pumping plants per year over the course of the program. FY20 marks the sixth year of the KPI, and a total of 21 pumping plants have been replaced, rehabilitated, or demolished to date, which is 3 over the target of 18 for the 6-years since inception of the program. In FY19 alone, 5 pumping plants were addressed. Design is underway to replace the Westside pumping plant and demolish the Encinal pumping plant in Orinda, and rehabilitate the San Ramon plant.

Long-Term Financial Stability

We are financial stewards of the resources entrusted to the District and manage these through careful financial planning, sound rates, and new technologies with the goal of ensuring our long-term sustainability.



EAST BAY MUNICIPAL UTILITY DISTRICT WATER DEVELOPMENT PROJECT FOR EAST BAY AREA BOND

No
00000

3 1/2% SERIES A

No
00000

East Bay Municipal Utility District, a municipal utility district duly organized and existing under the constitution and laws of the State of California, hereby acknowledges itself indebted and, for value received, promises to pay to bearer (or if this bond is registered to the registered holder hereof) the principal sum of

ONE THOUSAND DOLLARS (\$1,000)

on the 1st day of **March, 1994** (subject to any right of prior redemption hereinafter in this bond expressly reserved) together with interest thereon at the rate of

three and one-half (3 1/2%) per cent.

per annum until payment of said principal sum in full, payable semi-annually on the 1st days of March and September of each year. Unless this bond is registered, such interest, prior to maturity, shall be payable only on presentation and surrender of the proper interest coupons hereto attached as they respectively become due. Both the principal of and interest on this bond are payable in lawful money of the United States of America at the office of the Treasurer of said District in the City of Oakland, County of Alameda, State of California, or at the office of any local agent of said District, in the Borough of Manhattan, The City and State of New York, or the City of Chicago, State of Illinois, or the City and County of San Francisco, State of California, at the option of the holder hereof.

This bond is one of a duly authorized issue of bonds of said District aggregating **TWO HUNDRED FIFTY TWO MILLION DOLLARS (\$252,000,000)** in principal amount, all of the same tenor as this bond, and is one of the bonds of said District which are being sold to the public by the District.

law, and that the amount of this bond, together with all other indebtedness of said District, does not exceed any limit prescribed by the constitution or statutes of said State and that provision has been made as required by law for the levy and collection of annual ad valorem taxes sufficient to pay the principal of, and interest on this bond, and all other bonds of this issue, as the same become due. The full faith and credit of said District are hereby pledged for the punctual payment of the principal and interest of this bond.

This bond may be registered in the manner provided by law and thereafter the principal hereof and interest hereon shall be payable only to such registered owner.

Bonds of Series A numbered A1 to A18,500, both inclusive, maturing on or before March 1, 1994 are not redeemable prior to their respective maturity dates. Bonds of Series A numbered A18,501 to A25,000, both inclusive, maturing on and after March 1, 1994, are redeemable prior to their respective maturity dates at the option of the District, in a whole or in part, in several installments from time to time, at any interest payment date on or after March 1, 1994, at the principal amount thereof and an interest amount plus a premium of five per cent (5%) of principal amount less 1/4 of 1% thereof for each year or fraction of a year elapsed after March 1, 1994; the date fixed for making

A water revenue bond is a debt security issued to finance capital expenditures.

Goal: We manage the District's finances to meet funding needs and maintain fair and reasonable water and wastewater rates.

Strategy 1

Maintain a Long-Range Financing Plan that sets forth the long-term funding needs of the District.

Strategy 2

Implement water and wastewater rates and charges that are legal, fair, reasonable, and equitable.

Strategy 3

Ensure integrity, accountability and transparency in financial management.


Strategy 4

Implement technologies that improve the efficiency and effectiveness of business processes.

Long-Term Financial Stability Key Performance Indicators

Key Performance Indicator	FY20 Target	FY20 Performance	Target Met?
Sufficient Revenue/Fair Rates & Charges			
Rates as compared to other Bay Area agencies	At or below median	Water – below median Wastewater – above median	++ --
Financial Position			
% of capital program funded from debt	≤ 65%	Water – 34% Wastewater – 10%	++ ++
Debt service coverage	≥ 1.6 times coverage	Water – 2.28 Wastewater – 2.59	++ ++
Actual reserves as % of target	≥ 100%	Water >100% Wastewater >100%	++ ++
Integrity, Accountability and Transparency			
% of planned audits completed	100%	85%	+
% of audit findings resolved within 90 days	100%	Action initiated - 100%	++
Cyber Security Operational Readiness			
Planned patch cycles met	> 90%	91%	++
Security controls reviews	Annually	Completed	++
Database security reviews	Annually	Completed	++
Business recovery exercises	2 per year	3	++
Security awareness events	4 per year	6	++
Budget Performance			
Operating expenditures as a percentage of operating budget	≤ 100%	Water - 93% Wastewater - 95%	++ ++
Capital expenditures as a percentage of capital budgeted cash flow	90% and 110%	Water - 85% Wastewater - 86%	+ +

Sufficient Revenue/Fair Rates & Charges: The District compares its rates and charges with other Bay Area agencies to determine whether they are fair and reasonable. EBMUD’s water bill for an average single family using 8 Ccf per month was below the median of surveyed agencies as 7 of the 12 agencies had higher bills. The combined wastewater collection and treatment bill for an average single family discharging 6 Ccf per month was above the median as 3 of the 15 sewer system agencies surveyed had higher bills. However, the wastewater bill includes non-EBMUD charges for community collection that represent more than 50 percent of the overall bill. A revised KPI for wastewater rates to address this issue will be used starting in FY21.



Financial Position: District policy is to limit debt funded capital to no greater than 65 percent of the total capital program over each five-year planning period. The Water System debt funded 34 percent of its capital program, a significant decrease from the 46 percent in FY19 and the 52 percent in FY18. The Wastewater System debt funded 10 percent of its capital program, a slight decrease from the 11 percent in FY19 and the 15 percent in FY18.

District policy is to maintain an annual revenue bond debt service coverage ratio of at least 1.6 times. The Water System debt coverage ratio was 2.28 which was similar to the 2.35 and 2.15 coverage in FY19 and FY18 respectively. The Wastewater System debt coverage ratio was 2.59 which was slightly less than the 2.83 and 2.65 coverage in FY19 and FY18 respectively.

The District's goal is to meet or exceed the target for operating reserves. The target reserve levels of \$182.2 million for the Water System and \$44.9 million for the Wastewater System were exceeded which allows the balance in excess of the target to be used to fund capital projects and pay down debt.

Integrity, Accountability and Transparency: The Internal Audit section evaluates, tests, and monitors the District's internal control environment to provide assurance that: assets are properly maintained and accounted for; resources are appropriately and efficiently utilized; financial and operating reporting is accurate; and that staff complies with District policies, procedures, applicable regulations, ordinances, and statutes. Specifically, audits of departments, programs, processes and/or functions are conducted to assess the adequacy and effectiveness of the preventive, detective, and/or compensating controls in place to mitigate risks and reduce potential exposure. Internal Audit also conducts investigations to determine the validity and/or impact of allegations of impropriety or malfeasance.


Six of the seven audits in the FY20 annual audit plan were initiated and/or completed during this fiscal year. The seventh is a follow-up assessment of corrective actions taken to address deficiencies noted during prior audits was re-scoped to identify specific audits and included in the FY21 Internal Audit Plan. The status of internal audit efforts was provided to the Finance/Administration Committee as part of the Semi-Annual and Annual Internal Audit Report in March and July 2020.

As part of the ongoing effort to ensure recommended controls remain in place and are functioning as intended, going forward, beginning with the FY21 Internal Audit plan specific focused testing will be periodically conducted in all areas in which previous deficiencies were noted.

All of the FY20 Cyber Security Operational Readiness KPIs were met. Patching systems helps to address system vulnerabilities, security awareness reminds employees of the importance of being vigilant while using email, and business recovery exercises test the ability to recover key systems. Reviews of security controls and database security look for potential security improvements.

Budget Performance: This KPI measures expenses as a percent of budget, with a target not to exceed 100 percent of the operating budget, and to be between 90 and 110 percent of the capital budget.

The FY20 Water System operating expenses were 93 percent of budget primarily due to a reduction in some operations due to COVID which were partially offset due to increased expenses associated with the pandemic; higher than budgeted offset for the administration of capital; savings in debt service;



and unspent contingency. In FY19, Water System expenditures were 89 percent of budget. The FY20 Wastewater System operating expenses were 95 percent of budget primarily due to the recruitment lead time to fill vacancies; a higher than budgeted offset for the administration of capital; the recruitment lead time; debt service savings; and unspent contingency. In FY19, Wastewater System expenditures were 94 percent of budget.

Capital spending was 85 percent of budget for the Water System due to delays in several pressure zone, pipeline, aqueduct and service lateral projects, and the impact of the shelter-in-place order. In FY19, capital spending was 105 percent of budget. Capital spending was 86 percent of budget for the Wastewater System primarily due to delays in various improvement projects at the Main Wastewater Treatment Plant and design of the South Interceptor monitoring station. In FY19, capital spending was 124 percent of budget.

Customer and Community Services

We deliver responsive, trusted, value-added high quality service.



A Field Services Representative performing an inspection of a water meter.

Goal: We build stakeholder trust and long-term relationships through service excellence, proactive communication and education.

Strategy 1

Educate the public on the District's priorities, initiatives, systems and services.

Strategy 2

Continue to build trust by providing quality service, timely information and resolution of customer and community inquiries.

Strategy 3

Build long-term partnerships in the community, regionally and nationally, in areas of shared interest.

Strategy 4

Maintain an active Emergency Preparedness Program to plan for and manage the District's functions during an emergency and allow for an efficient and effective recovery following an emergency.

Customer and Community Services

Key Performance Indicators

Key Performance Indicator	FY20 Target	FY20 Performance	Target Met?
Communication			
Unify K-12 school education schools program	Review	Programs unified and Pilots implemented	++
Conduct outreach campaign	3	3	++
Customer Satisfaction			
% of customers rating the District's services as "Good" or "Excellent":	90%		
Field Services		98%	++
Contact Center		82%	--
New Business		100%	++
Water Quality		98%	++
Recreation		97%	++
Average speed of answer to calls coming into the Contact Center	≤ 60 seconds	39 seconds	++
Contact Center service level: % of calls answered within the target of ≤60 seconds	80%	83%	++
Abandonment rate	3%	1.5%	++
Timely billing of customer statements as scheduled	99%	99.3%	++
Notify customers in writing or via automated contact 48 hours in advance of shut-off for non-payment; provide information on CAP and payment plans to avoid shut-off	≥ 99%	100%	++
Reduce shut-offs for CAP participants by 10% over two years while increasing CAP enrollment	Performance Measure Only	Performance Measure Only	N/A
Review shut-off guidelines and customer assistance programs	Annually	Review completed	++
% of time customer dependent systems are available	99.9%	99.99%	++
Unplanned water service interruptions per 1,000 active accounts			
< 4 hrs.	≤ 10	5.5	++
4-12 hrs.	≤ 5	4.5	++
> 12 hrs.	≤ 2	1.4	++
Odor complaints near the MWWTP	≤ 30 complaints	14 complaints	++

Note: The KPI result for service interruptions lasting between 4 and 12 hours was reported incorrectly in FY19. The result should have been 5.0 and not 3.6.




