

Biennial Budget

Fiscal Years
2022 & 2023



Water System

Wastewater
System

Photos on cover:

Top photo shows 1929 Pardee Tunnel construction.

Bottom photo shows 2018 Lafayette Aqueduct repair.

East Bay Municipal Utility District
Biennial Budget
Fiscal Years 2022 and 2023

Volume 1 **District Overview**
Water System
Wastewater System

Volume 2 Supplemental Material:
Capital Project Summaries

Adopted by the Board of Directors
June 8, 2021



*Section of Mokelumne Aqueduct Pipe, used for float in the N.R.A. parade in Oakland, Sept. 29, 1933,
Construction photographs of Pardee Dam, California, UC Berkeley, Bancroft Library*

Note: The parade was in support of the National Recovery Administration, a government agency established by President Franklin D. Roosevelt to stimulate economic recovery through fair-practice codes during the Great Depression.

**EAST BAY MUNICIPAL UTILITY DISTRICT
BIENNIAL BUDGET FY22 & FY23
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BIENNIAL BUDGET FY22 & FY23
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SUPPLEMENTAL VOLUME

Capital Project Summaries

Note: Totals for charts and tables throughout the document may not sum due to rounding.

July 1, 2021

Honorable Members of the Board of Directors:

I am pleased to present the water and wastewater budgets for Fiscal Years 2022 (FY22) and 2023 (FY23) that support our mission to provide reliable, high quality water and wastewater services for the people of the East Bay.

In 1923, residents of the eastern San Francisco Bay voted to establish the East Bay Municipal Utility District forging the way for publicly-owned high quality water service. After 100 years of operation, our services remain sustainable and resilient regardless of the situations we have faced, from the current pandemic, Public Safety Power Shutoffs events to earthquakes, droughts, fires, and economic crises. We are proud to look back on almost a century of serving the East Bay community.



Then and now: Field Staff

In 2020, during my first year as General Manager, many challenges faced our communities and the nation ranging from the COVID-19 pandemic and high unemployment to racial equity and social justice concerns. At the start of the pandemic, EBMUD ceased water shutoffs before it was mandated by the State of California. We recognized the importance of our water and wastewater services to our customers especially with battling the COVID-19 pandemic. Our ability to respond to these and many other challenges are critical to keeping the East Bay community connected, healthy, and thriving.

The timeline for recovery from the COVID-19 pandemic and its long-term impacts remain unknown. From the launch of the development of this biennial budget, it was clear the budget would have to balance the need to be cautious, flexible, and realistic to respond to the changing landscape. The FY22 and FY23 biennial budget balances the economic realities and struggles of our customers with the need to continue to move forward with critical infrastructure projects and maintenance work.

Resources have been prioritized to achieve Strategic Plan goals and expand new initiatives while maintaining fair and reasonable water and wastewater rates. The FY22 and FY23 biennial budget supports:

- Water affordability through lower rate increases than previously projected,
- Ongoing critical maintenance activities,
- Key infrastructure investments,
- Racial justice and social equity initiatives,
- K-12 school education program outreach, and
- Customer Support Program enhancements.

CUSTOMER BILL IMPACTS

The FY22 and FY23 rates and customer bill impacts are shown in the below table. Water rates are one full percent below what was projected two years ago (a 20 percent reduction) while the wastewater rates are as forecasted in the prior biennial budget. Single family residential customers continue to consume on average 8 centum cubic feet (CCF) of water per month (about 200 gallons per day). Almost half of our customers also receive wastewater treatment services, and their average bill is based on discharging 6 CCF per month of their total water use to the sewer system. The table below shows the overall rate increases and the impact on the average monthly bill for our water and wastewater customers.

FY22 & FY23 Overall Rate & Average Monthly Bill Increase

	Water System		Wastewater System	
	<u>FY22</u>	<u>FY23</u>	<u>FY22</u>	<u>FY23</u>
% Rate Increase	4.0%	4.0%	4.0%	4.0%
Avg. Bill Increase	\$2.53	\$2.66	\$0.89	\$0.98

The attachment to this message shows the bill impact for a range of use levels. Wastewater customers also pay an annual Wet Weather Facilities Charge collected on the property tax bill. The annual charge is based on lot size and will increase 4.0 percent in FY22 or \$4.64 for the smallest lots to \$16.52 for the largest lots. In FY23, the charge will increase an additional 4.0 percent ranging from \$4.82 to \$17.18 per year.

The rate increases reflect the revenue necessary to meet the budget needs and are consistent with the District’s 2015 Water and 2019 Wastewater Cost of Service studies that allocate costs among customer classes based on usage characteristics. State law requires basing rates and charges on the cost of service.

NEGOTIATING LABOR AGREEMENTS

District employees are represented by American Federation of State, County and Municipal Employees (AFSCME) Local 2019, AFSCME Local 444, International Federation of Professional and Technical Engineers Local 21, and International Union of Operating Engineers Local 39. The labor agreements expire in April 2021. The District is in the process of negotiating agreements with represented employees, and working with management and non-represented employees as well.

BUDGET OVERVIEW

Reaching from the Sierra Nevada foothills to the San Francisco Bay, the District operates and maintains a vast network of pipelines, storage reservoirs, and treatment facilities to deliver clean, healthy water to customers and provide wastewater service. Maintaining high quality service requires ongoing investments in this infrastructure, some of which is over 100 years old.

The development of this biennial budget and the five-year capital improvement program was guided by our Strategic Plan. Our main budget priorities are to continue investments in and maintenance of aging infrastructure, and provide for long-term financial stability.

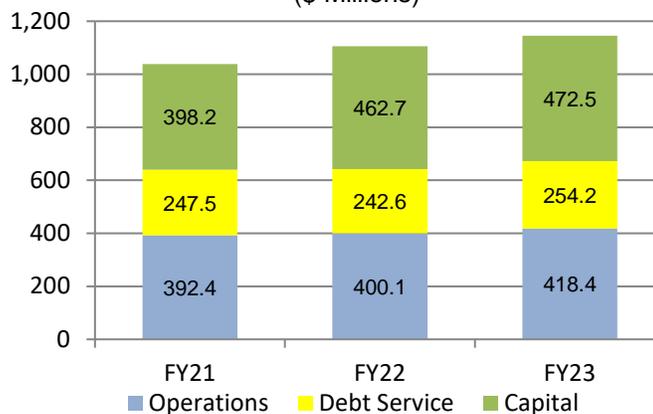
The budget was developed after assessing facilities and determining the highest priority projects based on safety, reliability, water quality, regulatory compliance, cost-effectiveness, and improving service to our customers.

The following table shows the budget appropriations for FY22 and FY23 for the Water System and Wastewater System operations, debt service, and capital appropriation compared to FY21. The operations budget reflects the day-to-day costs to provide water and wastewater services such as electricity, chemicals, and labor. The debt service budget includes the interest and principal on bonds issued to pay for capital investments in infrastructure along with other debt-related costs. The capital appropriation budget includes funding for capital projects such as replacing pipes, upgrading water treatment plants, and rehabilitating our wastewater treatment plant.

FY21, FY22, AND FY23 APPROPRIATIONS (\$ Millions)					
	FY21 Budget	FY22 Budget	% Chg	FY23 Budget	% Chg
Water System					
Operations	313.8	314.7	0.3%	328.7	4.4%
Debt Service	217.7	211.9	-2.7%	222.4	5.0%
Capital Appropriation	<u>356.4</u>	<u>404.8</u>	13.6%	<u>418.4</u>	3.4%
Total	887.9	931.4	4.9%	969.4	4.1%
Wastewater System					
Operations	78.6	85.4	8.7%	89.7	5.1%
Debt Service	29.8	30.7	2.9%	31.9	3.9%
Capital Appropriation	<u>41.8</u>	<u>57.9</u>	38.5%	<u>54.1</u>	-6.6%
Total	150.2	174.0	15.8%	175.7	1.0%
District-wide					
Operations	392.4	400.1	2.0%	418.4	4.6%
Debt Service	247.5	242.6	-2.0%	254.2	4.8%
Capital Appropriation	<u>398.2</u>	<u>462.7</u>	16.2%	<u>472.5</u>	2.1%
Total	1,038.2	1,105.4	6.5%	1,145.1	3.6%

FY21 - FY23 Water and Wastewater Budgets

(\$ Millions)



Water System – In FY22, the operations budget is increasing \$0.9 million, or 0.3 percent compared to FY21. Additional positions are being funded to support capital projects and operations work on infrastructure maintenance, and several initiatives mentioned earlier. Labor and benefit costs are increasing primarily to fund additional positions, a cost of living adjustment, negotiated pays such as standby and job site reporting, and a rise in benefit costs for retirement and health care. These increases are offset by overall lower salaries due to new employees starting at lower salary steps than the employees they replaced, savings due to the time required to fill positions, less use of overtime, and lower cost of living increases compared to the prior fiscal year. Non-labor operational costs are increasing such as computer software, specialized outside services, vehicle operating and maintenance costs, and additional retirement benefit payments made mostly through a 415(m) plan. These increases are significantly offset by higher capital support services consistent with prior trends which transfer costs to the capital budget, vehicle maintenance and repairs reimbursement, and lower energy costs. Debt service in FY22 is decreasing due to actions taken to reduce new bond issuances in prior years and lower assumed interest rates consistent with projected market trends. The FY22 capital appropriation of \$404.8 million will fund work over multiple years such as pipeline replacements, water treatment plant upgrades, and reservoir and pumping plant rehabilitation.

In FY23, the operations budget increases by \$14.0 million, or 4.4 percent. The rise in labor expenses includes scheduled step increases, a cost of living adjustment, overtime, standby, and a rise in benefit costs for retirement and health care. In addition, non-labor operational cost increases are expected in several areas such as fees and licenses, Board of Directors election fees, vehicle operating and maintenance costs, energy, computer software, self-insured liability claims, District laboratory services, and chemicals. These increases are partially offset by less use of professional services and higher capital support services which decreases operating expense by a like amount. Debt service is increasing as payments will be made on revenue bonds planned to be issued in FY22 and FY23. The FY23 capital appropriation \$418.4 million will continue to fund key infrastructure projects.

Wastewater System – In FY22, the operations budget is increasing by \$6.8 million, or 8.7 percent compared to FY21. Labor and benefit costs are increasing primarily to fund additional positions, a cost of living adjustment, overtime costs, and a rise in benefit costs for retirement and health care. These increases are offset by decreases in standby pay, new employees starting at lower salary steps than the employees they replaced, and lower cost of living increases compared to the prior fiscal year. Non-labor costs are increasing for chemicals, spoils/sludge disposal, reimbursable costs to the Water System, insurance premiums, and fees/licenses. These increases are offset by higher capital support services consistent with prior trends which transfer costs to the capital budget. Debt service is increasing as new revenue bonds are planned to be issued in FY22. The FY22 capital appropriation of \$57.9 million will fund work over multiple years such as rehabilitating structures and replacing equipment at the Main Wastewater Treatment Plant (MWWTP), making seismic upgrades, and addressing nutrients.

In FY23, the operations budget increases by \$4.3 million, or 5.1 percent. Labor and benefit costs are increasing primarily for scheduled step increases, a cost of living adjustment, costs of overtime and standby, and a rise in benefit costs for retirement and health care. Non-labor costs are increasing primarily due to chemical costs, spoils/sludge disposal, reimbursable expense to the

Water System, and insurance premiums. These costs are offset by an increase for capital support services which decreases operating expense by a like amount and less use of contract services. Debt service is increasing as payments will be made on revenue bonds planned to be issued in FY22 and FY23. The FY23 capital appropriation of \$54.1 million will continue to fund key infrastructure projects at the MWWTP and off-site locations.

FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM

This capital improvement program reflects our ongoing commitment to rehabilitate and replace aging infrastructure. The following focuses on planned spending on capital projects which is a significant component in calculating rates.

- In FY22-26, planned Water System capital spending totals \$2.0 billion, an increase of \$126.0 million or 7 percent from the prior five-year total.
- The planned Wastewater System capital spending totals \$243.2 million, an increase of \$8.8 million or 4 percent from the prior five-year total.

Water System Top Projects – The table shows the major Water System capital projects and the projected five-year spending as we continue to invest in infrastructure and maintain a high level of system reliability and water quality:

- Largest project spending is for Treatment Plant Upgrades which includes operational and water quality improvements and modernization involving the filter, chemical, control, disinfection, and safety systems.
- Pipeline Rebuild includes plans to replace 22.5 miles of distribution pipelines per year in FY22-23, an increase from 20 miles in FY20-21, increasing to 25 miles per year in FY24-26.
- Large Diameter Pipelines includes replacing deteriorated transmission pipelines and installing new pipelines which are the backbone of the water distribution system.
- Reservoir Rehabilitation includes upgrading or replacing steel and concrete storage reservoirs and large open-cut reservoirs to optimize storage capacity, improve safety for staff, and improve water quality.
- Other projects will rehabilitate pumping plants, install services and fire hydrants for new customers, replace polybutylene and copper service laterals, and make improvements to building structures and systems at various locations and increase energy efficiency.

Water System Major Capital Projects (\$ Millions)	
Projects	FY22-FY26 Cash Flow
Treatment Plant Upgrades	418
Pipeline Rebuild	336
Large Diameter Pipelines	155
Reservoir Rehabilitation	114
Pumping Plant Rehabilitation	107
New Service Installations	80
Service Lateral Replacements	78
Building Facilities Improvements	71

Wastewater System Top Projects – The table shows the major Wastewater System capital projects and the projected five-year spending as we continue to make improvements to the MWWTP to maintain our strong record of regulatory compliance and protection of the San Francisco Bay:

- General Wastewater work involves improvements to buildings that serve multiple treatment processes and includes seismic retrofits to various structures at the MWWTP.
- Rehabilitation work will continue on sewer interceptors and pump stations including underground pipelines, tie-in structures, pumps and related equipment.
- Work on the treatment process with a focus on Preliminary and Secondary Treatment to rehabilitate concrete structures such as primary sedimentation tanks and channels, the oxygen production plant, and secondary clarifiers.
- Other projects will address issues with the dewatering building and equipment to produce beneficial biosolids, improve the plant’s utilities and chemical piping, and make improvements to the power generation station to improve reliability for producing renewable energy and minimize biogas flaring.

Wastewater System Major Capital Projects	
(\$ Millions)	
Projects	FY22-FY26 Cash Flow
General Wastewater	66
Interceptors and Pump Stations	38
Secondary Treatment	29
Dewatering	26
Preliminary Treatment	25
Utilities and Site Work	21
Power Generation System	15

USING THE BUDGET DOCUMENT

The biennial budget document is comprised of two volumes. This volume contains all of the key budget information for both the Water and Wastewater Systems, including a District overview, detailed operating and capital budgets, and five-year financial forecasts. The attachment provides bill impacts for a wide range of use levels. The supplemental volume provides summaries of the projects in the Capital Improvement Program.

Since 1996, the District's budget documents have consistently received the Government Finance Officers Association's (GFOA) coveted Distinguished Budget Presentation Award. In addition, for the fifth time, the California Society of Municipal Finance Officers has conferred its Operating Budget Excellence Award for the District's biennial budget documents.



In 2020, GFOA selected EBMUD for the Award for Excellence for its FY20 & FY21 Biennial Budget In Brief publication. The award was given for an "Exceptionally Well Implemented Best Practice". GFOA's Award for Excellence recognizes innovative contributions in the field of government finance and leading examples of best practice implementation.



CONCLUSION

Our history demonstrates the reliability of our water and wastewater services and our commitment to our customer and the communities we serve. Our experiences and the people who built our systems are woven into the fabric that makes the East Bay what it is today.

The FY22 and FY23 biennial budget funds critical infrastructure and maintenance work while delivering lower water rate increases than previously projected. Looking forward, we face new challenges, none greater than the effects of climate change. The District is positioned to meet this and other new challenges with the same commitment, passion, and innovation which are a part of our nearly 100-year history. With the ongoing support of the Board and staff, I am confident that we will meet our challenges well into the future and ensure our operations remain sustainable and resilient.

This budget serves as a policy document and a financial plan for the next two fiscal years. I want to thank the staff whose collaborative efforts resulted in a budget that is based on fair and reasonable rates as we continue to provide reliable, high quality water and wastewater services.

Respectfully submitted,

Clifford C. Chan
General Manager

RATE IMPACTS BY USE LEVEL AND CUSTOMER CLASS

This attachment shows the bill impacts of the FY22 and FY23 water and wastewater rates and charges for a range of customer classes and use levels. Water use is measured in CCF (centum cubic feet) where 1 CCF equals 748 gallons.

Water Charges: Monthly Bill Impacts

The following table shows the monthly bill impact of the adopted rate increases on a cross-section of single family residential customers, ranging from 4 CCF (25th percentile) to 24 CCF (95th percentile), and for the median customer using 6 CCF and the average customer using 8 CCF. The table shows the monthly bill impact although single family residential customers receive bills covering a two month period.

Single Family Residential Water Charges on Water Bill								
	Use (CCF)	FY21	FY22	Increase from FY21	Percent Change	FY23	Increase from FY22	Percent Change
25 th Percentile	4	\$44.87	\$46.66	\$1.79	4.0%	\$48.54	\$1.88	4.0%
50 th Percentile (median use)	6	\$53.37	\$55.50	\$2.13	4.0%	\$57.74	\$2.24	4.0%
75 th Percentile	10	\$75.17	\$78.16	\$2.99	4.0%	\$81.30	\$3.14	4.0%
95 th Percentile	24	\$172.03	\$178.88	\$6.85	4.0%	\$186.02	\$7.14	4.0%
Average Single Family Residential Use*	8	\$63.47	\$66.00	\$2.53	4.0%	\$68.66	\$2.66	4.0%

*8 CCF/month represents recent average single-family residential use.

The following table shows the monthly bill impact of the adopted rate increases for two multi-family residential buildings: one with 4 units using 25 CCF per month, and one with 5+ units using 50 CCF per month. Impacts are also shown for a sample commercial customer using 50 CCF per month and an industrial customer using 500 CCF per month.

Multi-Family Residential and Non-Residential Water Charges on Water Bill									
	Meter (Inches)	Use (CCF)	FY21	FY22	Increase from FY21	Percent Change	FY23	Increase from FY22	Percent Change
Multi-Family Residential 4 units	1	25	\$192.35	\$200.03	\$7.68	4.0%	\$208.03	\$8.00	4.0%
Multi-Family Residential 5+ units	1	50	\$342.60	\$356.28	\$13.68	4.0%	\$370.53	\$14.25	4.0%
Commercial	1	50	\$341.10	\$354.78	\$13.68	4.0%	\$369.03	\$14.25	4.0%
Industrial	2	500	\$3,110.35	\$3,235.16	\$124.81	4.0%	\$3,365.17	\$130.01	4.0%

Wastewater Treatment Charges: Monthly Bill Impacts

Wastewater customer charges appear in two separate places, on the water bill and the property tax bill. The tables below address each of these bills.

Wastewater charges are based on the volume of water used, but are capped at a maximum of 9 CCF per month per single family residential customer as only indoor water use is discharged into the sewer system. The following table shows bill impacts for both an average single family residential customer using 6 CCF per month and a customer discharging the maximum of 9 CCF. In addition, impacts are shown for two multi-family residential customers: one with 4 units using 25 CCF per month, and one with 5+ units using 50 CCF per month. Impacts are also shown for a sample commercial customer using 50 CCF per month and an industrial customer using 500 CCF per month.

Wastewater Charges on Water Bill									
	Meter (Inches)	Use (CCF)	FY21	FY22	Increase from FY21	Percent Change	FY23	Increase from FY22	Percent Change
Average Single Family Residential	5/8	6	\$23.02	\$23.91	\$0.89	3.9%	\$24.89	\$0.98	4.1%
Maximum Single Family Residential	5/8	9	\$26.98	\$28.02	\$1.04	3.9%	\$29.18	\$1.16	4.1%
Multi-Family Residential 4 units	1	25	\$71.50	\$74.24	\$2.74	3.8%	\$77.32	\$3.08	4.1%
Multi-Family Residential 5+ units	1	50	\$155.30	\$161.59	\$6.29	4.1%	\$168.39	\$6.80	4.2%
Commercial	1	50	\$159.78	\$166.07	\$6.29	3.9%	\$172.87	\$6.80	4.1%
Industrial	2	500	\$9,387.78	\$9,748.07	\$360.29	3.8%	\$10,158.37	\$410.30	4.2%

Wastewater Wet Weather Facilities Charge: Annual Property Tax Bill Impacts

The following table shows the annual Wet Weather Facilities Charges that are based on lot size and appear on the property tax bill. Wet Weather Facilities are large storage systems and wastewater system infrastructure designed to prevent heavy storms from causing raw sewage overflows into San Francisco Bay.

Wastewater Wet Weather Facilities Charge on Property Tax Bill							
	FY21	FY22	Increase from FY21	Percent Change	FY23	Increase from FY22	Percent Change
Small Lot ≤5,000 sq. ft.	\$115.70	\$120.34	\$4.64	4.0%	\$125.16	\$4.82	4.0%
Medium Lot 5,001 - 10,000 sq.ft.	\$180.74	\$187.98	\$7.24	4.0%	\$195.50	\$7.52	4.0%
Large Lot >10,000 sq. ft.	\$413.10	\$429.62	\$16.52	4.0%	\$446.80	\$17.18	4.0%



Meter Reader in 1945



Meter Reader today

INTRODUCTION: DISTRICT OVERVIEW

In 1923, the East Bay Municipal Utility District (EBMUD or the District) was created by voters to supply water to parts of Alameda and Contra Costa counties in California in response to periodic water shortages. In 1929, upon completion of Pardee Dam, the highest in the world at the time, the first water deliveries were made from the Sierra Mountains to the East Bay to serve a population of 460,000.



Pardee Reservoir – Lone, CA

Water service is now provided to 1.4 million customers in a 332-square mile area, which is larger than New York City, extending from Crockett in the north to San Lorenzo in the south, and eastward from San Francisco Bay to Walnut Creek and the San Ramon Valley.

Ninety percent of the water supply comes from rain and snowmelt within the protected watershed of the Mokelumne River and captured in Pardee and Camanche Reservoirs located on the western slope of the Sierra Nevada. The water is transported more than 90 miles west via three aqueducts to East Bay water treatment plants or terminal reservoirs, and from there to 170 local reservoirs and 4,200 miles of distribution pipeline. In 2002, to protect customers from the effects of a severe drought, the District created the Freeport Regional Water Project to convey up to 100 million gallons per day of supplemental Sacramento River water.

In 1944, voters in six of the East Bay cities served by the District elected to create a wastewater treatment facility to treat factory waste and raw sewage that was being released into San Francisco Bay. In 1951, the wastewater treatment began at a plant constructed in Oakland near the San Francisco-Oakland Bay Bridge. Wastewater service is now provided to 740,000 customers in an 88-square mile area along the east shore of the bay extending from Richmond in the north to Oakland in the south. In addition to treating wastewater, laboratory services operate 365 days a year to continually monitor the quality of our drinking water and the treated water from the wastewater plant that is discharged to San Francisco Bay.

The District has a seven-member Board of Directors elected from wards within the service area. The Water and Wastewater Systems are legally distinct entities governed by the same Board that is committed to governing through a public process, guided by the District's Mission Statement.