Key Performance Indicator	FY20 Target	FY20 Performance	Target Met?
Emergency Preparedness			
Update the District's Emergency Operation Plan every two years and conduct an EOT exercise annually	100%	100%	++
Update all Business Continuity plans every two years and conduct an exercise for each annually	100%	98%	+
Review specific emergency communication plans	Annually	Plans completed	++

Communication: In FY20, work continued to unite the District’s education programs under one umbrella. The program gained a mission and vision statements and set of goals to provide direction for each education component. In addition, a classroom pilot involving seven schools and two summer programs reached over 300 students. The results indicated students and teachers had a keen interest in the hands-on and interactive aspects of water science. The pilot also demonstrated the need to help students understand the water system as students understood the role of rain and snow as sources of drinking water, but most had little knowledge of how it gets to their homes. The pilot gave direction in reformulating the District’s existing education materials. In early 2020, another pilot was launched with interactive tours of the Orinda Water Treatment Plant for high school students that incorporated conversations with water treatment operators, chemists, and plumbers. Two tours were completed, including an impromptu tour for students of McClymonds. Additional tours were put on hold in response to the COVID-19 shelter-in-place order.

With the advent of distance learning for all ages due to the pandemic, staff began exploring more interactive methods for student and public engagement through the District’s website. The Education Resources webpage was updated to combine educational resources on wastewater, conservation, environmental protection and the popular Wastewater Treatment Plant Tours.

Three large-scale media and public outreach campaigns were completed in FY20.

- In the summer of 2019, an outreach campaign was initiated to inform customers about the District’s preparations for planned power outages. Tactics included publications (fact sheets and bill inserts); media outreach (advisories, press releases, interviews for TV, radio, print, and on-site access to pumping plants); social media; and interactive web tools, including a new map where customers could check their address to determine if they were being asked to limit water use. Customers in affected areas also received email messages advising them to minimize water use.
- To impress upon the public the importance of fixing or replacing their leaky private sewer laterals, a multi-channel campaign was created, “Cracked sewer laterals pollute San Francisco Bay.” A story was featured about private sewer laterals in the Customer Pipeline newsletter, and on social media. During a winter storm, EBMUD also issued a news release, conducted press interviews and provided media access to the Main Wastewater Treatment plant and a wet weather facility to



illustrate the impact of increased wet weather flows on the wastewater treatment system and the bay. The resulting stories ran on ABC 7 and NBC 11.

- In the spring of 2020, as the coronavirus pandemic was unfolding, EBMUD worked to assure the public that their water was safe from coronavirus using news releases, regular website updates, publications and social media. EBMUD provided images and access to crews conducting essential work while following new safety protocols. The messages shifted during the emergency -- from emphasizing water quality to highlighting the importance and continuation of essential work, and finally to the costs associated with EBMUD's coronavirus response and our scientific partnerships to monitor the virus in wastewater to aid public health decision-making.


Customer Satisfaction: In FY20, the District received 154 field services survey responses. Ratings continue to be high with 98 percent of customers rating service as “good or excellent”, similar to the 99 percent in FY19. The total number of surveys received has decreased compared to prior years as the number of field inspections performed in FY20 has significantly reduced due to COVID-19.

The customer satisfaction KPIs for the Contact Center, New Business, Water Quality, and Recreation were new for FY19. The Contact Center was rated “good or excellent” by 82 percent of customers. The result is below the 90 percent target and is likely attributed to changes to the telephony system and the survey process. Prior to FY18, only a portion of customers who called were offered the survey, and the results did not capture all customer opinions. Under the new telephony system, all customers are given the opportunity to participate in the survey, removing variations in the survey administration and providing more complete survey results. In FY20, New Business achieved a 100 percent rating as “good or excellent”, while System Water Quality achieved a 98 percent customer rating. Recreation achieved an overall “good or excellent” rating of 97 percent, comprised of an Upcountry rating of 98 percent and an East Bay rating of 90 percent. Recreation activity is kept by calendar year and the 2019 report was presented to the Planning Committee in March 2020.

The Contact Center received over 289,000 calls and emails in FY20, and achieved its service level by answering 83 percent of calls within 60 seconds, which is consistent with the FY19 result of 83 percent and exceeds the 79 percent achieved in FY18. The Contact Center continues to meet its goal of answering calls in less than 60 seconds with an average time of 39 seconds in FY20, similar to the 38 seconds in FY19, but an improvement from 44 seconds in FY18. The call abandonment rate for FY20 was 1.5 percent, the same as in FY19, and down from 3 percent in FY18.

The timely billing of 99.3 percent of customer statements met the target and the District continues to make significant progress in this area. In FY20, the average weekly number of delayed bills was 310, down from 350 in FY19 and 372 in FY18, and considerably less than the 711 in FY16.

Reducing the number of shut-offs due to non-payment for Customer Assistance Program (CAP) participants, and reviewing shut-off guidelines continue to be a key focus of the District. In FY20, the Discontinuation of Service Regulation (Regulation) was updated as mandated by Senate Bill 998. The Regulation outlines the steps for customers to maintain water service, including an appeal process for disputing a water bill. To reduce the number of shutoffs additional door hangers were piloted to



provide customers one additional reminder of overdue bills. During the short span of the pilot, there was a significant reduction in shutoffs compared to prior months using the normal process.

In March 2020, the District became one of the first water utilities in the country to suspend shutoffs due to non-payment as a direct response to the COVID-19 pandemic. Additionally, nearly 500 water services disconnected due to non-payment were restored to ensure water services were maintained for all customers. In FY20, 131,102 48-hour notices were mailed to 46,285 unique accounts, as some accounts received multiple notices. In response to COVID-19, the 48-hour notices were modified to serve as payment reminders for customers. The revised notices provided information on CAP, payment plans, and payment extension options available to customers experiencing financial hardship. As an ongoing priority, a number of channels were used (top-of-bill messages, emails, mail, web, social media, newsletter and outside partnerships) to reach customers to provide information on CAP and other customer assistance programs, especially customers in disadvantage areas impacted by COVID-19.

The availability of automated systems used by customers (Internet, Call Center and Dispatch Center telephones, Customer Information System, and Integrated Voice Response self-service applications) is also a measure of customer satisfaction. The systems had minimal system interruption during FY20.

Minimizing the impacts to customers from unplanned water service interruptions is vital. The District met its KPI for interruptions in all categories, meeting the KPI for interruptions lasting 4-12 hours for the second year in a row after missing the KPI in the previous three years.

A measure of customer satisfaction is to have less than 30 odor complaints attributable to the Wastewater Treatment Plant. In FY20, the target was met with 14 odor complaints received, slightly less than the 15 complaints in FY19. The continued decrease in the number of odor complaints is likely related to staff planning work to minimize the potential for generating odors, optimizing operational and maintenance practices, and upgrading the odor control system at the influent pump station.

Emergency Preparedness: These KPIs measure the District's ability to maintain an active emergency preparedness program and test emergency response and business continuity plans. In FY20, progress continued to be made in mitigating risk, preparing for a disaster, and improving readiness. The America's Water Infrastructure Act (AWIA) was passed in October 2018 requiring water agencies to complete a risk and resiliency assessment by March 2020 and update the Emergency Operations Plan (EOP) based on the outcomes by September 2020. The Risk and Resiliency Report was certified within the deadline and the FY20 update to the EOP was certified in September.

The Public Affairs Office is working to update the District's overall Crisis Communications Plan, and will fine tune the emergency-specific Public Safety Power Shutoff mitigation and response communications plan which was completed in FY20.

The District conducted or participated in 48 exercises and drills including those with other agencies and mutual assistance partners. The exercises included: a workshop exercise of the Emergency Operations



Team with a Public Safety Power Shutoff; one mutual assistance workshop; the bi-annual District-wide emergency communications drill; and functional exercises of alternative work locations.

Details concerning the BCP and emergency preparedness programs are contained in the Annual Readiness Report and Program Update presented to the Planning Committee in September 2020.



Workforce Planning and Development

Our mission can only be fulfilled through our high performing employees. We hire, train, and retain the best.

The combination of classroom and experiential training helps employees fulfill their potential.

Goal: We create an environment that attracts, retains and engages a high performing diverse workforce in support of the District’s mission and core values.

Strategy 1

Maintain robust workforce plans to determine future needs, identify gaps and implement actions to close the gaps.

Strategy 2

Continue to develop employees to meet workforce demands.

Strategy 3

Integrate District values, recognize employee contributions, and establish clear performance measures to achieve a high performance culture.

Strategy 4

Enhance the District’s ability to recruit a highly qualified, diverse staff that exhibits the District’s values.

Workforce Planning and Development


Key Performance Indicators

Key Performance Indicator	FY20 Target	FY20 Performance	Target Met?
Employee Development			
% of competing Leadership Program graduates who place on applicable promotional lists	75%	0%	--
Annual average training hours per employee	30	49	++
Number of employees in development programs (academies, rotations, internships, mentorships)	Performance Measure Only	311	N/A
Performance Culture			
% of performance plans completed on time	> 99%	98.4%	+
% of performance appraisals completed on time	> 99%	99.1%	++
Number of injury & illness incidents resulting in time away from work per 100 employees	≤ 3.0	1.29	++
Annually implement outreach campaigns on wellness ("Well Being") themes	4	7	++
Recruitment			
% of exams resulting in hiring lists within 60 days or less	80%	90%	++
% of minorities and % of women on District eligibility lists	Performance Measure Only	59% minorities 34% women	N/A
Number of Internships	Performance Measure Only	40	N/A

Employee Development: A Pathways Academy has not been hosted since FY15. Overall, 19 of the 24 participants (80 percent) have promoted to higher level positions. Of the remaining five employees, three have retired. This will be the last year reporting on this KPI.

The annual average number of training hours per employee is a common indicator benchmarked by employers. During FY20, employees averaged 49 training hours, compared to 39 hours in FY19. The increase in general training hours during FY20 is related to California passing SB 1343, requiring all employees to receive Harassment Prevention Training every two years, and an increase in tuition reimbursable programs completed by employees.

The number of employees in development programs measures the engagement and the development of employees. In FY20, 311 employees participated in such programs including engineering rotations, values and organizational improvement teams, values advocates, internships, Peralta Cohort Learning Program career coaching, and mentoring. In FY19, 324 employees participated in such programs. Due to COVID-19, there was a reduction in internships; however, there was an increase in the number of employees participating in career coaching.



Performance Culture: This KPI measures the percent of employees with performance plans and appraisals completed within the past 13 months. The number of employees with a current performance plan in place did not meet the target at 98.4 percent, but the number of employees with a current performance appraisal did meet the target at 99.1 percent. Both numbers are down from last year as the pandemic added a layer of difficulty for some work groups.

The Employee Injury and Illness Lost Time Incidence Rate is used by OSHA and the Bureau of Labor Statistics to show the number of job-related injuries and illnesses that result in one or more lost workdays by employees. For FY20, the Lost Time Incidence Rate was 1.29 and there were 22 lost time injuries. For FY19, the rate was 1.51 with 26 lost time injuries.

In FY20, the Wellbeing effort started with the rollout of training stations with personal trainers in the fall, followed by a busy January Wellbeing Month that touched on (1) resilience, (2) mental health, (3) movement/physical health, and (4) healthy eating. January Wellbeing Month also included a farmers market at the Administration Building and fruit delivery all across the District. As employees worked from home or on rotational shifts due to COVID-19, staff worked with Fidelity to bring live personal finance webinars to employees, and reminders of how to access tele-health with all of the District's health insurance providers. Lastly, calls were set up with the EAP provider to support employees around the personal response to George Floyd's death and the black lives matter protests.

Recruitment: The percent of exams resulting in hiring lists within 60 days is a measure of the hiring process, and is based on the time from the close of application filings to the establishment of eligible lists. In FY20, there were 94 exams completed and 85 resulted in hiring lists within 60 days. The COVID-19 shelter-in-place order forced a number of recruitments to be put on hold and postponed while new test administration procedures were developed. In FY19, there were 124 exams completed.

The District tracks the diversity of candidates considered for employment to determine if recruitment efforts are attracting sufficiently diverse contender applicants. In FY20, the percentage of minorities and women on District eligibility lists was 59 percent and 34 percent, respectively, compared to 61 percent and 41 percent in FY19. This is the second year the District has reported performance on this KPI. We report performance on this measure, but do not set targets.