The mission of the District 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.”

Board policies are implemented under the direction of the General Manager who, along with the General Counsel, is appointed by the Board. The Senior Management Team, comprised of department managers and directors, is responsible for managing operations. The District employs over 2,000 people in service to its mission.

KEY MILESTONES

1875	Population of 15,000 served by several private water companies, but there is a lack of water storage. San Leandro Reservoir completed, later renamed after Anthony Chabot.
1910	Population swells to 150,000 with refugees from the 1906 San Francisco earthquake.
1919	San Pablo Reservoir completed by the East Bay Water Company.
1923	EBMUD is organized and then acquires water rights to the Mokelumne River.
1926	Upper San Leandro Reservoir completed by the East Bay Water Company.
1928	Lafayette Reservoir completed.
1929	Pardee Dam, highest in the world at the time, and the Mokelumne aqueduct completed.
1930	Population of 460,000 served at 35 million gallons per day (MGD).
1949	Second Mokelumne Aqueduct completed.
1951	Wastewater treatment system in operation to protect San Francisco Bay.
1963	Third Mokelumne Aqueduct completed.
1964	Camanche and Briones reservoir dams completed.
1970	Population of 1.1 million served at 220 MGD.
1974	EBMUD customers vote to add fluoride to water.
1985	Wastewater plant begins producing renewable energy.
1990	Population of 1.2 million served at 192 MGD.
1995	North Richmond Water Reclamation Plant begins recycled water.
1999	Wet Weather Program completed to minimize storm induced sewer overflows.
2000	Population of 1.3 million served at 216 MGD.
2002	Freeport Regional Water Authority established with Sacramento City and County.
2010	Population of 1.3 million served at 174 MGD following the 2007-2010 drought. Richmond Advanced Recycled Expansion (RARE) facility dedicated - 3.5 MGD.
2011	National law adopted to get lead out of drinking-water plumbing based EBMUD-sponsored state law. Facility tests completed from Freeport Regional Water Facility to the East Bay.
2015	Population of 1.4 million served at 148.5 MGD.
2018	The Mokelumne River was designated as California's 12th Wild and Scenic River.

For a complete history of the East Bay Municipal Utility District, please visit the history page at www.ebmud.com/about-us/who-we-are/mission-and-history/.

COMMUNITY

Service Area

Since 1929, when the District first delivered water from the Sierra Mountains to the East Bay, the population served has grown by almost a million people. Today the District's service area includes many of the Bay Area's largest employers. The District's vitality is inseparable from the \$776 billion Bay Area regional economy which is essential to the economic health of California and the nation. The gross domestic product (GDP) of the Bay Area is one of the highest in the United States. The District's infrastructure is diverse and extensive, with a replacement cost conservatively estimated at more than \$15 billion.

The District's water service area covers 332 square miles and includes 20 cities and 15 unincorporated communities located in Alameda and Contra Costa Counties on the east side of San Francisco Bay (the "East Bay"). The wastewater service area covers 88 square mile area along the east shore of the bay extending from Richmond in the north to Oakland in the south. The map below shows the District's water and wastewater service areas.



Population

Approximately 1.4 million people are served by the Water System, 740,000 of whom are also served by the Wastewater System. Oakland, the largest city in Alameda County, is the eighth largest in the state. The following table includes population data for the largest cities in the service area.

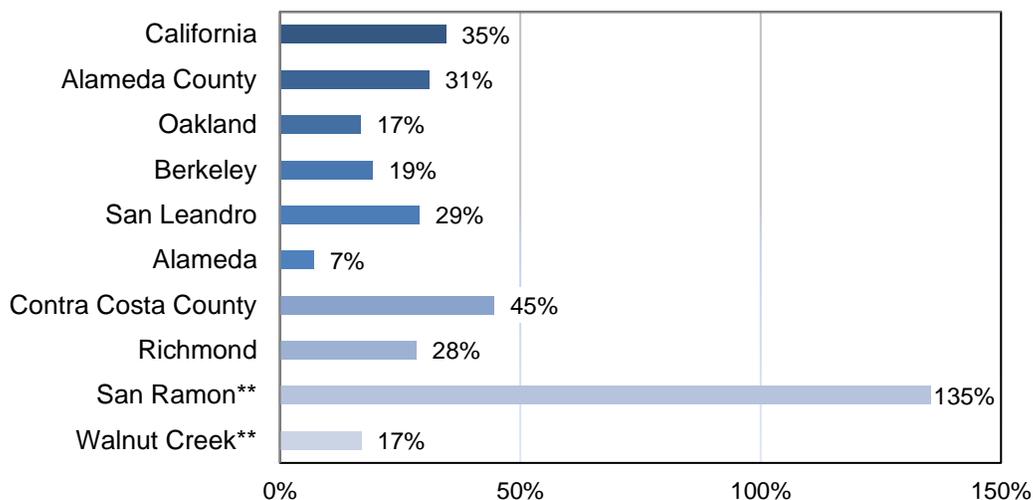
Population Trends*
Seven Largest Cities in Service Area
Alameda and Contra Costa Counties, and California

<u>City/County</u>	<u>1990</u>	<u>2000</u>	<u>2010</u>	<u>2020</u>
California	29,558,000	33,872,000	37,223,900	39,782,870
Alameda County	1,274,700	1,443,700	1,509,240	1,670,834
Oakland	371,100	399,500	390,757	433,697
Berkeley	102,700	102,700	112,621	122,580
San Leandro	68,100	79,500	84,977	87,930
Alameda	75,900	72,300	73,835	81,312
Contra Costa County	797,600	948,800	1,047,948	1,153,561
Richmond	86,600	99,200	103,661	111,217
San Ramon**	35,300	44,800	72,148	83,118
Walnut Creek**	60,600	64,300	64,140	70,860

* California Department of Finance, Demographic Research Unit, Population Estimates for California Cities.

** EBMUD does not serve all of San Ramon or Walnut Creek, but total population is shown for each.

Population Growth Since 1990
Seven Largest Cities in Service Area and Both Counties



* Total population shown even though EBMUD does not serve the entire community.

WATER AND WASTEWATER SYSTEMS

Water Supply



Mokelumne River

Ensuring a high quality water supply for today and the future is one of the District's highest priorities. Significant capital investments have been made to ensure a reliable water supply such as securing supplemental water sources and expanding recycled water programs.

One of the most important factors in water quality is the source: the purer the source the better the water. Ninety percent of the District's water comes from the 578-square mile watershed of the Mokelumne River located on the western slope of the Sierra Nevada. This area is mostly national forest, District-owned lands, and other undeveloped lands minimally affected by human

activity. The watershed collects snowmelt which flows into Pardee Reservoir near the town of Valley Springs.

Three large aqueducts carry this water more than 90 miles from Pardee Reservoir to the East Bay and protect it from pesticides, agricultural and urban runoff, and industrial discharges. When water demand is high or during times of operational need, the District also draws water from protected local watersheds.

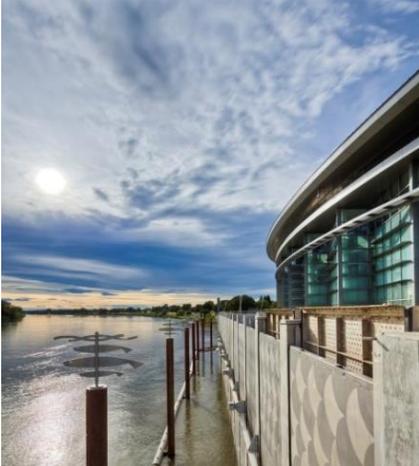
Before water reaches homes and businesses, the District takes many steps to ensure its quality. This includes carefully managing watershed lands and storage reservoirs; treating the water; maintaining water quality through a complex system of distribution pipes, pumping plants and neighborhood reservoirs; testing water samples in our laboratory and in the field; and addressing customer concerns. These efforts ensure that all customers receive high-quality drinking water that meets or surpasses all state and federal requirements.



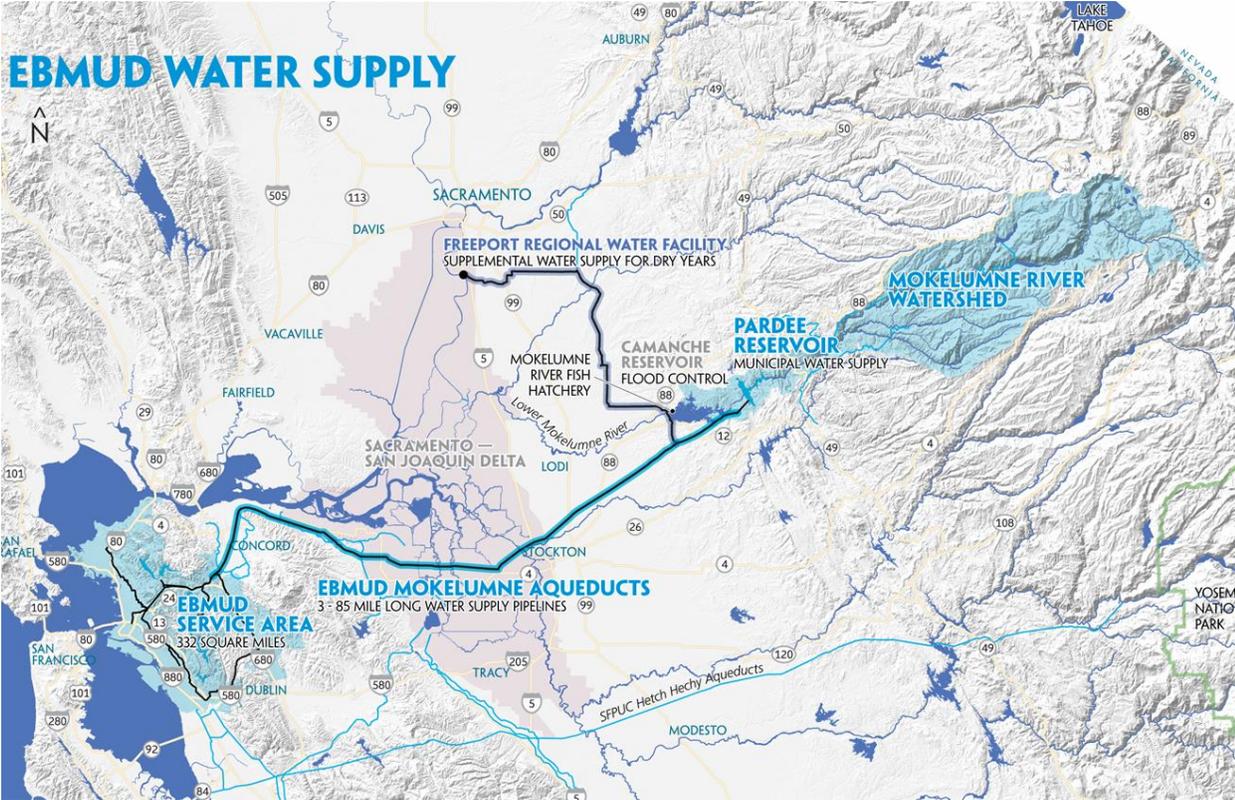
Pardee Dam and Powerhouse – Lone, CA

Every five years, the District updates its Urban Water Management Plan to ensure a reliable water supply for the next generation. This includes making the best use of limited supplies through water conservation and recycling and developing long-term projects to augment the water supply including water transfers from other water rights owners and regional projects with other agencies. The Plan will be updated in the spring of 2021.

The map below shows how the water travels from the Mokelumne River Watershed into Pardee Reservoir, across the Central Valley in the Mokelumne Aqueducts, and to the District's service area.