In FY20, internship programs continued to support the development of a pipeline of local talent for our future workforce. In light of the shelter-in-place order, the District quickly adjusted the annual Summer Youth Internship Program to a virtual, project-based model that introduced 31 diverse high school students from across our service area to various District careers (including engineering, science, skilled trades, and business support operations). For FY20, 77 percent of participants in the program were minorities and 54 percent were women. The District's Toolworks internship program, which provides work-based learning opportunities for people with disabilities, provided five internships. Additionally, four Industrial Maintenance and Machining interns were hosted by the District through a partnership with Peralta Colleges Foundation and Laney College. In FY19, there were two internship programs totaling 56 interns (48 high school summer interns, plus eight Toolworks interns). In light of the pandemic and programmatic changes, a decrease in the number of interns was observed in FY20.

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EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: October 22, 2020

MEMO TO: Board of Directors

THROUGH: Clifford C. Chan, General Manager *cc*

FROM: Sophia D. Skoda, Director of Finance *SDS*

SUBJECT: Quarterly Payroll, Disbursement and Real Estate Summary Reports for the Water and Wastewater Systems for Quarter Ended September 30, 2020

SUMMARY

File the September 30, 2020 quarterly payroll and disbursement report for the Water and Wastewater Systems with the Board. This report will be reviewed at the October 27, 2020 Finance/Administration Committee meeting.

DISCUSSION

As directed by Resolution Nos. 32834-94 and 32837-94, attached is a record of the payment of demands. There were no real estate transactions covering the quarter July through September 2020 to report.

SDS:AM:lc

Attachment

I:\Sec\2020 Board Related Items\Committees 2020\102720 Finance Ctte\FIN - Qtrly Payroll Disbursement Real Estate Summ Rpts 102720.doc

**EAST BAY MUNICIPAL UTILITY DISTRICT
FIRST FISCAL QUARTERLY PAYROLL AND DISBURSEMENT SUMMARY REPORT**

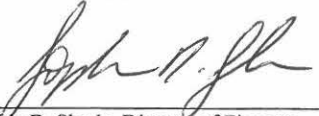
**PAYROLL SUMMARY
(RESOLUTION NO. 32834-94)**

	<u>July 2020</u>		<u>August 2020</u>		<u>September 2020</u>		<u>QUARTERLY TOTALS</u>	
<i>District Payments</i>	WSG	WWG	WSG	WWG	WSG	WWG	WSG	WWG
Gross Pay	\$ 15,738,266	\$ 2,637,824	\$ 15,775,210	\$ 2,632,440	\$ 17,636,095	\$ 2,827,974	\$ 49,149,571	\$ 8,098,237
Retirement	\$ 5,949,028	\$ 976,037	\$ 5,925,306	\$ 964,477	\$ 5,917,710	\$ 967,445	\$ 17,792,045	\$ 2,907,959
FICA	\$ 1,188,481	\$ 198,877	\$ 1,173,185	\$ 196,203	\$ 1,250,340	\$ 204,851	\$ 3,612,005	\$ 599,931
Kaiser	\$ 2,031,505	\$ 305,884	\$ 2,045,416	\$ 304,921	\$ 2,034,042	\$ 301,614	\$ 6,110,963	\$ 912,418
Sutter Health	\$ 119,951	\$ 16,419	\$ 120,577	\$ 16,970	\$ 117,517	\$ 16,970	\$ 358,046	\$ 50,358
Blue Cross	\$ 310,719	\$ 46,265	\$ (29,753)	\$ (4,973)	\$ 634,015	\$ 85,991	\$ 914,980	\$ 127,283
VSP	\$ 31,762	\$ 4,930	\$ 31,611	\$ 4,908	\$ 31,611	\$ 4,874	\$ 94,984	\$ 14,712
Delta Dental	\$ 190,255	\$ 35,861	\$ 230,579	\$ 27,344	\$ 200,572	\$ 34,135	\$ 621,406	\$ 97,340
Life Insurance	\$ 157,176	\$ 24,335	\$ 36,504	\$ 6,475	\$ (82,525)	\$ (12,096)	\$ 111,154	\$ 18,714
LTD	\$ 84,806	\$ 14,001	\$ 41,907	\$ 6,970	\$ -	\$ -	\$ 126,713	\$ 20,971
Unemploy Ins	\$ 17	\$ -	\$ 50,180	\$ 7,200	\$ -	\$ -	\$ 50,197	\$ 7,200
TOTAL	\$ 25,801,966	\$ 4,260,434	\$ 25,400,721	\$ 4,162,934	\$ 27,739,376	\$ 4,431,756	\$ 78,942,064	\$ 12,855,124

**DISBURSEMENT SUMMARY
(RESOLUTION NO. 32837-94)**

	<u>July 2020</u>		<u>August 2020</u>		<u>September 2020</u>		<u>QUARTERLY TOTALS</u>	
Voucher Payments	\$ 38,216,821	\$ 3,628,992 *	\$ 24,007,024	\$ 5,354,641	\$ 20,024,592	\$ 3,930,426	\$ 82,248,438	\$ 12,914,059
Customer Refunds	\$ 90,981	\$ -	\$ 72,624	\$ -	\$ 82,755	\$ -	\$ 246,360	\$ -
Electronic payments	\$ 849,616	\$ 7,228	\$ 673,510	\$ 12,171	\$ 1,063,629	\$ 14,013	\$ 2,586,755	\$ 33,413
Pcard payments	\$ 970,386	\$ -	\$ 838,149	\$ -	\$ 952,608	\$ -	\$ 2,761,143	\$ -
TOTAL	\$ 40,127,805	\$ 3,636,220	\$ 25,591,307	\$ 5,366,813	\$ 22,123,584	\$ 3,944,439	\$ 87,842,695	\$ 12,947,472

NOTE: * Five accounts payable check runs in July 2020

By: 


Sophia D. Skoda, Director of Finance



Date

By: 

Andrea Miller, Controller



Date

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: October 22, 2020
MEMO TO: Board of Directors
THROUGH: Clifford C. Chan, General Manager *CC*
FROM: Sophia D. Skoda, Director of Finance *SDS*
SUBJECT: Quarterly Investment Report – September 30, 2020

SUMMARY

In accordance with Section 53646 of the California Government Code, the Treasurer of the District submits to the General Manager, the Internal Auditor, and the Board of Directors a quarterly investment report. Attached is the September 30, 2020 quarterly investment report. This report will be reviewed at the October 27, 2020 Finance/Administration Committee meeting.

DISCUSSION

The investments held by the District as of September 30, 2020 are shown in Attachment A and totaled \$813.9 million. The portfolio is in compliance with the Board's adopted policy regarding District investments and as of September 30, 2020 had an average yield to maturity of 0.42 percent. Investments also reflect working capital of the District's associated Joint Powers Authorities and the East Bay Municipal Utility District Employees' Retirement System.

Attachment B shows the composition and credit allocation of the District's investment portfolio. It also shows a comparison of the yield of the District's portfolio against the yield on the 90-day Treasury Bill and the Federal Funds Rate. On September 30, 2020, the Federal Funds Rate was 0.25 percent and the yield on the 90-day Treasury Bill was 0.10 percent. Forecasts of the projected cash balances of the Water and Wastewater System General Funds for the six months through March 2021 are also included. In compliance with Section 53646(b)3 of the California Government Code, this report indicates the District will meet expenditure requirements for the next six months from a combination of maturing investments and revenues from budgeted operations.

SDS:RLH

Attachments

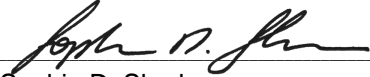
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EAST BAY MUNICIPAL UTILITY DISTRICT
Portfolio Management
Portfolio Summary
September 30, 2020

ATTACHMENT A

Description	Face Amount Shares	Market Value	Book Value	% of Portfolio	YTM @ Cost	Days To Maturity
Local Government Investment Pool	156,544,280	156,544,280	156,544,280	19.14	0.26	1
Federal Agency Issues Coupon	144,814,000	145,177,116	145,076,664	17.75	0.42	113
Money Market Mutual Funds	136,887,509	136,887,509	136,887,509	16.74	0.03	1
US Treasuries	136,000,000	138,215,780	138,217,848	16.90	0.13	324
LAIF	91,645,423	91,645,423	91,645,423	11.20	0.78	1
Cash	88,788,069	88,788,069	88,788,069	10.86	0.01	1
Medium Term Notes	57,086,000	58,574,539	57,279,898	7.16	2.43	444
Municipal Bonds	2,090,000	2,105,984	2,088,748	0.26	2.17	207
Total / Average	813,855,282	817,938,701	816,528,439	100.00	0.42	108


Sophia D. Skoda
Director of Finance

10/12/2020
Date

*LAIF includes Retirement funds of \$16,645,423.40



EAST BAY MUNICIPAL UTILITY DISTRICT
Portfolio Management
Non-Cash Portfolio Holdings by Fund
September 30, 2020

ATTACHMENT A

Water:

Description	Face Amount Shares	Market Value	Book Value
US Treasuries	136,000,000	138,215,780	138,217,848
Federal Agency Issues Coupon	126,670,000	126,929,431	126,866,302
Local Government Investment Pool	116,565,674	116,565,674	116,565,674
Money Market Mutual Funds	108,759,252	108,759,252	108,759,252
LAIF	59,001,800	59,001,800	59,001,800
Medium Term Notes	52,245,000	53,635,502	52,387,735
Municipal Bonds	1,175,000	1,188,333	1,174,235
Total/Average	600,416,725	604,295,771	602,972,845

Wastewater:

Description	Face Amount Shares	Market Value	Book Value
Local Government Investment Pool	39,978,606	39,978,606	39,978,606
Money Market Mutual Funds	28,128,258	28,128,258	28,128,258
Federal Agency Issues Coupon	18,144,000	18,247,685	18,210,362
LAIF	9,521,100	9,521,100	9,521,100
Medium Term Notes	4,841,000	4,939,037	4,892,162
Municipal Bonds	915,000	917,651	914,513
Total/Average	101,527,964	101,732,337	101,645,002



EAST BAY MUNICIPAL UTILITY DISTRICT
Portfolio Management
Non-Cash Portfolio Holdings by Fund
September 30, 2020

ATTACHMENT A

JPA:

BACWA	Face Amount Shares	Market Value	Book Value
LAIF Local Government Investment Pool	2,262,600	2,262,600	2,262,600
Total/Average	2,262,600	2,262,600	2,262,600

DERWA

LAIF Local Government Investment Pool	1,000,000	1,000,000	1,000,000
Total/Average	1,000,000	1,000,000	1,000,000

FRWA

LAIF Local Government Investment Pool	1,000,000	1,000,000	1,000,000
Total/Average	1,000,000	1,000,000	1,000,000

IICP

LAIF Local Government Investment Pool	150,500	150,500	150,500
Total/Average	150,500	150,500	150,500

UMRWA

LAIF Local Government Investment Pool	64,000	64,000	64,000
Total/Average	64,000	64,000	64,000



EAST BAY MUNICIPAL UTILITY DISTRICT
Portfolio Management
Non-Cash Portfolio Holdings by Fund
September 30, 2020

ATTACHMENT A

Other:

Employee Retirement System	Face Amount Shares	Market Value	Book Value
LAIF Local Government Investment Pool	16,645,423	16,645,423	16,645,423
Total/Average	16,645,423	16,645,423	16,645,423

FERC

LAIF Local Government Investment Pool	2,000,000	2,000,000	2,000,000
Total/Average	2,000,000	2,000,000	2,000,000



EAST BAY MUNICIPAL UTILITY DISTRICT
Portfolio Management
Portfolio Details by Fund - Investments
September 30, 2020

Description	CUSIP	Settlement Date	Face Amount Shares	Market Value	Book Value	Cost Value	Moody's	S&P	YTM @ Cost	Days To Maturity
Water:										
US Treasuries										
T-Bill 0 10/27/2020	9127964K2	9/2/2020	34,000,000	33,997,960	33,997,705	33,995,325	Aaa	AA+	0.09	27
T-Note 1.5 11/30/2021	912828YT1	7/23/2020	34,000,000	34,533,800	34,533,777	34,620,234	Aaa	AA+	0.15	426
T-Note 1.75 11/30/2021	912828U65	8/12/2020	34,000,000	34,640,220	34,633,637	34,706,520	Aaa	AA+	0.15	426
T-Note 2.875 11/15/2021	9128285L0	8/10/2020	34,000,000	35,043,800	35,052,729	35,183,359	Aaa	AA+	0.12	411
Subtotal/Average			136,000,000	138,215,780	138,217,848	138,505,439				
Federal Agency Issues Coupon										
FHLB 0.145 10/15/2020	3130AJMP1	6/18/2020	34,900,000	34,900,000	34,899,516	34,896,161	Aaa	AA+	0.18	15
FHLMC 1.875 11/17/2020	3137EAEK1	6/30/2020	22,010,000	22,060,403	22,059,202	22,153,505	Aaa	AA+	0.16	48
FHLB 0.145 10/22/2020	3130AJN39	6/26/2020	20,000,000	19,999,800	19,999,888	19,999,400	Aaa	AA+	0.15	22
FNMA 1.5 11/30/2020	3135G0F73	6/23/2020	14,756,000	14,789,791	14,788,517	14,841,290	Aaa	AA+	0.17	61
FNMA 1.5 11/27/2020-15	3136G06A4	9/2/2020	10,000,000	10,021,600	10,022,283	10,033,040	Aaa	AA+	0.10	58
FNMA 2.875 10/30/2020	3135G0U84	6/18/2020	8,054,000	8,072,122	8,071,869	8,133,815	Aaa	AA+	0.17	30
FNMA 2.5 4/13/2021	3135G0U27	8/13/2020	7,275,000	7,365,719	7,367,532	7,390,309	Aaa	AA+	0.12	195
FHLMC 1.85 11/27/2020-17	3134GA2Q6	10/4/2017	2,925,000	2,932,722	2,924,978	2,924,561	Aaa	AA+	1.86	58
FHLMC 2 11/18/2024-20	3134GURP7	11/18/2019	2,650,000	2,655,963	2,649,890	2,649,868	Aaa	AA+	2.00	1510
FFCB 2 11/5/2020	3133EEAV2	12/18/2018	2,000,000	2,003,640	1,998,562	1,972,520	Aaa	AA+	2.75	36
FFCB 1.95 11/2/2021	3133EHP31	12/12/2018	1,000,000	1,019,590	990,581	975,010	Aaa	AA+	2.86	398
FHLMC 1.5 4/27/2021-18	3134G9EE3	1/9/2019	1,000,000	1,007,910	993,536	974,050	Aaa	AA+	2.67	209
FHLB 1.35 11/24/2020-17	3130A9VU2	7/27/2017	100,000	100,172	99,948	98,850	Aaa	AA+	1.71	55
Subtotal/Average			126,670,000	126,929,431	126,866,302	127,042,379				
Money Market Mutual Funds										
Federated MM	MM3767	1/9/2018	54,455,661	54,455,661	54,455,661	54,455,661	Aaa	AAA	0.04	1
Morgan Stanley MM	MM0852	6/30/2011	27,303,590	27,303,590	27,303,590	27,303,590	Aaa	AAA	0.02	1
Fidelity Investments MM	MM4022	3/2/2016	27,000,000	27,000,000	27,000,000	27,000,000	Aaa	AAA	0.01	1
Subtotal/Average			108,759,252	108,759,252	108,759,252	108,759,252				
CAMP CA Asset Mgmt Program										
CAMP LGIP	CAMP6035	5/9/2014	96,539,491	96,539,491	96,539,491	96,539,491	NR	AAA	0.27	1
Subtotal/Average			96,539,491	96,539,491	96,539,491	96,539,491				

Description	CUSIP	Settlement Date	Face Amount Shares	Market Value	Book Value	Cost Value	Moody's	S&P	YTM @ Cost	Days To Maturity
LAIF Local Government Investment Pool										
LAIF LGIP	LGIP1001	6/30/2011	59,001,800	59,001,800	59,001,800	59,001,800	NR	NR	0.78	1
Subtotal/Average			59,001,800	59,001,800	59,001,800	59,001,800				
Medium Term Notes										
Apple Inc 2 11/13/2020	037833DJ6	12/26/2018	12,529,000	12,555,186	12,517,011	12,341,529	Aa1	AA+	2.82	44
Apple Inc 2.7 5/13/2022	037833BF6	2/21/2019	9,802,000	10,179,475	9,797,824	9,793,668	Aa1	AA+	2.73	590
Apple Inc 2.7 5/13/2022	037833BF6	2/7/2019	5,845,000	6,070,091	5,842,148	5,839,243	Aa1	AA+	2.73	590
Apple Inc 2.85 5/6/2021	037833AR1	3/24/2020	5,460,000	5,541,354	5,481,793	5,500,786	Aa1	AA+	2.17	218
APPLE INC 2.4 5/3/2023	037833AK6	3/16/2020	5,000,000	5,264,400	5,122,941	5,148,700	Aa1	AA+	1.43	945
Apple Inc 2.85 5/6/2021	037833AR1	11/28/2018	5,000,000	5,074,500	4,992,448	4,969,170	Aa1	AA+	3.11	218
Apple Inc 2.3 5/11/2022	037833CQ1	2/7/2019	4,444,000	4,582,786	4,414,595	4,384,539	Aa1	AA+	2.73	588
MICROSOFT CORP 2.375 5/1/2023-23	594918AT1	12/11/2019	4,165,000	4,367,711	4,218,977	4,235,805	Aaa	AAA	1.86	943
Subtotal/Average			52,245,000	53,635,502	52,387,735	52,213,440				
CalTRUST Local Government Investment Pool										
CalTRUST LGIP	CALTRUST923	4/30/2020	20,026,183	20,026,183	20,026,183	20,026,183	NR	AAA	0.16	1
Subtotal/Average			20,026,183	20,026,183	20,026,183	20,026,183				
Municipal Bonds										
Highland Redevelopment Agency Successor Agency 2 2	430034AV0	9/7/2017	810,000	812,171	809,630	806,290	None	AA+	2.14	124
Yorba Linda Redevelopment Agency Successor Agency	986176AR6	9/1/2017	365,000	376,162	364,605	363,971	None	AA-	2.31	701
Subtotal/Average			1,175,000	1,188,333	1,174,235	1,170,261				
Total/Average			600,416,725	604,295,771	602,972,845	603,258,244				



EAST BAY MUNICIPAL UTILITY DISTRICT
Portfolio Management
Portfolio Details by Fund - Investments
September 30, 2020

Description	CUSIP	Settlement Date	Face Amount Shares	Market Value	Book Value	Cost Value	Moody's	S&P	YTM @ Cost	Days To Maturity
Wastewater:										
CAMP CA Asset Mgmt Program										
CAMP LGIP	CAMP6035	8/19/2016	39,978,606	39,978,606	39,978,606	39,978,606	NR	AAA	0.27	1
Subtotal/Average			39,978,606	39,978,606	39,978,606	39,978,606				
Money Market Mutual Funds										
Federated MM	MM3767	6/25/2018	14,084,470	14,084,470	14,084,470	14,084,470	Aaa	AAA	0.04	1
Morgan Stanley MM	MM0852	10/29/2019	7,043,787	7,043,787	7,043,787	7,043,787	Aaa	AAA	0.02	1
Fidelity Investments MM	MM4022	12/20/2019	7,000,000	7,000,000	7,000,000	7,000,000	Aaa	AAA	0.01	1
Subtotal/Average			28,128,258	28,128,258	28,128,258	28,128,258				
Federal Agency Issues Coupon										
FFCB 1.74 10/21/2022-20	3133EK2U9	3/25/2020	4,060,000	4,063,735	4,071,337	4,074,190	Aaa	AA+	1.60	751
FFCB 2.375 4/15/2021	3133EKGY6	8/13/2020	3,500,000	3,542,140	3,542,608	3,552,990	Aaa	AA+	0.12	197
FHLMC 1.875 11/17/2020	3137EAEK1	1/14/2020	1,845,000	1,849,225	1,845,650	1,849,170	Aaa	AA+	1.60	48
FHLMC 1.875 11/17/2020	3137EAEK1	6/18/2020	1,749,000	1,753,005	1,752,872	1,761,260	Aaa	AA+	0.18	48
FHLMC 1.875 11/17/2020	3137EAEK1	1/14/2020	1,540,000	1,543,527	1,540,547	1,543,511	Aaa	AA+	1.60	48
FNMA 1.5 11/30/2020	3135G0F73	9/28/2020	1,500,000	1,503,435	1,503,500	1,503,615	Aaa	AA+	0.10	61
FFCB 1.71 11/25/2022-20	3133ELAU8	3/25/2020	1,200,000	1,203,012	1,203,744	1,204,644	Aaa	AA+	1.56	786
FNMA 2.28 4/23/2021-14	3136G0EG2	12/12/2018	850,000	860,209	847,329	838,755	Aaa	AA+	2.86	205
FFCB 1.75 4/1/2021	3133ECKF0	12/10/2019	500,000	504,020	500,122	500,318	Aaa	AA+	1.70	183
FFCB 1.79 11/12/2024-21	3133EK6L5	11/18/2019	500,000	508,190	499,517	499,415	Aaa	AA+	1.82	1504
FFCB 2 4/4/2022	3133ECKQ6	11/18/2019	500,000	513,835	502,207	503,477	Aaa	AA+	1.70	551
FFCB 5.375 11/10/2020	31331VFZ4	12/13/2019	200,000	201,146	200,812	206,594	Aaa	AA+	1.70	41
FHLMC 1.8 5/28/2021-15	3134G45K0	12/13/2019	200,000	202,206	200,118	200,262	Aaa	AA+	1.71	240
Subtotal/Average			18,144,000	18,247,685	18,210,362	18,238,200				
LAIF Local Government Investment Pool										
LAIF LGIP	LGIP1001	6/30/2011	9,521,100	9,521,100	9,521,100	9,521,100	NR	NR	0.78	1
Subtotal/Average			9,521,100	9,521,100	9,521,100	9,521,100				

Description	CUSIP	Settlement Date	Face Amount Shares	Market Value	Book Value	Cost Value	Moody's	S&P	YTM @ Cost	Days To Maturity	
Medium Term Notes											
Apple Inc 2.25 2/23/2021	037833BS8	8/14/2020	1,355,000	1,364,539	1,364,358	1,367,371	Aa1	AA+	0.51	146	
Apple Inc 2.3 5/11/2022	037833CQ1	3/17/2020	1,000,000	1,031,230	1,013,685	1,018,270	Aa1	AA+	1.43	588	
Apple Inc 2 11/13/2020	037833DJ6	12/11/2019	996,000	998,082	996,325	998,500	Aa1	AA+	1.72	44	
Microsoft Corp 2.65 11/3/2022	594918BH6	3/18/2020	500,000	523,270	512,713	515,975	Aaa	AAA	1.41	764	
Apple Inc 2.7 5/13/2022	037833BF6	3/16/2020	400,000	415,404	408,245	411,012	Aa1	AA+	1.40	590	
Microsoft Corp 2.65 11/3/2022	594918BH6	3/18/2020	250,000	261,635	256,357	257,988	Aaa	AAA	1.41	764	
Toyota Motor Credit Corp 2.95 4/13/2021	89236TEU5	11/30/2018	215,000	218,014	214,639	213,398	Aa3	AA-	3.28	195	
Apple Inc 2.85 5/6/2021	037833AR1	1/16/2020	125,000	126,863	125,839	126,833	Aa1	AA+	1.71	218	
Subtotal/Average			4,841,000	4,939,037	4,892,162	4,909,346					
Municipal Bonds											
Culver City Redevelopment Agency Successor Agency	230340AM3	12/4/2017	780,000	780,913	779,927	777,582	None	AA-	2.11	32	
Palm Springs CA Cmnty Redevelopment Agency Success	69667ABS4	11/15/2017	135,000	136,739	134,586	133,292	None	AA-	2.35	336	
Subtotal/Average			915,000	917,651	914,513	910,874					
Total/Average			101,527,964	101,732,337	101,645,002	101,686,385					