Freeport Water Project – Sacramento, CA



Wastewater Treatment

The District's wastewater treatment plant provides service for 740,000 people along the eastern shore of the San Francisco Bay, and treats approximately 56 million gallons of municipal wastewater per day. Wastewater is collected from homes and businesses through privately owned sewer laterals that feed into a network of city and other regional sewers, which eventually join the District's sewer interceptors and pump stations. These facilities carry the wastewater to the treatment plant located in Oakland. Stormwater is collected through separate community-owned systems. The plant treats sewage to meet stringent state and federal standards before recycling it or releasing cleaned water to the Bay. Prior to its construction, raw sewage was discharged directly into the Bay. As a partner in the stewardship of the Bay, the District works with residents and businesses to help them keep contaminants out of the sewer system.



Wastewater Treatment Plant – Oakland, CA



Power Generation Station – Oakland, CA

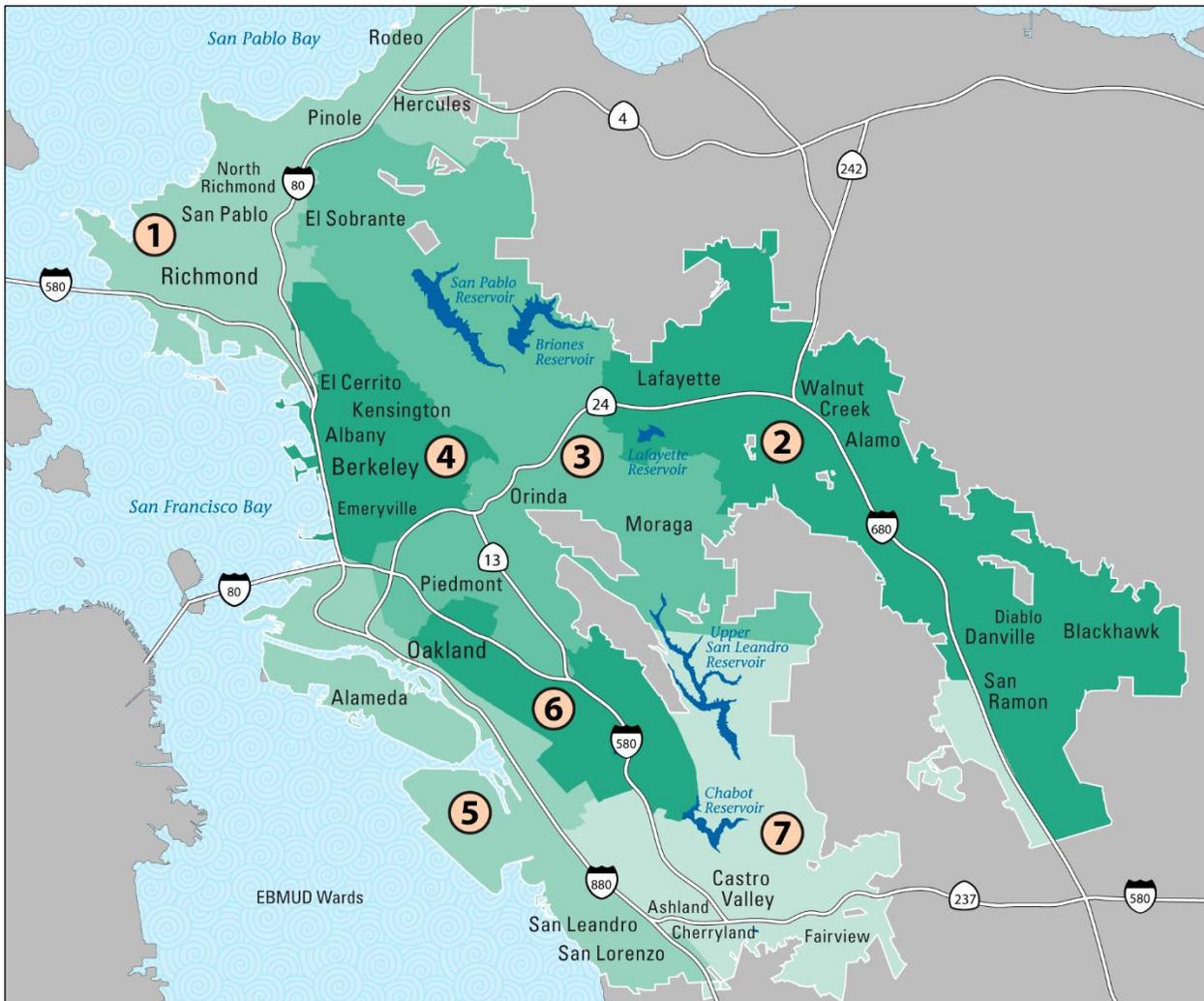
The District has been recycling and producing renewable energy at its wastewater plant since the mid-1980s. The District's plant transforms sewage and other organic wastes into green energy, nutrient-rich soil conditioner, and recycled water. The District produces sufficient renewable energy to meet its onsite power demands. Any excess energy is currently sold to the neighboring Port of Oakland.

DISTRICT ORGANIZATION

BOARD OF DIRECTORS

The District has a seven-member elected Board of Directors who determines overall policies, which are then implemented under the direction of the General Manager. The Board of Directors believes that the District has a public responsibility to preserve the region's resources and set industry standards for water and wastewater utilities.

Directors are publicly elected to four-year terms from seven wards within the service area. The following map shows the areas included in each ward.



The Board of Directors is shown below. Additional information can be found at:
www.ebmud.com/about-us/board-directors/your-board-members/.

- | | | |
|---------------|--|--------------------------------|
| WARD 1 | Lesa R. McIntosh | Term expires 12/31/2024 |
| | CONTRA COSTA COUNTY: Cities of Crockett, Hercules, Rodeo, and San Pablo; portions of Richmond and Pinole; and communities of North Richmond and Selby. | |
| WARD 2 | John A. Coleman, Vice President | Term expires 12/31/2022 |
| | CONTRA COSTA COUNTY: Cities of Alamo, Lafayette, Walnut Creek, Town of Danville; portions of San Ramon and Pleasant Hill and communities of Blackhawk and Diablo. | |
| WARD 3 | Marguerite Young | Term expires 12/31/2022 |
| | ALAMEDA COUNTY: City of Piedmont, and a substantial portion of Oakland.
CONTRA COSTA COUNTY: Cities of Orinda and El Sobrante; Town of Moraga, and portions of Pinole and Richmond. | |
| WARD 4 | Andy Katz | Term expires 12/31/2022 |
| | ALAMEDA COUNTY: Cities of Albany, Berkeley, and Emeryville; and a portion of Oakland.
CONTRA COSTA COUNTY: Cities of El Cerrito and Kensington. | |
| WARD 5 | Doug Linney, President | Term expires 12/31/2024 |
| | ALAMEDA COUNTY: Cities of Alameda and San Lorenzo; West Oakland and Oakland Airport Area, and a portion of San Leandro. | |
| WARD 6 | William B. Patterson | Term expires 12/31/2024 |
| | ALAMEDA COUNTY: Portions of Oakland (East Oakland and south of Park Boulevard/5 th Avenue) to the San Leandro City boundary. | |
| WARD 7 | Frank Mellon | Term expires 12/31/2022 |
| | ALAMEDA COUNTY: Castro Valley; portions of San Leandro and Hayward; communities of Cherryland and Fairview.
CONTRA COSTA COUNTY: Portion of San Ramon. | |

Board meetings are open to the public and are held twice monthly on the second and fourth Tuesday and at other times as needed. The Board is committed to governing through a public process, guided by the District's Mission Statement.

SENIOR MANAGEMENT

The General Manager (GM) and General Counsel are appointed by and report directly to the Board of Directors.

Clifford C. Chan	General Manager
Craig S. Spencer	General Counsel

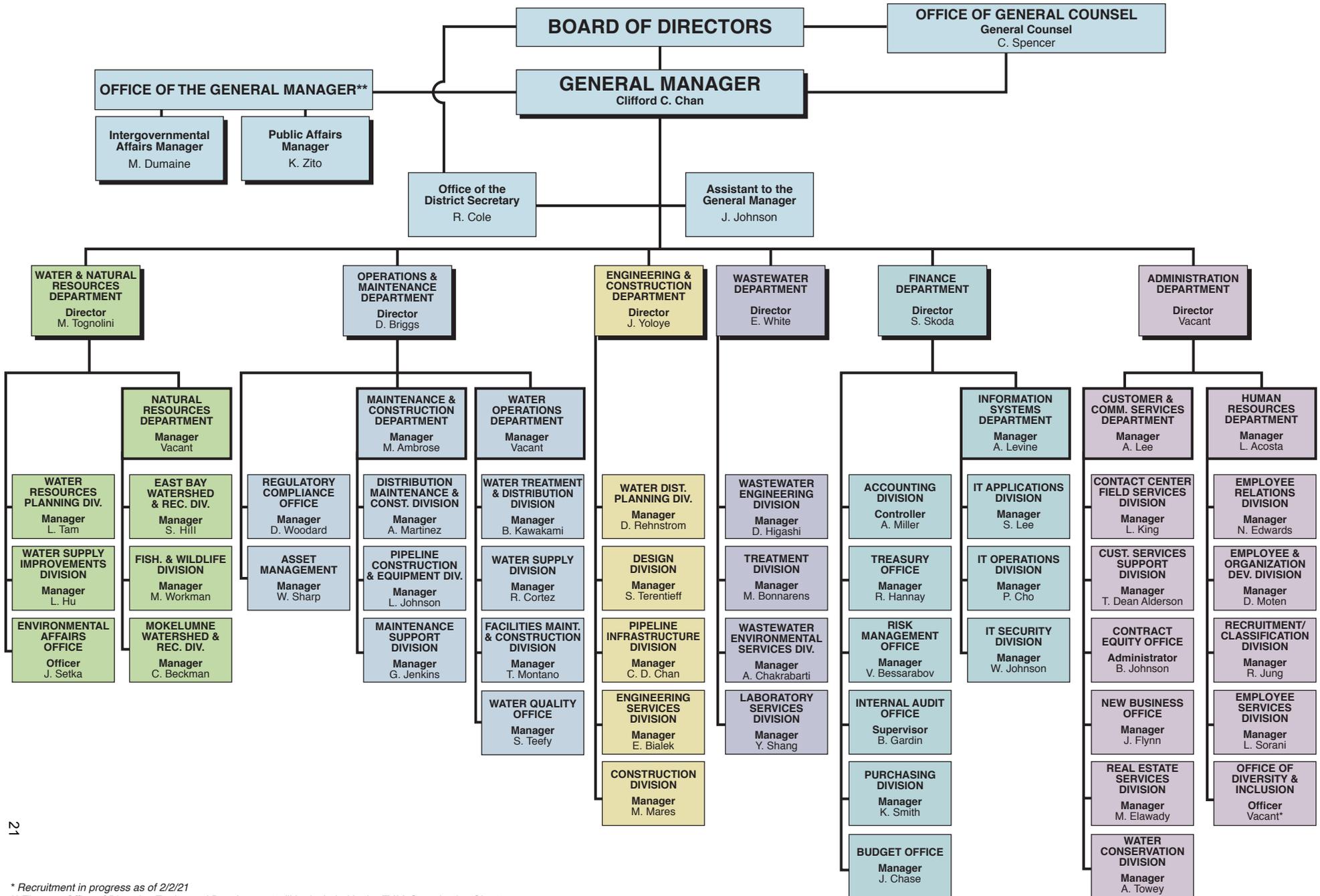
The Senior Management Team listed below is responsible for managing the operations of the District.