EAST BAY MUNICIPAL UTILITY DISTRICT
Portfolio Management
Portfolio Details by Fund - Investments
September 30, 2020

Description	CUSIP	Settlement Date	Face Amount Shares	Market Value	Book Value	Cost Value	Moody's	S&P	YTM @ Cost	Days To Maturity
JPA:										
BACWA										
LAIF LGIP	LGIP1001	6/30/2011	2,262,600	2,262,600	2,262,600	2,262,600	NR	NR	0.78	1
Subtotal/Average			2,262,600	2,262,600	2,262,600	2,262,600				
DERWA										
LAIF LGIP	LGIP1001	2/1/2017	1,000,000	1,000,000	1,000,000	1,000,000	NR	NR	0.78	1
Subtotal/Average			1,000,000	1,000,000	1,000,000	1,000,000				
FRWA										
LAIF LGIP	LGIP1001	6/30/2011	1,000,000	1,000,000	1,000,000	1,000,000	NR	NR	0.78	1
Subtotal/Average			1,000,000	1,000,000	1,000,000	1,000,000				
IICP										
LAIF LGIP	LGIP1001	6/30/2011	150,500	150,500	150,500	150,500	NR	NR	0.78	1
Subtotal/Average			150,500	150,500	150,500	150,500				
UMRWA										
LAIF LGIP	LGIP1001	6/30/2011	64,000	64,000	64,000	64,000	NR	NR	0.78	1
Subtotal/Average			64,000	64,000	64,000	64,000				



EAST BAY MUNICIPAL UTILITY DISTRICT
Portfolio Management
Portfolio Details by Fund - Investments
September 30, 2020

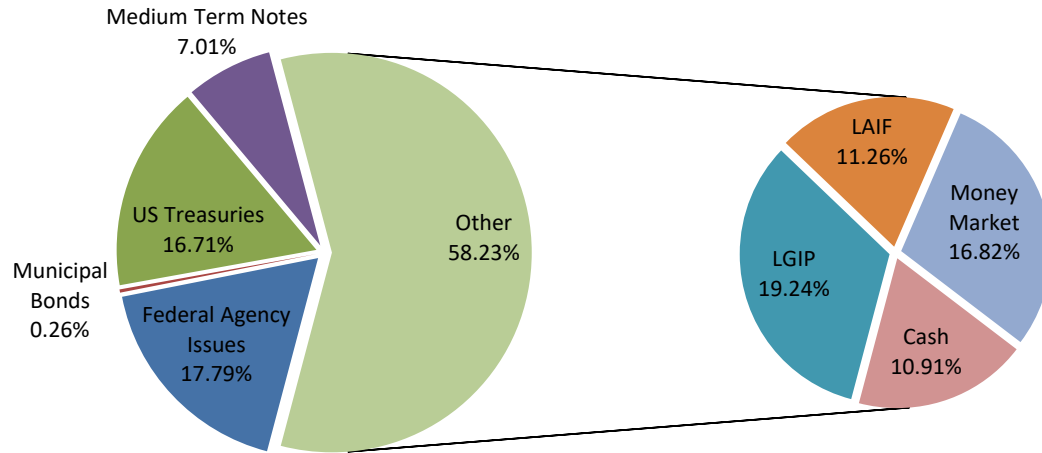
Description	CUSIP	Settlement Date	Face Amount Shares	Market Value	Book Value	Cost Value	Moodys	S&P	YTM @ Cost	Days To Maturity
Other:										
Employee Retirement System										
LAIF LGIP	LGIP1005	6/30/2011	16,645,423	16,645,423	16,645,423	16,645,423	NR	NR	0.78	1
Subtotal/Average			16,645,423	16,645,423	16,645,423	16,645,423				
FERC										
LAIF LGIP	LGIP1001	6/30/2011	2,000,000	2,000,000	2,000,000	2,000,000	NR	NR	0.78	1
Subtotal/Average			2,000,000	2,000,000	2,000,000	2,000,000				
Cash										
WELLS FARGO Cash	CASH2017	4/1/2017	88,788,069	88,788,069	88,788,069	88,788,069	NR	NR	0.01	1
Subtotal/Average			88,788,069	88,788,069	88,788,069	88,788,069				



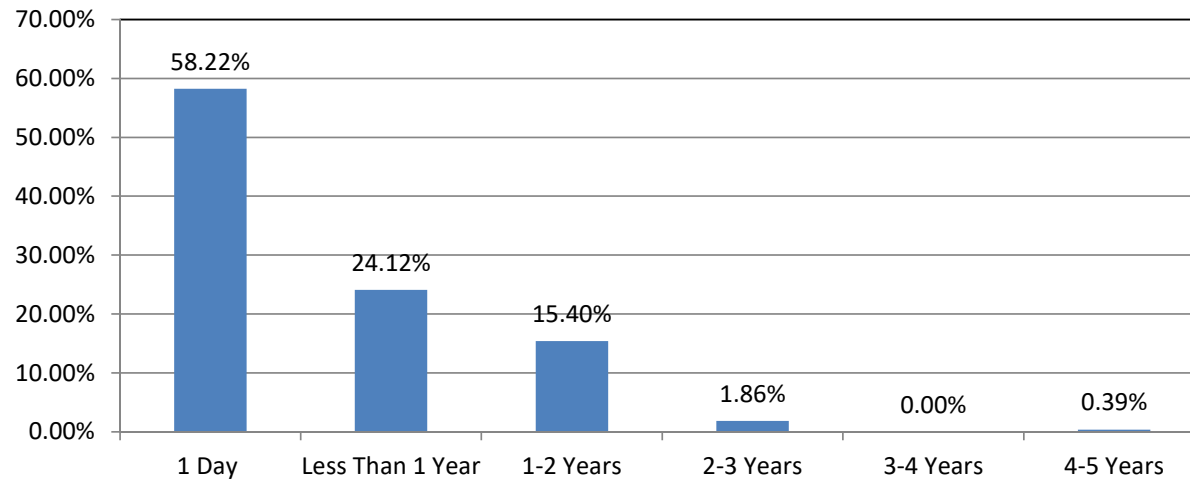
EAST BAY MUNICIPAL UTILITY DISTRICT
Investment Portfolio
Yield and Composition - by Asset Class
September 30, 2020

ATTACHMENT B-1

Portfolio Holding Distribution by Asset Class



Portfolio Holdings Distribution by Maturity Range



Ratings & Amounts

U.S. Treasuries

T-Bill 34 + T-Note AA+ 136,000,000

Agency Bonds

FAMC	AA+	-
FFCB	AA+	13,460,000
FHLB	AA+	55,000,000
FHLMC	AA+	33,919,000
FNMA	AA+	42,435,000

Municipal Bonds

Municipal	AAA category	-
Municipal	AA category	2,090,000

Corporate Bonds

Corporate	AAA category	4,915,000
Corporate	AA category	52,171,000

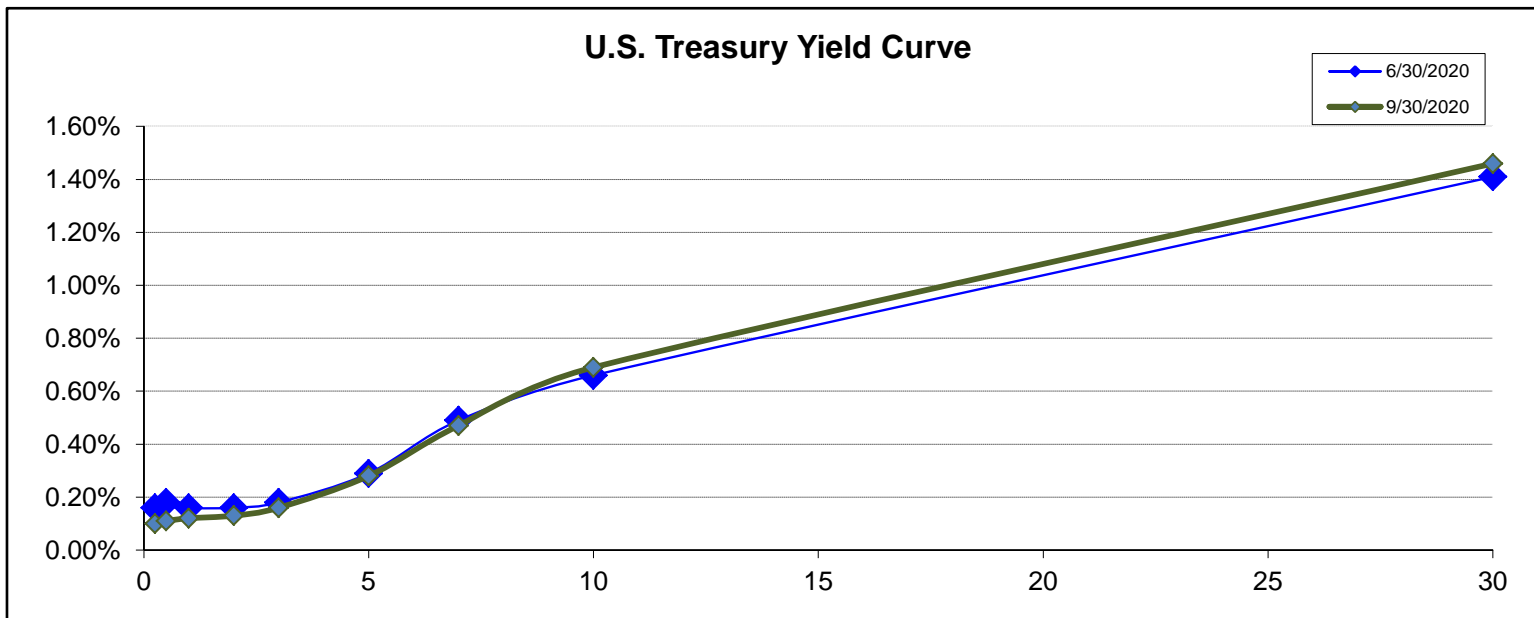
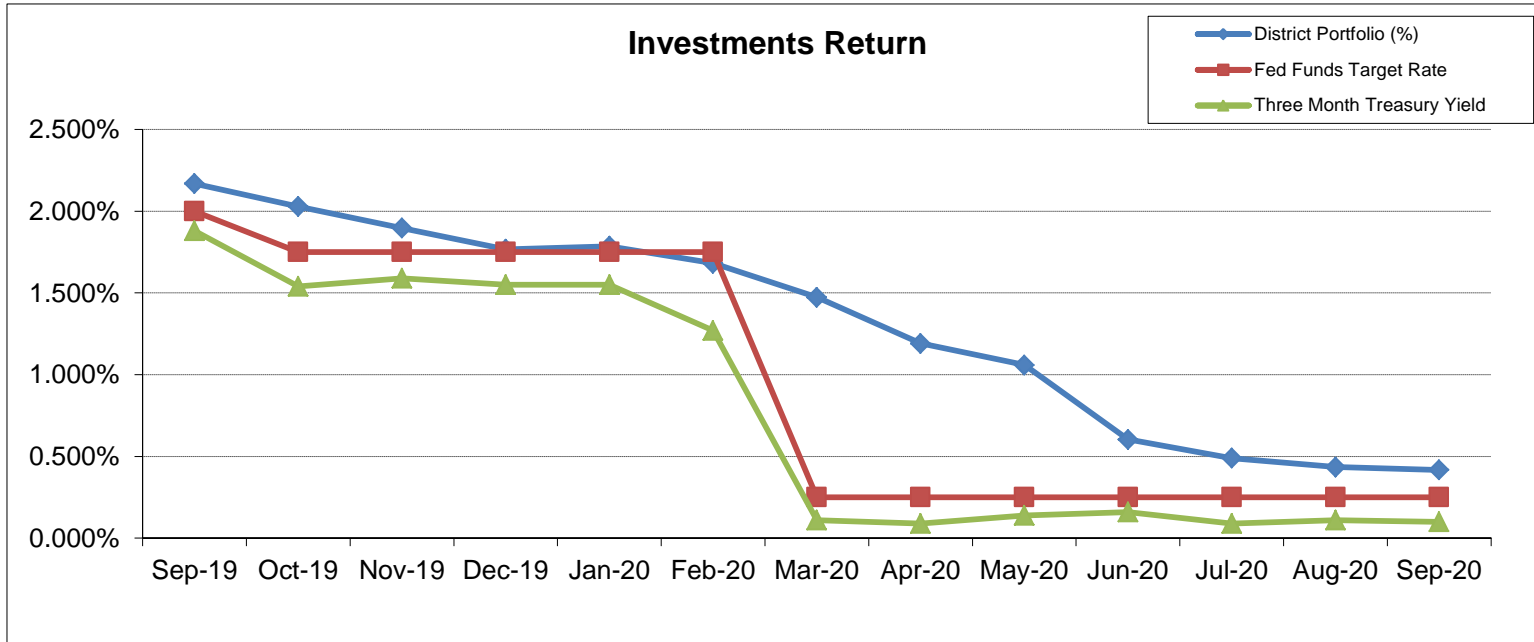
Overnight Liquidity