Laura A. Acosta	Manager of Human Resources
Michael R. Ambrose	Manager of Maintenance and Construction
David A. Briggs	Director of Operations and Maintenance
Rischa S. Cole	Secretary of the District
Marlaigne K. Dumaine	Special Assistant to the GM – Governmental Affairs
Andrew L. Lee	Manager of Customer and Community Services
Andrew J. Levine	Manager of Information Systems
Sophia D. Skoda	Director of Finance
Michael T. Tognolini	Director of Water and Natural Resources
Eileen M. White	Director of Wastewater
Jimi O. Yoloye	Director of Engineering and Construction
Kelly Zito	Special Assistant to the GM – Communications
Vacant	Manager of Water Operations
Vacant	Special Assistant to the GM – Diversity, Equity, Development

The chart on the following page provides an overview of the organization and shows the different departments and divisions within the District. It can also be found at www.ebmud.com/about-us/board-directors/management/.



San Pablo Reservoir – El Sobrante, CA



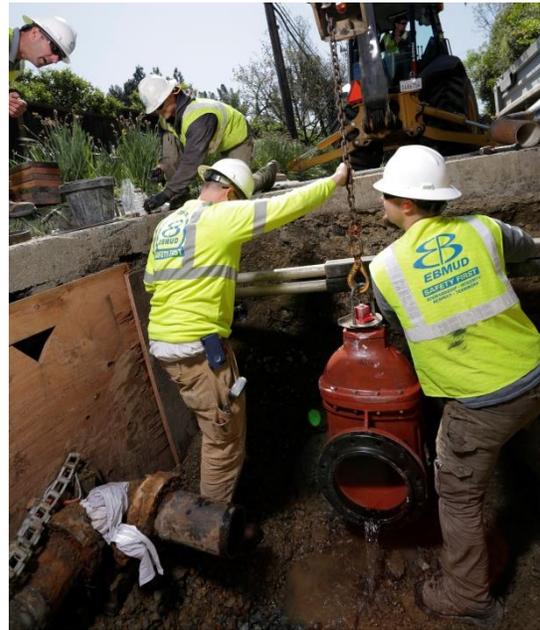
* Recruitment in progress as of 2/2/21

** The new Office of Diversity, Equity, and Development will be included in the FY22 Organization Chart

WORKFORCE

The District has over 2,000 employees. Most are represented by the American Federation of State, County and Municipal Employees, Locals 444 and 2019; the International Federation of Professional and Technical Engineers, Local 21; and the International Union of Operating Engineers, Local 39. The majority of employees work in the East Bay, but some also work in the Central Valley and Mokelumne watershed area.

The District is an equal employment opportunity (EEO) employer, and a proud leader in taking legal, proactive steps that support a diverse, inclusive workforce. The District strives to achieve a diverse workforce composition reflective of the labor market in regard to gender and race/ethnicity, and to identify deficiencies and obstacles in recruitment and develop action-oriented programs to address such deficiencies/obstacles and thereby increase diversity. We are committed to providing a professional environment which is free from EEO discrimination, harassment, and/or retaliation. We take affirmative action to employ and advance in employment of qualified women, minorities, protected veterans, and individuals with disabilities. A new office reporting to the General Manager includes District functions of diversity, equity, and development, will help the District meet its goals to be a diverse agency meeting needs of our community and our staff.



Field Crew



Administration Building – Oakland, CA



Wastewater Treatment Plant – Oakland, CA

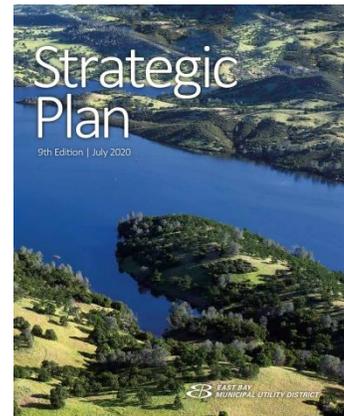
STRATEGIC PLAN SUMMARY

The District's Strategic Plan incorporates its mission and principles, and identifies its goals, strategies, objectives, and key performance indicators. The plan guides staff in the management and allocation of resources and assets. The Strategic Plan also guides the development of the biennial budget and the five-year capital improvement program to ensure that necessary resources are provided to implement the plan's strategies and objectives.

The current Strategic Plan was adopted by the Board of Directors in June 2020. It is the framework for how the District will respond to and prioritize challenges and evolving priorities. The plan incorporates the principles of fiscal responsibility, sustainability, and effective use of resources that minimize the District's environmental footprint.

The Strategic Plan includes the following elements:

- **Goals** define in broad terms the high-level achievements the District will pursue;
- **Strategies** define which actions are necessary to achieve each goal;
- **Objectives** reflect what needs to be accomplished in the near term; and
- **Key Performance Indicators (KPIs)** measure how well the District is doing in achieving its goals.



Strategic Plan Goals

The District has established the following set of goals integrating sustainability principles:

- **Long-Term Water Supply**
We ensure a reliable high-quality water supply for the future.
- **Water Quality and Environmental Protection**
We meet or surpass environmental and public health standards and protect public trust values.
- **Long-Term Infrastructure Investment**
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.
- **Long-Term Financial Stability**
We manage the District's finances to meet funding needs and maintain fair and reasonable water and wastewater rates.
- **Customer and Community Services**
We build stakeholder trust and long-term relationships through service excellence, proactive communication and education.
- **Workforce Planning and Development**
We create an environment that attracts, retains, and engages a high performing diverse and inclusive workforce in support of the District's mission and core values.

Implementing the Plan

The purpose of the strategic planning process is to define the actions that need to be taken in the next three to five years to achieve the District's mission now and into the future. The process is designed to assess the environment in which we operate and respond to both near and long-term challenges. The General Manager and the Senior Management Team lead the implementation of the Strategic Plan.

The Strategic Plan is adopted by the Board of Directors. Upon adoption, development of specific actions to implement the Strategic Plan begins. The Strategic Plan provides staff with an overall high-level direction to achieve future success; it does not describe the specific actions to be taken. By developing actions that are linked to the Strategic Plan we can ensure that we focus our resources on the highest priorities that will best serve our customers.

Strategic Plan Process



Individual employee performance plans are prepared annually to establish and communicate responsibilities and performance expectations to achieve the priorities contained in the plan.

The Strategic Plan is comprised of two documents. One contains our goals, strategies and objectives to define the actions to take to ensure both long-term achievements and near-term accomplishments, and the other includes a comprehensive set of KPIs that reflect the various strategies and objectives contained within the six Strategic Plan goals.

The KPI results are measured annually against established targets to evaluate progress towards meeting our goals and are presented to the Board's Finance Committee.

Strategic Plan goals, strategies, objectives, and KPIs are available in the Appendix and online at www.ebmud.com/about-us/who-we-are/.

The following page has the one-page summary of the Strategic Plan goals and strategies.

Strategic Plan | Goals and Strategies

East Bay Municipal Utility District | July 2020

Long-Term Water Supply

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** Consider the impacts of climate change and take appropriate action to understand and balance mitigation and adaptation responses to those impacts through sustainable activities.

Water Quality and Environmental Protection

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 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.

Long-Term Infrastructure Investment

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 Financial Stability

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.

Customer and Community Services

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

- Strategy 1** Build public awareness of 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 and in support of the District’s mission.
- Strategy 4** Maintain active Emergency Preparedness and business continuity Programs to plan for, minimize interruptions, and manage the District’s essential functions during an emergency and allow for an efficient and effective recovery.

Workforce Planning and Development

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

- Strategy 1** Coordinate workforce planning activities to determine future needs, identify gaps and implement actions to close the gaps.
- Strategy 2** Continue to develop employees to meet evolving workforce demands and implement actions to close gaps.
- Strategy 3** Support 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.

**For the complete Strategic Plan, go to
www.ebmud.com/about-us/who-we-are**

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CHAPTER 1: FINANCIAL ORGANIZATION AND BUDGET PROCESS

This chapter describes the District's financial structure and organization, and budget development process, and responsibilities. It provides the parameters under which the budget is created.

FINANCIAL ORGANIZATION

Fund Structure and Descriptions

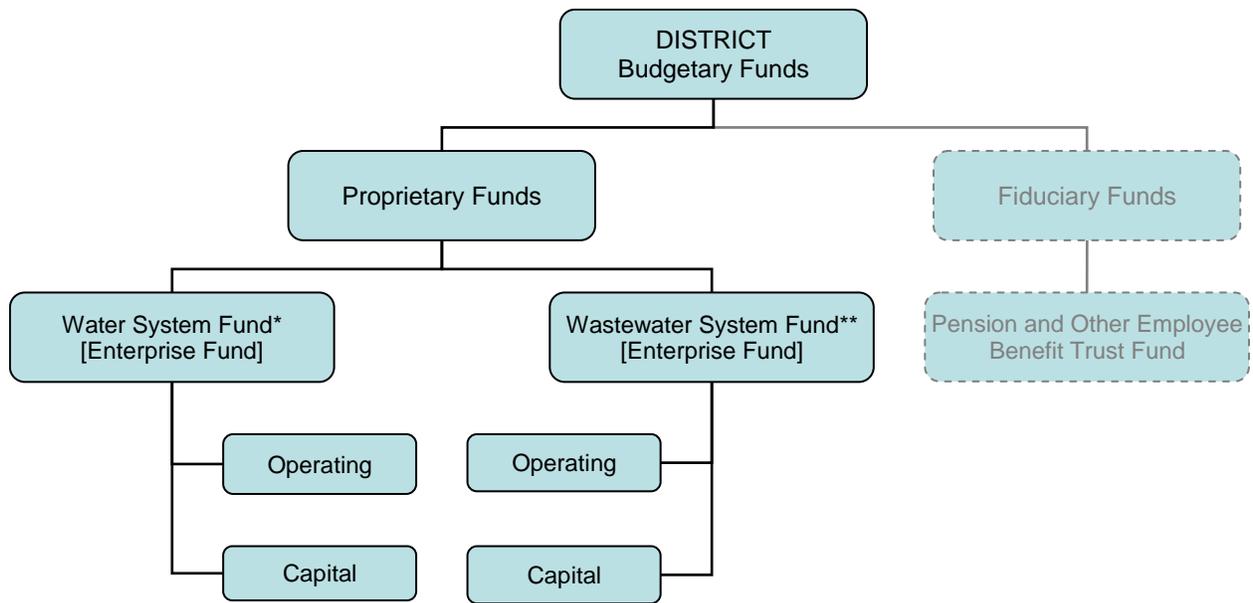
The District's financial structure is composed of proprietary funds (ongoing business operations) and fiduciary funds (see glossary for definitions of terms). The proprietary funds include two legally distinct and financially independent enterprise funds: Water System and Wastewater System. The two separate funds preserve the unique expenditure and revenue distinction between the two entities. When services are provided by one system for the benefit of the other, the appropriate fund is billed and cash transfers are made.

- The Water System is engaged in the collection, transmission, and distribution of water to communities within Alameda and Contra Costa Counties of California. In addition, the Water System provides support services to the Wastewater System and the cost of these services are charged to the Wastewater System. The Water System consists of fourteen staffed departments.
- The Wastewater System is engaged in the treatment of wastewater from residences and industries in the California communities of Alameda, Albany, Berkeley, Emeryville, Oakland, Piedmont, and the Stege Sanitary District. The Wastewater System consists of one staffed department.

Both systems are proprietary and enterprise funds. 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 expense of providing goods or services to the general public on a continuing basis be financed or recovered primarily through user charges.

The Water System performs many support functions for the Wastewater System. These functions include but are not limited to financial services such as accounting, human resources services such as recruitment, information technology, customer services, legal services, and general oversight and governance. The Wastewater System reimburses the Water System directly for these services through a joint administrative and general annual expense.

Both systems are governed by the same elected Board of Directors and share policies and procedures. Throughout this document, the 'District' refers to the East Bay Municipal Utility District and is understood to encompass both the Water and Wastewater Systems.



***Departments**

- Administration
- Customer & Community Services
- Engineering & Construction
- Finance
- Human Resources
- Information Systems
- Maintenance & Construction
- Natural Resources
- Office of the General Counsel
- Office of the General Manager
- Operations and Maintenance Support
- Water Operations
- Water Recycling Program
- Water Resources

****Department**

- Wastewater

These funds are organized according to the Uniform System of Accounts for Water Utilities, as established by the California Public Utilities Commission, and adhere to the Government Finance Officers Association (GFOA) requirements for enterprise funds.

In addition to the proprietary funds, the District maintains a fiduciary fund to account for resources held for the benefit of parties outside the government. The 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.

Financial Reporting

Financial reports are prepared in conformity with generally accepted accounting principles. At the conclusion of each fiscal year, the Finance Department prepares the Comprehensive Annual Financial Report in compliance with principles and standards for financial reporting set forth by the Governmental Accounting Standards Board (GASB), and the guidelines recommended by the GFOA of the United States and Canada. An application has been submitted to GFOA for the Certificate of Achievement for Excellence in Financial Reporting for the Comprehensive Annual Financial Report for the fiscal year ending June 30, 2020. The Certificate of Achievement is a prestigious national award recognizing conformance with the highest standards for preparing a state and local government financial report. To receive the award, a government unit must publish an easily readable and efficiently organized report that satisfies both generally accepted accounting principles and applicable legal requirements. If awarded, this will be the sixteenth consecutive year that the District has received the award.

Budgetary and Accounting Basis

The basis of budgeting and accounting refers to the method for recognizing revenue and expenses in financial and budgetary reporting.

The District's budgets are prepared on a modified cash flow basis which projects the cash inflows and outflows over the course of a fiscal year (July 1 through June 30) excluding physical and intangible assets such as depreciation. Revenues are recognized as they are received and accounted for while obligations for expenditures are recognized when a commitment is made through an encumbered purchase order or actual expense.

The District's accounts and transactions are tracked on an accrual basis, which is the basis of accounting under generally accepted accounting principles. Under this method, all assets and liabilities associated with operations are included on the balance sheet; revenues are recorded when earned and expenses are recorded at the time commitments are incurred.

Depreciation and amortization are handled differently in budgetary and financial reporting. In budgetary reporting, depreciation and amortization are excluded, and the repayment of the principal on debt as an expense is included. In financial reporting, depreciation and amortization are included, and the repayment of the principal on debt as an expense is excluded.

This table illustrates the differences between the budget and accounting basis described above.

	BUDGETARY (Modified Cash Flow Basis)	ACCOUNTING (Accrual Basis)
Revenue	Recognized when received and accounted for	Recorded when earned
Obligations	Recognized when a commitment is made through encumbrance or expense	Recorded at the time commitments are incurred
Depreciation and amortization	Excluded	Included
Repayment of principal on debt	Included	Excluded

Financial Planning

The District prepares a strategic plan and annual financial forecasts that provide the basis for developing the budget. Long-term financial stability is a goal in the Strategic Plan, which includes managing the District's finances to support its needs and maintain reasonable water and wastewater rates.

Revenue requirements over a five-year planning horizon are evaluated to determine the level of rate adjustments required for the upcoming budget years. To the extent possible, increases in water and wastewater rates are adjusted to avoid large fluctuations.

Financial Policies

The District establishes policies and resolutions to comply with the stipulations set forth in the Municipal Utility District Act of the State of California (MUD Act). District policies are reviewed biennially; some policies such as the Investment Policy are reviewed annually. The policies described below set forth key objectives for long-range financial planning and control.

The following policies are included in the Appendices as a reference:

Policy 4.02	Cash Reserves
Policy 4.04	Financial Planning and Budgetary Control
Policy 4.07	Investment Policy
Policy 4.13	Establishing Water and Wastewater Rates
Policy 4.27	Debt Management

Policy 4.02: Cash Reserves: identifies specific financial metric targets. The District strives to maintain operating reserves at a level sufficient to meet working capital and unanticipated needs, specifically:

- Maintaining Working Capital Reserve of at least 3.0 times monthly net operating and maintenance expenses.
- Maintaining Self-Insured Liability Program Reserve based on the Actuarial Self-Insured Retention (SIR) funding recommendation.
- Maintaining Workers' Compensation Program Reserve based on the Actuarial SIR funding recommendation.
- Maintaining Rate Stabilization Reserve:
 - The Water System requires a minimum of 20 percent of projected annual water volume revenues.
 - The Wastewater System requires a minimum of 5 percent of operating and maintenance expenses.

Policy 4.04: Financial Planning and Budgetary Control: provides for the efficient use of District resources through financial planning and cost control; keeps total annual expenditures to the level of total annual revenue; provides periodic status reports on revenues, expenditures, and investments; and establishes the authority of the General Manager to transfer up to 5 percent of each fiscal years' budget between the capital and operating budgets within each System's funds, provided that the total budget for each System fund remains unchanged. Budget transfers between the Water and Wastewater Systems are prohibited.

Policy 4.07: Investment Policy: guides the investment of District funds. The policy ensures that all investments are compliant with the state law, and protects investments (safety), ensures availability of funds when needed (liquidity), provides earnings on the investment portfolio (yield) while reducing risk by investing in a variety of instruments (diversification) and the District's Conflict of Interest Code. Among the key guidelines included in the policy are the types and characteristics of permitted investments, parameters for investment decisions, reporting requirements, and internal controls.

Policy 4.13: Establishing Water and Wastewater Rates: sets forth the rate methodology, rate design, and rate distribution that provide adequate revenues while keeping rates affordable, encouraging conservation and efficient use of water, and reflecting the cost of providing service to customers. Rates should provide sufficient revenue to support a safe, reliable, and sufficient water supply and wastewater treatment services to its customers over the long term.

Policy 4.27: Debt Management: strives to maintain a reasonably conservative ratio between current funding sources and debt financing by:

- Maintaining an annual revenue bond debt service coverage ratio of at least 1.6 times;
- Limiting debt-funded capital to no more than 65 percent of the total capital program over each five-year planning period; and
- Limiting commercial paper/variable rate debt to 25 percent of outstanding long-term debt.

BUDGET PROCESS

During the budget process, the District makes decisions on the efficient use of its resources using the Strategic Plan for guidance. A financial plan and biennial budget are established for the Water and the Wastewater Systems that includes the operations and capital programs and sets levels of related expenditures that may be made.

The budget reflects the costs necessary to provide customers with safe, reliable water and wastewater service over the long-term while keeping rates fair and reasonable. The budget is also used to develop rates and charges that provide adequate revenues to meet the District's needs and encourages the efficient use of water.

Decisions on allocating resources and addressing budget needs do not end when the Board adopts the budget. Throughout the year, departments are responsible for implementing the budget and monitoring budget performance, responding to unforeseen or emergency circumstances, and participating in long-range financial planning.

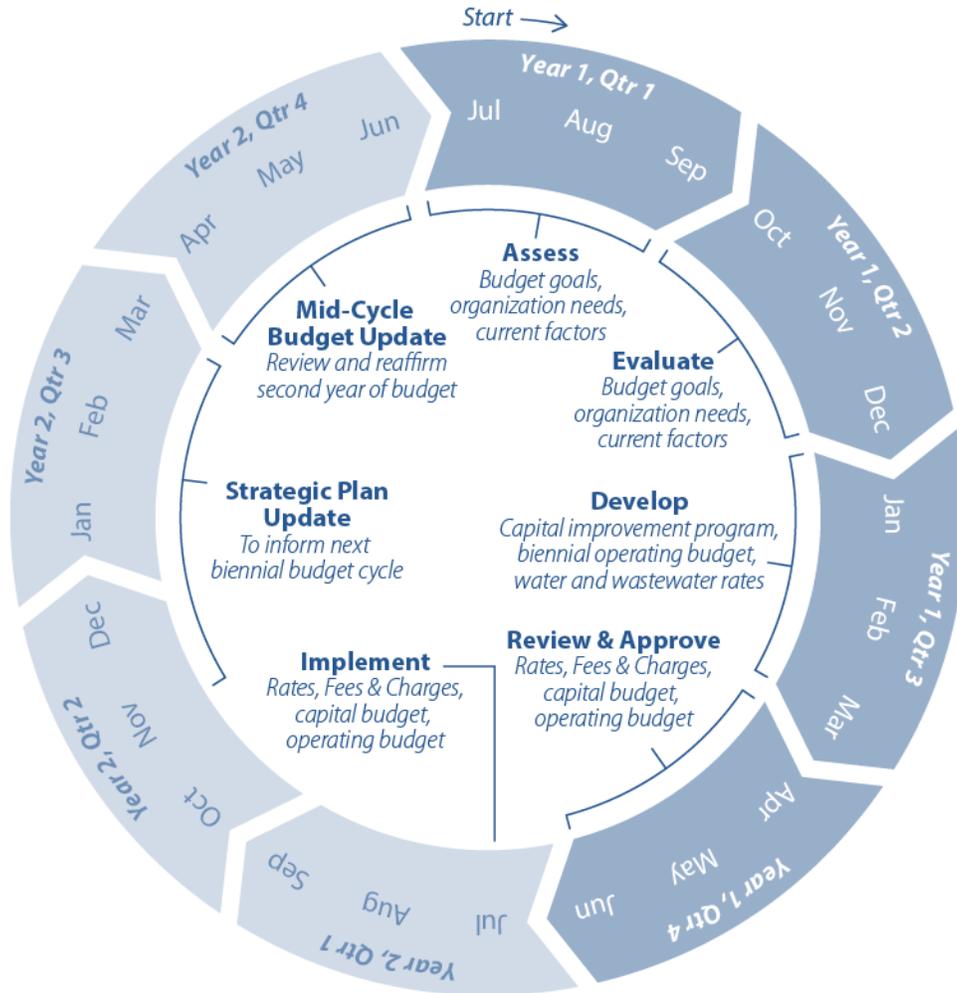
The District received the GFOA's Distinguished Budget Presentation Award for its FY20 and FY21 biennial budget document. This is the sixteenth consecutive budget document for which the District has received the GFOA award. For the fifth time, the California Society of Municipal Finance Officers (CSMFO) has presented the Excellence in Budgeting Award to the District. To qualify for these awards, the budget document had to meet stringent guidelines and criteria.

Balanced Budget

The District budget is balanced when revenues are equal to or greater than expenditures including debt service and ending fund balances meet minimum policy levels. The budget is established on the principle of overall revenue neutrality, as outlined in the American Water Works Association (AWWA) Principles of Water Rates, Fees and Charges recommendations for government-owned utilities. The District's rates and charges are set to ensure that revenues are sufficient to recover the total cash needs in a given fiscal year.

Budget Development Calendar

The District has a biennial budget process which is represented in the graphic below and described more fully in the following text.



Assess:

Budget goals, organization needs, and current factors

July
August
September

Strategic Plan adopted.
Budget guidelines and assumptions prepared.
Capital budget development starts.

Evaluate:

Budget goals, organization needs, and current factors

October
November
December

Operating budget development starts.
Review of capital budget requests begins.
Review of operating budget requests begins.

Develop: Capital improvement program, biennial operating budget, water and wastewater rates

January / February Operating budget and capital improvement program recommendations are developed by Senior Management with Board of Directors input. Water and Wastewater rates to fund budget needs are proposed.

March Documents are prepared to present proposed budget and rates to the Board and the public. The General Manager presents the proposed operating and capital budgets, and proposed rates, fees and charges to the Board at budget workshops.

Review & Approve: Rates, fees & charges, capital budget, operating budget

April Another budget workshop occurs if needed to address any direction given by the Board at previous budget workshops. California Proposition 218 notices are distributed to property owners.

May The General Manager's recommendations on the proposed rates, charges, and fees are filed with the Board of Directors.