LGIP	AAAmf	156,544,280
MMF	AAAmf	136,887,509
LAIF	N/A	91,645,423
Cash	N/A	88,788,069

\$ 813,855,282



EAST BAY MUNICIPAL UTILITY DISTRICT
Investment Portfolio
Yield and Composition of Investment Portfolio
September 30, 2020





EAST BAY MUNICIPAL UTILITY DISTRICT
Investment Portfolio
Yield and Composition of Investment Portfolio
September 30, 2020

ATTACHMENT B-3

Projected Cash Flow (in \$Millions)

Water System

Month End	Matured Investments	Projected			Matured Reinvested
		Receipts	Disbursements	Cash & Investments	
Sep-20				666.1	
Oct-20	63.0	64.3	56.3	674.1	63.0
Nov-20	54.3	56.6	116.4	614.3	54.3
Dec-20	0.0	69.9	56.3	627.9	0.0
Jan-21	0.0	49.7	56.3	621.3	0.0
Feb-21	0.8	47.5	56.3	612.6	0.8
Mar-21	0.0	46.9	56.3	603.2	0.0

Wastewater System

Month End	Matured Investments	Projected			Matured Reinvested
		Receipts	Disbursements	Cash & Investments	
Sep-20				108.9	
Oct-20	0.0	9.2	10.5	107.6	0.0
Nov-20	7.1	26.2	19.5	114.3	7.1
Dec-20	0.0	9.2	10.5	113.0	0.0
Jan-21	0.0	9.2	10.5	111.7	0.0
Feb-21	1.4	9.2	10.5	110.4	1.4
Mar-21	0.0	9.2	10.5	109.1	0.0

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EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: October 22, 2020
MEMO TO: Board of Directors
THROUGH: Clifford C. Chan, General Manager *CC*
FROM: Sophia D. Skoda, Director of Finance *SDS*
SUBJECT: Monthly Investment Transactions Report

SUMMARY

In accordance with Policy 4.07 – Investment Policy, staff presents a monthly transactions report for the Finance/Administration Committee to review and for the Board to consider each month. The September 2020 report is being submitted for Board consideration. This report will be presented at the October 27, 2020 Finance/Administration Committee meeting.

DISCUSSION

Pursuant to Policy 4.07 – Investment Policy, staff generates a monthly report of investment transactions (buys, sales, deposits, withdrawals) as well as transactions that occur as a feature of the securities held (interest, calls, maturities). Information on portfolio performance, balances, and other factors are presented in the quarterly investment report.

In September 2020, the portfolio increased from \$795.3 million to \$813.9 million. Net transactions increased the total by \$18.5 million. Interest received added \$0.1 million to the portfolio. Deposits into short-term liquidity funds totaled \$27.4 million and \$21.4 million was withdrawn. The District purchased \$45.5 million in securities, and \$35.5 million in securities matured. No securities were called and no securities were sold. Net transactions at the District's commercial bank resulted in an increase of \$2.6 million.

CCC:SDS:RLH

Attachment

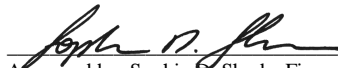
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Monthly Investment Transactions Report
September 2020

This report is presented to the Board pursuant to Government Code Section 53607 and in accordance with the District's Investment Policy 4.07.

The attached report details transactions in the District's portfolio as follows:

- **Monthly Investment Transactions Summary** **Page 1**
- **Monthly Investment Activity** **Page 2**
 - Buys Page 3
 - Deposits Page 4
 - Matured Page 5
 - Calls Page 6
 - Sales Page 7
 - Withdrawals Page 8
- **Monthly Interest Activity** **Page 9**
 - Interest Received (Transferred to Wells Fargo) Page 10
 - Interest Received (Reinvested) Page 11


Approved by: Sophia D. Skoda, Finance Director

10/12/2020
Date

SDS:AMM:aw



EAST BAY MUNICIPAL UTILITY DISTRICT
Monthly Investment Transactions Summary
September 2020

Portfolio	Beginning Balance*	Monthly Net Transaction Activity	Monthly Interest Activity	Ending Balance
001 - Water System Consolidated	591,610,119.77	8,780,000.00	26,605.57	600,416,725.34
007 - Wastewater Consolidated	100,303,309.01	1,215,000.00	9,655.27	101,527,964.28
049 - Ferc Partnership	2,000,000.00	-	-	2,000,000.00
009 - BACWA	2,262,600.00	-	-	2,262,600.00
015 - DERWA	1,000,000.00	-	-	1,000,000.00
002 - FRWA	1,000,000.00	-	-	1,000,000.00
014 - IICP	150,500.00	-	-	150,500.00
010 - UMRWA	64,000.00	-	-	64,000.00
003 - Employees Retirement	10,666,423.40	5,979,000.00	-	16,645,423.40
099 - Wells Fargo**	86,198,177.21	2,569,361.55	20,529.98	88,788,068.74
Total	795,255,129.39	18,543,361.55	56,790.82	813,855,281.76

* Portfolio balance presented at face value.

**Wells Fargo's month-end available balance per bank statement. Gross amount; not allocated by fund and not included in balances above.

Anjanique Walsh
 Prepared by: Anjanique Walsh, Accounting Technician

10/6/20
 Date

Sandy Lindley
 Reviewed by: Sandy Lindley, Accounting Supervisor

10/6/20
 Date

Andrea Miller
 Approved by: Andrea M. Miller, Controller

10/8/20
 Date



EAST BAY MUNICIPAL UTILITY DISTRICT
Monthly Investment Activity
September 2020

Portfolio	Buys	Deposits	Matured	Calls	Sales	Withdrawals	Non-Investment Transactions*	Net Transaction Activity
001 - Water System Consolidated	44,000,000.00	-	(35,220,000.00)	-	-	-	-	8,780,000.00
007 - Wastewater Consolidated	1,500,000.00	-	(285,000.00)	-	-	-	-	1,215,000.00
049 - Ferc Partnership	-	-	-	-	-	-	-	-
009 - BACWA	-	-	-	-	-	-	-	-
015 - DERWA	-	-	-	-	-	-	-	-
002 - FRWA	-	-	-	-	-	-	-	-
014 - IICP	-	-	-	-	-	-	-	-
010 - UMRWA	-	-	-	-	-	-	-	-
003 - Employees Retirement	-	27,374,000.00	-	-	-	(21,395,000.00)	-	5,979,000.00
065 - Water S2008A DSRF	-	-	-	-	-	-	-	-
068 - Water 2010A DSRF	-	-	-	-	-	-	-	-
Investment Activity Total	45,500,000.00	27,374,000.00	(35,505,000.00)	-	-	(21,395,000.00)	-	15,974,000.00
099 - Wells Fargo	(45,500,000.00)	(27,374,000.00)	35,505,000.00	-	-	21,395,000.00	18,543,361.55	2,569,361.55
Total	-	-	-	-	-	-	18,543,361.55	18,543,361.55

*Non-investment transactions are net receipts and expenditures in Wells Fargo resulting from activities other than investment and interest transactions detailed in this report.

Reviewed by: Damien Charléty, Principal Mgmt Analyst

Date

10/12/2020

Approved by: Robert L. Hannay, Treasury Manager

Date



EAST BAY MUNICIPAL UTILITY DISTRICT
 Monthly Investment Activity
 September 2020

Portfolio Name	Asset Class	Description	CUSIP/Ticker	Trade Date	Settlement Date	Maturity Date	Face Amount/Shares	Principal	Interest/Dividends	Total
Buys										
001 - Water System Consolidated	Federal Agency Issues Coupon	FNMA 1.5 11/27/2020-15	3136G06A4	09/01/2020	09/02/2020	11/27/2020	10,000,000.00	10,033,040.00	39,583.33	10,072,623.33
001 - Water System Consolidated	US Treasuries	T-Bill 0 10/27/2020	9127964K2	09/01/2020	09/02/2020	10/27/2020	34,000,000.00	33,995,325.00	0.00	33,995,325.00
					Total		44,000,000.00			
007 - Wastewater Consolidated	Federal Agency Issues Coupon	FNMA 1.5 11/30/2020	3135G0F73	09/25/2020	09/28/2020	11/30/2020	1,500,000.00	1,503,615.00	7,375.00	1,510,990.00
					Total		1,500,000.00			

45,500,000.00 45,531,980.00 46,958.33 45,578,938.33



EAST BAY MUNICIPAL UTILITY DISTRICT
 Monthly Investment Activity
 September 2020

Portfolio Name	Asset Class	Description	CUSIP/Ticker	Trade Date	Settlement Date	Maturity Date	Face Amount/Shares	Principal	Interest/Dividends	Total
Deposits										
003 - Employees Retirement	LAIF	LAIF LGIP	LGIP1005	09/02/2020	09/02/2020	N/A	19,000,000.00	19,000,000.00	0.00	19,000,000.00
003 - Employees Retirement	LAIF	LAIF LGIP	LGIP1005	09/04/2020	09/04/2020	N/A	4,188,000.00	4,188,000.00	0.00	4,188,000.00
003 - Employees Retirement	LAIF	LAIF LGIP	LGIP1005	09/18/2020	09/18/2020	N/A	4,186,000.00	4,186,000.00	0.00	4,186,000.00
Total							27,374,000.00			

27,374,000.00 27,374,000.00 0.00 27,374,000.00



EAST BAY MUNICIPAL UTILITY DISTRICT
Monthly Investment Activity
September 2020

Portfolio Name	Asset Class	Description	CUSIP/Ticker	Trade Date	Settlement Date	Maturity Date	Face Amount/Shares	Principal	Interest/Dividends	Total
Matured										
001 - Water System Consolidated	Municipal Bonds	Alameda County Improvement Commissio	010775BA1	09/01/2020	09/01/2020	09/01/2020	225,000.00	225,000.00	0.00	225,000.00
001 - Water System Consolidated	Municipal Bonds	Santa Cruz County Redevelopment Succ	80182YCR6	09/01/2020	09/01/2020	09/01/2020	760,000.00	760,000.00	0.00	760,000.00
001 - Water System Consolidated	Municipal Bonds	Yorba Linda Redevelopment Agency Suc	986176AP0	09/01/2020	09/01/2020	09/01/2020	235,000.00	235,000.00	0.00	235,000.00
001 - Water System Consolidated	US Treasuries	T-Bill 0 9/29/2020	9127964A4	09/29/2020	09/29/2020	09/29/2020	34,000,000.00	34,000,000.00	0.00	34,000,000.00
					Total		35,220,000.00			
007 - Wastewater Consolidated	Municipal Bonds	Palm Springs CA Cmnty Redevelopment	69667ABR6	09/01/2020	09/01/2020	09/01/2020	285,000.00	285,000.00	0.00	285,000.00
					Total		285,000.00			
							35,505,000.00	35,505,000.00	0.00	35,505,000.00