June Public hearing on rates is held. Board adopts operating and capital budgets; rates, fees and charges schedules; and positions authorization.

Implement: Adopted rates, fees & charges, capital and operating budgets

July Adopted rates and budget implementation begins. Adopted budget, and rates and charges schedules published.

Strategic Plan Update

The Strategic Plan is updated every two to four years. This plan provides the District with overall direction for the next three to five years, sets priorities, and guides the development of the operating and capital budgets within those priorities.

Mid-Cycle Budget Update

The Board of Directors approves the budget covering a two-year period. The Board reviews and reaffirms the second year of the two-year budget prior to the start of a new fiscal year in July. A Mid-Cycle Budget Update workshop provides the Board of Directors with a budget status and any projected changes to revenues, expenditures, and staffing.

Annual and Semi-Annual Budget Performance Reports

At the mid-point and conclusion of each fiscal year, the Board of Directors is provided with a comparative analysis of expenditures to budget.

Budget Responsibilities

Budget decisions are made through a process that involves the Board of Directors, District staff and the public. The responsibilities for financial management planning and budget control are:

Departmental Responsibilities

- Prepare capital improvement program and biennial budget requests;
- Monitor financial performance and take prompt corrective action, as needed;
- Monitor key performance indicators and take corrective action, as appropriate; and
- Inform the General Manager when unforeseen circumstances indicate that budget amounts may be exceeded or that expected revenues may be less than planned.

Finance Department Responsibilities

Treasury Operations

- Monitor District's liquidity and ensure funds are available as needed, invest funds in accordance with Board policy, wire funds to pay approved demands, and take other actions associated with the prudent management of the District's financial resources;
- Provide for the issuance of debt to fund the capital improvement program; and
- Prepare financial projections, schedules of rates and charges, tax rate proposals and other financial materials.

Accounting

- Produce monthly and annual expenditure and revenue reports;
- Prepare and present information on financial trends to facilitate evaluation of the District's financial position and identify conditions requiring management attention; and
- Prepare periodic reports on the status of expenditures, revenues, investments and actions taken to ensure the financial stability of the District.

Budget Office

- Facilitate the development of the Strategic Plan;
- Project short-range and long-range financial needs, and recommend methods for meeting those needs;
- Prepare the District's biennial operations and capital improvement program budgets;
- Prepare monthly, quarterly, semi-annual and annual budget performance reports;
- Prepare the mid-cycle budget update;
- Assist departments throughout the year with their budgets and financial issues; and
- Develop procedures and controls to monitor and ensure compliance with the budget.

General Manager's Responsibilities

- Review and present to the Board of Directors long-range plans, budgets and revisions, schedules of rates and charges, payments of financial demands and other financial transactions, as necessary;
- Authorize budget transfers up to five percent of the fiscal years' budget between the operations and capital budgets in each of the Water and Wastewater System's budgets, provided that the total budget for each of the two systems remains unchanged;
- Authorize the allocation of budgeted funds from contingency; and
- Implement emergency financial procedures within approved limits, when necessary.

Budgetary Controls

Automated District-wide budgetary controls track spending to the amounts set in the budget. Budgetary controls function differently for operations and capital budget expenditures.

For the operations budget, each department is controlled within each of the three expenditure categories: personnel costs, contract services, and operations and maintenance. Departments are not allowed to exceed their authorized operations budget for each fiscal year.

For the capital budget, each capital project is controlled based on its appropriation. A project may not exceed its total appropriation. Unlike the operations budget, which expires on June 30 of each fiscal year, capital appropriations are multi-year and will last the life of the project.

Budget Adjustments

Adjustments to the operations budget are reallocations of funds between organizational units, categories, and/or line items, which allow departments to have financial flexibility within established budgetary controls.

Budget adjustments to the capital budget are reallocations of funds within or between projects. Approval from the affected department(s) and the Budget Office is required for all budget adjustments.

General Manager approval is required for the reallocation of funds from contingency, and the reallocation of funds between the operations and capital budgets in both the Water and Wastewater Systems. Approval from the Board of Directors is required for increases to the total adopted budget of the Water or Wastewater System.

Capital Improvement Program Preparation

The Capital Improvement Program (CIP) budget communicates the District's planned infrastructure investments for the next five years by identifying and prioritizing its capital needs.

The CIP consists of three primary levels:

Strategy – groups several programs representing key capital objectives as identified in the Strategic Plan. The strategies are summarized in the Capital Expenditures sections of the Water System and Wastewater System chapters.

Program – represents a group of related projects combined to facilitate planning and decision-making. A discussion of the significant programs can be found in the CIP program highlights sections of the Water System and Wastewater System chapters.

Project – a discrete set of capital improvement tasks, coordinated by a project manager. Appropriation requests and projected spending (cash flow) are authorized at the project level. A discussion of each project included in the CIP can be found in the supplemental volume of the budget document.

CIP Budget Preparation

The CIP is prepared as part of the biennial budget process. The responsibilities for preparing and managing the CIP are shared among staff as follows:

Project Management

Project managers work together to meet the requirements of the biennial CIP budget process and to implement a specific program or project. During the budget process the project appropriations and cash flows are updated, and project descriptions and justifications are modified to identify recent and anticipated major accomplishments. Managers also work together to identify the most effective ways to schedule, staff, and coordinate projects.

The steps used to budget for the CIP are:

- Propose and justify new capital projects needed to carry out the District's goals;
- Identify how resources will be allocated to accomplish the work; and
- Identify the required appropriation and estimated cash flow for each project, including any contingency and an inflation factor for future project appropriations and cash flows.

Capital Steering Committee (CSC)

The CSC consists of Department Directors and Managers responsible for the overall management of the CIP during the budget preparation process.

Responsibilities include:

- Serve as an advisory group to the General Manager and the Budget Office;
- Review projects for opportunities to combine programs and projects, streamline costs, and determine the necessity for proposed new projects;
- Confirm the adequacy of District resources to complete projects;
- Scrutinize planned project cash flow amounts;

- Finalize the list of individual projects to be presented to the General Manager and Board of Directors based on available resources, project need, and priority;
- Review the status of the CIP regularly;
- Work with project management staff to resolve administrative issues; and
- Authorize necessary changes to project scope, schedule, and budget that are within staff's administrative authority.

Budget Office

The Budget Office is responsible for the overall management of the budget process which includes:

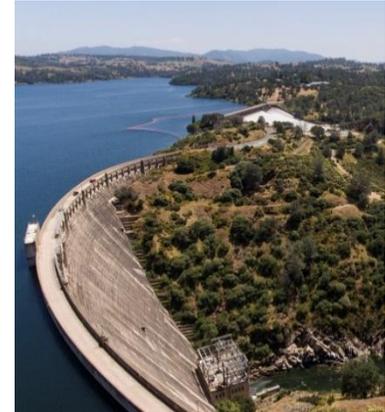
- Manage the CIP budget preparation and planning process;
- Provide staff support to the CSC;
- Ensure that the decisions of the CSC and General Manager are reflected in the budget;
- Determine the level of funding necessary for the CIP;
- Report to the General Manager and CSC the status of capital cash flow spending; and
- If required, request General Manager or Board approval for adjustments to the CIP project appropriations.

In FY22, a new budget system will be implemented which may change how the capital budget is developed in the future.

CHAPTER 2: BUDGET SUMMARY

This chapter summarizes the biennial budget for the Water and Wastewater Systems and includes the following topics:

- Budget Appropriations
- Operations
- Debt Service
- Capital Improvement Program
- Staffing
- Labor and Benefits
- Sources of Funds
- Fund Summaries



Pardee Dam – Lone, CA

BUDGET APPROPRIATIONS

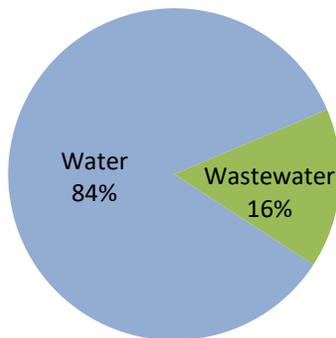
On June 8, 2021 the Board of Directors adopted the budget that was proposed by staff on March 23, 2021. There are no changes between the proposed and adopted budget.

The budgeted appropriations are divided into three categories:

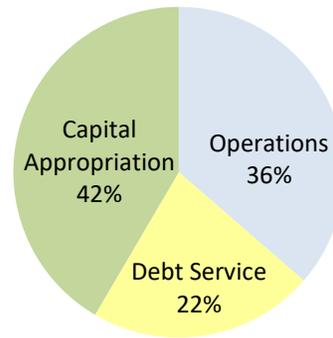
- **Operations** associated with the annual cost of providing all water and wastewater services;
- **Debt Service** on bonds issued to pay for the capital infrastructure investments along with other debt-related expenses; and
- **Capital** associated with projects to upgrade aging infrastructure, make seismic improvements, protect natural resources, and ensure a future water supply.

FY22 & FY23 APPROPRIATIONS (\$ Millions)							
	FY22			FY23			Grand Total
	Water	Wastewater	Total	Water	Wastewater	Total	
Operations	314.7	85.4	400.1	328.7	89.7	418.4	818.5
Debt Service	211.9	30.7	242.6	222.4	31.9	254.2	496.9
Capital Appropriation	<u>404.8</u>	<u>57.9</u>	<u>462.7</u>	<u>418.4</u>	<u>54.1</u>	<u>472.5</u>	<u>935.2</u>
Total	931.4	174.0	1,105.4	969.4	175.7	1,145.1	2,250.5

Appropriations by System



Appropriations by Category



The Water System has almost two times as many customers as Wastewater, yet its total appropriations are over five times greater than Wastewater due to the overall size and scope of activities of the Water System.

Total investments related to capital (debt service plus capital) comprise almost two-thirds of the appropriations.

APPROPRIATIONS BY SERVICES PROVIDED

EBMUD provides water and wastewater services to protect public health through the operation and maintenance of an infrastructure system spanning over 4,200 miles of pipeline, aqueducts, reservoirs, pumping plants, sewer interceptors, and treatment plants. Other services include recreation, fishery and habitat restoration, water conservation, pollution prevention, youth education, and producing renewable energy at dams and the wastewater treatment plant. Unlike many California water agencies, EBMUD owns its own water source and only purchases water during a drought.



Lafayette Reservoir – Lafayette, CA

The following table summarizes the budgeted appropriations by services provided.

FY22 & FY23 APPROPRIATIONS BY SERVICES PROVIDED		
(\$ Millions)		
SERVICES	FY22	FY23
Capital Improvement Program Projects to upgrade aging infrastructure, protect natural resources, and provide high quality water and wastewater services. Projects typically result in the construction of new facilities, or the rehabilitation or upgrade of existing facilities.	462.7	472.5
Debt Service Interest and principal repayment of bonds sold to pay for capital investments along with other debt-related expenses.	242.6	254.2
Water Service Operation and maintenance of facilities to store, treat and deliver high-quality water to 1.4 million customers including reservoirs, pipelines, and treatment plants; planning for future water supply; recycled water; and reading meters.	191.3	199.2
Wastewater Service Operation and maintenance of facilities to treat wastewater for 740,000 customers including sewer interceptors, the treatment plant, laboratory and wet weather facilities; and educational outreach to residences and businesses.	85.4	89.7
Support Services Human resources, finance, legal, information systems and other services.	79.6	84.0
Customer Service Water conservation programs, public information, school outreach, billing services, contact center, and additional customer support services.	25.0	26.1
Natural Resource Management and Protection Environmentally sound management of over 57,000 acres of watershed lands, operation of public recreation facilities and fisheries programs.	18.8	19.4
TOTAL BUDGET APPROPRIATIONS	1,105.4	1,145.1

OPERATIONS

Various departments carry out the day-to-day operations and the budget includes appropriations for labor, contract services and other expenses such as fuel, chemicals, and computer hardware and software. Appropriations are also budgeted for contingency to cover unanticipated needs and employee cost of living adjustments; intradistrict to ensure that certain internal expenses are not duplicated such as vehicle expenses and warehouse overhead; and capital support to capture costs that support but are not directly attributable to capital projects. Capital support is subtracted from operations and reallocated to the capital budget. Intradistrict expenses are also subtracted from operations and only impact the Water System.