EAST BAY MUNICIPAL UTILITY DISTRICT
Monthly Investment Activity
September 2020

Portfolio Name	Asset Class	Description	CUSIP/Ticker	Trade Date	Settlement Date	Maturity Date	Face Amount/Shares	Principal	Interest/Dividends	Total
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Calls

No Transactions this Period

0.00 0.00 0.00 0.00



EAST BAY MUNICIPAL UTILITY DISTRICT
Monthly Investment Activity
September 2020

Portfolio Name	Asset Class	Description	CUSIP/Ticker	Trade Date	Settlement Date	Maturity Date	Face Amount/Shares	Principal	Interest/Dividends	Total
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Sales

No Transactions this Period

0.00 0.00 0.00 0.00



EAST BAY MUNICIPAL UTILITY DISTRICT
 Monthly Investment Activity
 September 2020

Portfolio Name	Asset Class	Description	CUSIP/Ticker	Trade Date	Settlement Date	Maturity Date	Face Amount/Shares	Principal	Interest/Dividends	Total
Withdrawals										
003 - Employees Retirement	LAIF	LAIF LGIP	LGIP1005	09/03/2020	09/03/2020	N/A	10,780,000.00	10,780,000.00	0.00	10,780,000.00
003 - Employees Retirement	LAIF	LAIF LGIP	LGIP1005	09/29/2020	09/29/2020	N/A	10,615,000.00	10,615,000.00	0.00	10,615,000.00
Total							21,395,000.00			

21,395,000.00 21,395,000.00 0.00 0.00



EAST BAY MUNICIPAL UTILITY DISTRICT
Monthly Interest Activity
September 2020

Portfolio	Total Interest Received	Interest Transferred to Wells Fargo*	Net Interest Activity (Reinvested)**
001 - Water System Consolidated	42,878.01	(16,272.44)	26,605.57
007 - Wastewater Consolidated	13,912.81	(4,257.54)	9,655.27
049 - Ferc Partnership	-	-	-
009 - BACWA	-	-	-
015 - DERWA	-	-	-
002 - FRWA	-	-	-
014 - IICP	-	-	-
010 - UMRWA	-	-	-
003 - Employees Retirement	-	-	-
065 - Water S2008A DSRF	-	-	-
068 - Water 2010A DSRF	-	-	-
Interest Transactions Total	56,790.82	(20,529.98)	36,260.84
099 - Wells Fargo	-	20,529.98	20,529.98
Total	56,790.82	-	56,790.82

*Coupon and other interest received; reinvestment unavailable.

**Coupon and other interest payments reinvested in specific portfolio.

Anjanique Walsh
 Prepared by: Anjanique Walsh, Accounting Technician

Sandy Lindley
 Reviewed by: Sandy Lindley, Accounting Supervisor

Andrea Miller
 Approved by: Andrea M. Miller, Controller

10/6/20
 Date

10/6/20
 Date

10/8/20
 Date



EAST BAY MUNICIPAL UTILITY DISTRICT
 Monthly Interest Activity
 September 2020

Portfolio Name	Asset Class	Description	CUSIP/Ticker	Trade Date	Settlement Date	Maturity Date	Face Amount/Shares	Principal	Interest/Dividends	Total
Interest Received (Transferred to Wells Fargo)										
001 - Water System Consolidated	Municipal Bonds	Alameda County Improvement Commission	010775BA1	09/01/2020	09/01/2020	09/01/2020	0.00	0.00	2,250.00	2,250.00
001 - Water System Consolidated	Municipal Bonds	Santa Cruz County Redevelopment Success	80182YCR6	09/01/2020	09/01/2020	09/01/2020	0.00	0.00	7,638.00	7,638.00
001 - Water System Consolidated	Municipal Bonds	Yorba Linda Redevelopment Agency Succes	986176AP0	09/01/2020	09/01/2020	09/01/2020	0.00	0.00	2,056.25	2,056.25
001 - Water System Consolidated	Municipal Bonds	Yorba Linda Redevelopment Agency Succes	986176AR6	09/01/2020	09/01/2020	09/01/2022	0.00	0.00	4,106.25	4,106.25
001 - Water System Consolidated	Money Market Mutual Funds	Fidelity Investments MM	MM4022	09/30/2020	09/30/2020	N/A	0.00	0.00	221.94	221.94
								Total		16,272.44
007 - Wastewater Consolidated	Municipal Bonds	Palm Springs CA Cmnty Redevelopment Ag	69667ABR6	09/01/2020	09/01/2020	09/01/2020	0.00	0.00	2,850.00	2,850.00
007 - Wastewater Consolidated	Municipal Bonds	Palm Springs CA Cmnty Redevelopment Ag	69667ABS4	09/01/2020	09/01/2020	09/01/2021	0.00	0.00	1,350.00	1,350.00
007 - Wastewater Consolidated	Money Market Mutual Funds	Fidelity Investments MM	MM4022	09/30/2020	09/30/2020	N/A	0.00	0.00	57.54	57.54
								Total		4,257.54

0.00 0.00 20,529.98 20,529.98



EAST BAY MUNICIPAL UTILITY DISTRICT
Monthly Interest Activity
September 2020

Portfolio Name	Asset Class	Description	CUSIP/Ticker	Trade Date	Settlement Date	Maturity Date	Face Amount/Shares	Principal	Interest/Dividends	Total
Interest Received (Reinvested)										
001 - Water System Consolidated	Local Government Investment Pool	CalTRUST LGIP	CALTRUST923C	09/30/2020	09/30/2020	N/A	0.00	0.00	2,309.91	2,309.91
001 - Water System Consolidated	Local Government Investment Pool	CAMP LGIP	CAMP6035	09/30/2020	09/30/2020	N/A	0.00	0.00	21,686.46	21,686.46
001 - Water System Consolidated	Money Market Mutual Funds	Federated MM	MM3767	09/30/2020	09/30/2020	N/A	0.00	0.00	2,160.35	2,160.35
001 - Water System Consolidated	Money Market Mutual Funds	Morgan Stanley IMM	0852	09/30/2020	09/30/2020	N/A	0.00	0.00	448.85	448.85
								Total		26,605.57
007 - Wastewater Consolidated	Local Government Investment Pool	CAMP LGIP	CAMP6035	09/30/2020	09/30/2020	N/A	0.00	0.00	8,980.72	8,980.72
007 - Wastewater Consolidated	Money Market Mutual Funds	Federated MM	MM3767	09/30/2020	09/30/2020	N/A	0.00	0.00	558.76	558.76
007 - Wastewater Consolidated	Money Market Mutual Funds	Morgan Stanley IMM	0852	09/30/2020	09/30/2020	N/A	0.00	0.00	115.79	115.79
								Total		9,655.27
							0.00	0.00	36,260.84	36,260.84

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: October 22, 2020

MEMO TO: Board of Directors

THROUGH: Clifford C. Chan, General Manager *CC*

FROM: Sophia D. Skoda, Director of Finance *SDS*

SUBJECT: Water Infrastructure Finance and Innovation Act (WIFIA) Loan Letter of Interest

SUMMARY

In early October 2020, the District submitted a Letter of Interest (LOI) for the WIFIA loan program that is administered by the U.S. Environmental Protection Agency (EPA). The LOI is the first step in the application process for a federal WIFIA loan. The full process is expected to take more than a year until a loan would be finalized and executed. This item will be discussed at the October 27, 2020 Finance/Administration Committee meeting.

DISCUSSION

Since the inception of the WIFIA, the District has been monitoring the suitability of the loan program to fund capital projects. With the evolution of the program structure and with U.S. Treasury rates falling, staff believes pursuing a WIFIA loan may now be financially beneficial to the District. A WIFIA loan has the potential to provide the District a low-interest, flexible method of borrowing for capital projects. There are consulting costs associated with preparing an application that staff will consider before moving forward with a full application.

In early October, the District submitted an LOI to EPA in order to demonstrate the District's eligibility, financial creditworthiness, project engineering feasibility, and alignment with WIFIA selection criteria. EPA will decide whether to invite the District to formally apply for a WIFIA loan. At the advice of the District's outside municipal advisors, the District included a broad array of water treatment-related projects, including the Orinda Water Treatment Plant (WTP) Disinfection Improvements Project, the Chemical Safety System Improvements Project, and the Walnut Creek WTP Pretreatment Project, among others. In the event the District is invited to submit an application, staff will work with EPA to refine the project list according to priorities and preferences of the District and EPA. EPA is able to fund 49 percent of specific project costs with WIFIA loan proceeds. The District would fund the remainder of project costs with a mix of rate revenue and bond proceeds.

The cost estimates of the projects included in the LOI total \$908 million over the next 10 years. The cost and timelines of these projects have not been finalized and securing a WIFIA loan does not bind the District to pursue these projects. Loan proceeds would be dispersed on a

reimbursement basis, meaning the District would expend dollars and then be reimbursed with loan proceeds, similar to a State Revolving Fund (SRF) loan.

The interest rate of a WIFIA loan is based on taxable U.S. Treasury rates at the time of the loan closing and the weighted average life of the loan. As of October 5, 2020, the District's municipal advisor estimates the loan interest rate would be 1.14 percent. This is lower than the District's current revenue bond borrowing cost of about 3 percent, though the relationship between the District's bond rates and U.S. Treasury rates could change between now and a future loan closing date. Borrowing under a WIFIA loan would likely offset borrowing the District would otherwise pursue with revenue bonds.

NEXT STEPS

The District is waiting for feedback on the LOI from EPA with the goal to receive an invitation to officially apply for a loan. At that point, the District will decide whether or not to submit a full application and, if so, will finalize the list of projects to finance with the loan as part of the full application. Staff will provide the Finance/Administration Committee feedback from the EPA on the LOI and next steps if the District is invited to apply.

CCC:SDS:RLH

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: October 22, 2020

MEMO TO: Board of Directors

THROUGH: Clifford C. Chan, General Manager *CC*

FROM: David A. Briggs, Manager of Water Operations *DB*

SUBJECT: Fiscal Year 2020 Annual Power Sales Report

SUMMARY

The attached Fiscal Year 2020 (FY20) Annual Power Sales Report summarizes program activities for the period July 1, 2019 through June 30, 2020. Revenue in FY20 was \$5.5 million and exceeded budgeted revenue of \$5.0 million. Forecasted power revenue for Fiscal Year 2021 is \$6.7 million. The FY20 Annual Power Sales Report will be presented at the October 27, 2020 Finance/Administration Committee meeting.

RECOMMENDATION

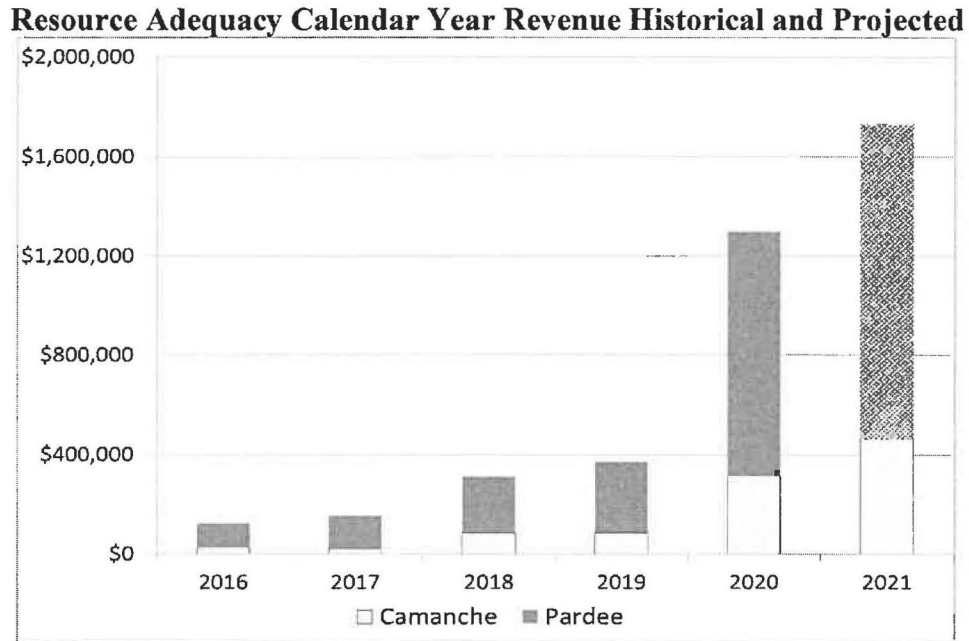
Accept the FY20 Annual Power Sales Report, pursuant to Board Resolution No. 33240-01.

DISCUSSION

In October 1999, the District and the Pacific Gas and Electric Company terminated their long-term power sales agreement. Since then the District has sold power under Board Resolution Nos. 33157-99, 33240-01, and 33375-03. These resolutions delegate authority to staff to buy and sell power, and require monthly and annual power sales reporting to the Board.

District staff now conducts energy transactions through a series of agreements. On June 23, 2015, the Board approved an agreement with Marin Clean Energy (MCE) for sale of energy and Renewable Energy Credits (RECs). The authority was expanded on September 13, 2016 to allow for the sale of Resource Adequacy (RA). On October 13, 2015, the Board approved a five-year enabling agreement with Shell Energy for sale of energy, RECs, and RA when necessary. This agreement will expire on December 31, 2020. A third agreement with 3 Phases Renewables, Inc. (3 Phases) was executed on September 25, 2018 for the sale of RA for calendar year 2019 with options for an additional four years. The Board will consider at the October 27, 2020 Regular Board meeting a general authorization for staff to sell RA and RECs to East Bay Community Energy (EBCE) for five years beginning in 2021 when EBCE is cost competitive.

The expansion of Community Choice Aggregators in California in the past few years and changes to the California Independent System Operator (CAISO) rules for RA has led to a tenfold increase in the value of RA in recent years as shown in the chart below.



More information on energy sales, purchases, and definitions of terms is included in the attached report.

CCC:DAB:sd

Attachment

ANNUAL POWER SALES REPORT

FISCAL YEAR 2020

CONTENTS

- **FY20 ENERGY SALES AND PURCHASES**
- **FY21 PROJECTED ENERGY SALES AND PURCHASES**
- **OTHER EFFORTS**
- **NEXT STEPS**

**Annual Power Sales Report
Fiscal Year 2020**

In June 2020, the District completed its 25th year of operation as an independent power producer. The District also completed its fifth year of delivering power to MCE under a ten-year Power Purchase Agreement (PPA). This is the primary agreement for sale of hydroelectric power and RECs. A separate agreement authorizes the sale of RA. RA is a regulatory requirement for electric load serving entities to improve statewide grid reliability by ensuring load serving entities procure sufficient generator capacity commitments from actual resources. RA sales are exercised through a competitive bid process. The District completed sales of Pardee RA to Shell Energy for FY20 under a PPA that enables the sale of energy, RECs, and RA. In addition, sales of Camanche RA to 3 Phases continued in FY20.

The FY20 net power revenue of \$5.5 million was greater than the budgeted revenue of \$5.0 million. Actual runoff was less than budget projections¹, generation was greater than budget (2 percent greater), energy pricing was less than budget (89 percent of budget), and RA revenue was greater than budget (660 percent greater). A quarterly update of hydropower revenue was provided to the District's Budget Office.

FY20 ENERGY SALES AND PURCHASES

The following table shows earned revenue and transaction costs by month.

Month	Generation (MWh)	FY20 REVENUE/COSTS					
		APX Fees	MCE Energy	MCE RECs	RA Sales	Other REC Sales	CAISO
Jul-19	23,878	-\$7,570	\$658,909	\$151,753	\$29,136		\$17,535
Aug-19	12,793	-\$7,570	\$424,018	\$82,824	\$25,846		\$54,359
Sep-19	9,851	-\$7,570	\$366,251	\$61,705	\$24,107		\$10,749
Oct-19	11,351	-\$7,570	\$413,113	\$70,686	\$26,074		\$12,567
Nov-19	6,307	-\$7,570	\$290,096	\$40,145	\$14,122		\$27,911
Dec-19	7,436	-\$7,570	\$315,469	\$48,034	\$29,200		\$24,781
Jan-20	6,499	-\$7,570	\$227,607	\$61,250	\$124,960	\$32,250	\$174
Feb-20	3,902	-\$7,570	\$115,142	\$35,870	\$122,930	\$62,000	\$6,410
Mar-20	3,508	-\$7,570	\$85,442	\$28,780	\$119,150	\$86,874	-\$11,159
Apr-20	14,579	-\$7,570	\$305,523	\$132,140	\$139,100		-\$7,697
May-20	4,988	-\$7,570	\$80,288	\$34,820	\$146,240		\$18,984
Jun-20	7,000	-\$7,570	\$226,000	\$57,560	\$141,130	\$30,306	\$16,377
Total	112,092	-\$90,840	\$3,507,858	\$805,567	\$941,995	\$211,430	\$170,992
TOTAL NET REVENUE							\$5,547,002

¹ For budgeting purposes, staff assumes runoff associated with a 65 percent exceedance, a moderately dry scenario. Water year 2020 yielded runoff equivalent to a 75 percent exceedance (drier than assumed).

Generation: Mokelumne power generation was less than the forecasted due to less than forecasted runoff conditions. The FY20 generation forecast initially projected 148,439 MWh while actual generation was 112,092 MWh. Where possible, daily generation plans maximized energy production during the peak energy pricing hours. In FY20, this strategy increased revenue by an estimated \$330,000. All generation optimization adhered to prescribed ramping criteria and District flow requirements.

APX Fees: The APX, Inc. (APX) provides scheduling service and settlement calculations for the District's water and wastewater power sales transactions.

MCE Sales: Sales occurred under the ten-year PPA, which terminates on June 30, 2025. This agreement includes the sale of hydroelectric energy and RECs with options to purchase RA. Staff is negotiating an amendment to the PPA that will simplify the scheduling process and result in lower scheduling costs and receipt of energy revenue up to two months earlier.

- Energy: The monthly energy revenue is the sum of the daily energy delivered to MCE per schedule at the corresponding price index as defined in the contract.
- RECs: The Camanche and Pardee power plants are considered renewable energy resources per the California Renewable Portfolio Standard and provide bundled RECs to counterparties. The District transfers bundled RECs associated with its generation to MCE at a set price. Excess bundled RECs can be sold to Shell Energy through a contract that will end on December 2020, or retained to help the District meet its greenhouse gas emissions goal outlined in the District's Policy 7.07 – Energy.

Shell Energy Sales: Sales occurred under the five-year enabling PPA, which will terminate on December 31, 2020. This agreement includes the sale of hydroelectric energy, RECs (both secondary to the MCE Agreement) and RA.

- Energy: No energy sales to Shell in FY20
- RECs: Sale of 7,540 unscheduled bundled RECs for \$94,250
- RA: Six months of RA sales occurred from January 2020 through June 2020 for Pardee, enhancing revenue by \$591,000.

3 Phases Sales: Sales occurred under the five-year enabling PPA, which will terminate on December 31, 2023. This agreement is solely for sale of RA.

- RA: Sales occurred from July 2019 through June 2020, enhancing revenue by \$350,994.

CleanFuture: An opportunity to sell unbundled RECs at a rate significantly above the market rate materialized resulting in additional revenue of \$117,180.

California Independent System Operator (CAISO): CAISO pays or charges a generator when they are over or under their scheduled generation in real time. There is a continuous deviation from scheduled generation due to line losses, changes in power station consumption, intentional generation changes, and electrical system emergencies. The payment or charge for these

scheduled deviations is netted out over the month, and includes CAISO fees to schedule and access the electrical grid. These payments and charges are collectively reported as CAISO sales in this report. CAISO sales are budgeted based on historical charges and generation, and include ancillary sales of standby generation capacity. Deviations from the monthly and weekly power sales plans occur after daily adjustments are made to accommodate water quality, diversions from other water rights holders, and to ensure adequate cold water for fishery releases. The Mokelumne River's average annual runoff is 745 thousand acre feet (TAF). For the water year ending September 30, 2020, the total runoff was approximately 420 TAF.

FY21 PROJECTED ENERGY SALES AND PURCHASES

The forecasted FY21 Mokelumne power revenue is \$6.7 million. This forecast is based on: revenue earned through September 2020, a median water year (50 percent exceedance) forecast for the remainder of the fiscal year, monthly average energy pricing of approximately \$26/MWh, REC pricing per the contract with MCE, and RA pricing per the existing agreements with Shell and 3 Phases. Power revenue includes energy, RECs and RA sales, APX, and CAISO fees.

Month	Generation (MWh)	FORECASTED FY21 REVENUE					
		Price (\$/MWh)	APX Fees	Energy	Resource Adequacy	RECs	CAISO
Jul-20	4,187	\$34	-\$7,570	\$137,217	\$101,150	\$38,630	\$3,938
Aug-20	5,584	\$103	-\$7,570	\$553,810	\$89,320	\$50,290	\$23,672
Sep-20	4,750	\$72	-\$7,570	\$345,000	\$83,720	\$38,900	-\$2,497
Oct-20	9,100	\$34	-\$7,570	\$307,125	\$86,720	\$63,700	-\$5,460
Nov-20	8,400	\$45	-\$7,570	\$381,175	\$45,780	\$58,800	-\$5,040
Dec-20	8,200	\$41	-\$7,570	\$337,709	\$99,220	\$57,400	-\$4,920
Jan-21	9,600	\$35	-\$7,570	\$336,480	\$26,460	\$96,000	-\$5,760
Feb-21	14,800	\$31	-\$7,570	\$461,020	\$24,430	\$148,000	-\$8,880
Mar-21	14,900	\$19	-\$7,570	\$284,024	\$20,650	\$149,000	-\$8,940
Apr-21	21,000	\$20	-\$7,570	\$429,030	\$40,600	\$210,000	-\$12,600
May-21	29,500	\$22	-\$7,570	\$645,755	\$47,740	\$295,000	-\$17,700
Jun-21	27,400	\$20	-\$7,570	\$548,000	\$42,630	\$191,800	-\$16,440
Total	157,421	\$26	-\$90,840	\$4,766,345	\$708,420	\$1,397,520	-\$60,627
July – Sept actual earned revenue					TOTAL NET REVENUE \$6,720,818		

OTHER EFFORTS

Staff will manage the following RA contracts in FY21:

- Close out the first year and begin the second year of a three-year contract with 3 Phases for sale of Camanche RA with total revenue potential of \$425,390
- Close out the one-year RA Pardee sales agreement with Shell Energy with total revenue potential of \$395,000
- Finalize efforts to contract with EBCE for Pardee RA in calendar year 2021 with total revenue potential of \$740,050 in FY21

Potential total RA revenue for FY21 could reach \$1,560,440.

Staff will consider the option to extend the existing Shell Energy sales agreement for energy, RECs and RA. This action will provide the District with additional sales flexibility to maximize hydropower revenue.

NEXT STEPS

During FY21, staff plans to:

- Solicit RA pricing for Pardee for calendar year 2022 from MCE, Shell Energy, 3 Phases, EBCE, and possibly others to maximize the value of the District's RA.
- Complete the upgrade of the 56K digital revenue meter data line and router at the Pardee power plant as required by the CAISO.