Wastewater Clarifier – Oakland, CA

The table below shows department operations within each system. The Maintenance & Construction and Water Operations Departments account for almost half of the Water System operations budget.

FY22 & FY23 DEPARTMENT OPERATIONS (\$ Millions)			
	FY22 Budget	FY23 Budget	% Chg
WATER SYSTEM			
Administration	0.4	0.4	0.8%
Customer & Community Services	24.2	24.6	1.9%
Engineering & Construction	22.4	22.4	0.3%
Finance	29.0	29.8	2.7%
Human Resources	14.6	15.3	4.4%
Information Systems	33.9	34.8	2.6%
Maintenance & Construction	79.2	80.1	1.2%
Natural Resources	18.4	18.7	1.5%
Office of the General Counsel	5.6	5.6	0.6%
Office of the General Manager	7.9	8.4	5.4%
Operations & Maintenance Support	23.6	24.2	2.2%
Water Operations	95.5	97.3	1.9%
Water Recycling Program	6.1	6.4	4.1%
Water Resources	<u>9.7</u>	<u>10.0</u>	3.8%
Staffed Departments	370.5	378.1	2.0%
Contingency	9.4	17.2	-
Intradistrict	(14.3)	(14.6)	2.1%
Capital Support	<u>(51.0)</u>	<u>(52.0)</u>	2.0%
TOTAL WATER SYSTEM	314.7	328.7	4.4%
WASTEWATER SYSTEM			
Staffed Department	87.8	90.9	3.5%
Contingency	1.4	2.7	-
Capital Support	<u>(3.8)</u>	<u>(3.9)</u>	2.6%
TOTAL WASTEWATER SYSTEM	85.4	89.7	5.1%
DISTRICT TOTAL	400.1	418.4	4.6%

DEBT SERVICE

Capital expenditures are typically funded through debt financing or on a “pay-as-you-go” basis, but a portion can also be funded by reimbursements, grants or loans. Debt financing is generally suited to large capital projects with a long useful life and creates a measure of intergenerational equity in that future ratepayers will participate in the financing of the capital projects over their useful life. The “pay-as-you-go” option uses current year revenues and supports long-term financial stability.

The District’s policy is that over any five-year planning period no more than 65 percent of the Capital Improvement Program (CIP) will be funded from debt. Prior biennial budgets, as well as this budget, support additional “pay-as-you-go” funding to reduce debt service costs. Although debt service payments are considered to be part of the operating budget, debt proceeds are used to finance capital investments.

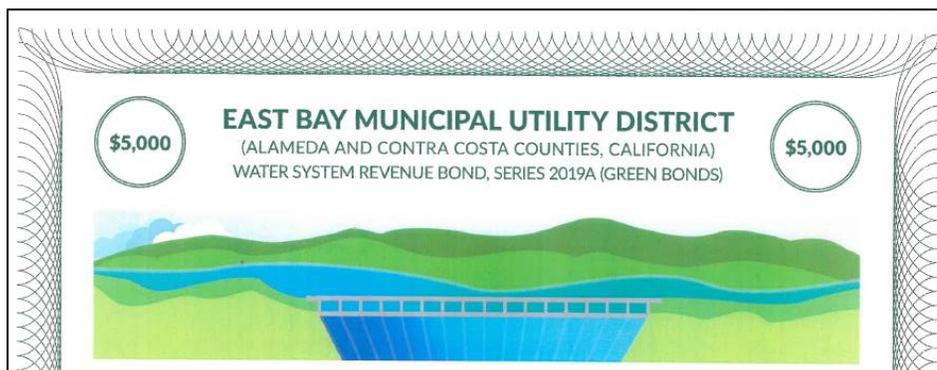
The Water System and Wastewater System have a similar projected level of debt funding of approximately 40 percent over the five-year FY22-26 CIP.

FY22 & FY23 Debt Service and Bonds Issued

Annual debt service payments are made to pay the interest and principal on the bonds issued to fund a portion of the CIP as shown in the table below. The table also shows the amount of new revenue bonds expected to be issued to help fund the CIP.

Total outstanding debt on the Water System is projected to be \$2.68 billion, and \$357.4 million on the Wastewater System as of June 30, 2021.

(\$ Millions)	FY22		FY23	
	Water System	Wastewater System	Water System	Wastewater System
Debt Service Payments	211.9	30.7	222.4	31.9
New Bonds Issued	150.0	10.0	150.0	20.0



Water Revenue Green Bond

CAPITAL IMPROVEMENT PROGRAM

The Capital Improvement Program (CIP) identifies the District's capital needs over the next five years and prioritizes projects to rehabilitate and replace aging infrastructure to better serve customers.

Capital appropriations are the amounts approved by the Board to be spent on capital projects and may be expended over multiple years. Appropriations vary from year-to-year depending upon the funding needs of the projected work. Capital support consists of costs incurred by support functions that are not directly charged to individual capital projects, such as finance, human resources, and information systems. These costs support the CIP as a whole and are deducted from the operations budget and included in the capital budget.



Pumping Plant Construction

The following table shows the annual appropriations for the five-year CIP, plus capital support. The Board adopts the appropriations for only the first two years of the CIP. The remaining years are for planning purposes and are subject to revision. Approximately 85 percent of the appropriations are associated with the Water System.

Planned Capital Appropriations within Fund (\$ Millions)						
	FY22	FY23	FY24	FY25	FY26	Total
Water	353.8	366.4	375.2	397.0	465.0	1,957.4
Capital Support	<u>51.0</u>	<u>52.0</u>	<u>53.0</u>	<u>54.1</u>	<u>55.2</u>	<u>265.3</u>
Water Total	404.8	418.4	428.3	451.1	520.2	2,222.7
Wastewater	54.1	50.2	28.9	79.5	164.0	376.7
Capital Support	<u>3.8</u>	<u>3.9</u>	<u>4.0</u>	<u>4.1</u>	<u>4.1</u>	<u>19.9</u>
Wastewater Total	57.9	54.1	32.8	83.6	168.1	396.6
District Total	462.7	472.5	461.1	534.7	688.3	2,619.3

Major capital projects to be undertaken are shown below. These and other capital projects are described in Chapter 3 and 4, and in the supplemental volume for this budget.

Water System	Wastewater System
Treatment Plant Upgrades	General Wastewater Improvements
Pipeline Rebuild	Interceptor and Pump Station Improvements
Large Diameter Pipelines	Secondary Treatment Improvements
Reservoir Rehabilitation	Dewatering Building and Equipment
Pumping Plant Rehabilitation	Preliminary Treatment Improvements
New Service Installations	Utilities and Site Work
Service Lateral Replacements	Power Generation System Improvements
Building Facilities Improvements	Electrical and Control Systems

STAFFING

Departments add and delete positions based on operational need and look for opportunities to restructure workloads as employees leave the District. Staffing is shown by full-time equivalents (FTE) which varies depending upon appointment type. Civil service, civil service exempt, limited-term, and temporary construction appointments are full-time positions and equal 1.0 FTE. Intermittent positions equal 0.75 FTE. Part-time and temporary positions equal 0.5 FTE.



Wastewater Staff

In FY22, the District will have 2,156.75 authorized FTE, with full-time positions comprising over 95 percent of the workforce. The following shows the number of authorized FTEs for FY19 through FY23, as amended by Board actions. Over this five-year period, staff levels have increased by 40.75 FTE or 1.9 percent.

District Staffing (Number of Authorized FTEs)					
Appointment Type	FY19	FY20	FY21	FY22	FY23
Full-Time Civil Service and C.S. Exempt	2,014.0	2,058.0	2,058.0	2,065.0	2,065.0
Limited-Term / Temporary Construction	65.0	63.0	62.0	57.0	56.0
Intermittent	3.0	3.75	3.75	3.75	3.75
Temporary / Part-Time	<u>33.0</u>	<u>32.0</u>	<u>32.0</u>	<u>31.0</u>	<u>31.0</u>
Total Authorized FTEs	2,115.0	2,156.75	2,155.75	2,156.75	2,155.75
FTE Change From Previous FY	0.0	41.75	(1.0)	1.0	(1.0)

Limited-Term/ Temporary Construction category includes 12 FTEs requiring Drought Declaration.

FY22 & FY23 Changes in FTE

Staffing changes provide opportunities to address priority areas such as investments in and maintenance of aging water and wastewater infrastructure. In FY22 and FY23, the goal is to hold staffing steady during this uncertain time while continuing to proceed with key projects and initiatives. The number of District-wide authorized FTE is increasing a net of 1.0 in FY22 through the addition of 9.5 FTEs and the deletion of 8.5 FTEs. In FY23, 1.0 FTE will be deleted.

Water System

The 7.5 FTEs added in FY22 will address:

- Replacement and maintenance of aging infrastructure
- Operations Support
- Customer Support Program
- Racial justice and social equity strategies

Wastewater System

The 2.0 FTEs added in FY22 will focus on:

- Priority issues such as biosolids, nutrients, and contaminants of emerging concerns
- Facilities control systems oversight and cyber security

LABOR AND BENEFITS



Leak Detection

Labor includes all compensation such as salaries and overtime. Benefits include the District's costs associated with retirement, health care, Social Security, disability and unemployment insurance. The District does not pay for the employee share of retirement contributions.

Labor and benefits are allocated to either operations or capital. Typical duties performed by employees that charge to operations include pipeline repairs, meter maintenance, treatment plant operations, customer support, human resources, and information systems. Typical capital duties include upgrades, rehabilitation and replacement of pumping plants, pipelines, reservoirs and treatment plants.

The table below shows labor and benefits allocated between the operations and capital budgets. Total labor and benefits are projected to increase 1.7 percent in FY22, and 3.8 percent in FY23.

- Total labor and benefits budget attributable to operations is 73 percent.
- Benefits represent 38.3 percent of the total labor budget.

Labor and Benefits by Operations and Capital (\$ Millions)					
	FY21 Budget	FY22 Budget	% Chg	FY23 Budget	% Chg
Water					
Operations	256.2	261.4	2.0%	272.6	4.3%
Capital	101.5	102.5	1.0%	105.2	2.6%
Wastewater					
Operations	48.6	49.8	2.6%	51.7	3.8%
Capital	11.4	11.2	-1.5%	11.7	3.9%
District-wide					
Operations	304.8	311.2	2.1%	324.3	4.2%
Capital	112.9	113.7	0.7%	116.9	2.9%
Total	417.7	424.9	1.7%	441.2	3.8%

Includes cost of living adjustment.

Excludes the Capital Support overhead allocated from Operations to Capital.

Increases in labor and benefit costs are primarily attributable to funding additional FTEs, cost of living adjustments, overtime costs, and a rise for retirement and health care expenses. These increases are offset by drivers such as overall lower salaries in comparison to the prior biennial budget due to the significant number of new employees with salaries lower than the employees they replaced, savings due to the time required to fill positions, a lower assumed cost of living adjustment compared to the prior biennial budget, and less use in the first fiscal year of premium pay for eligible employees that report to a job site lacking the basic facilities provided at District locations. The majority of the additional FTEs are in the Water System to support capital projects, infrastructure maintenance, operations support, customer support program, racial justice and social equity strategies, internships, K-12 school education program, and wastewater operations.



Wastewater Employee

Several complex drivers impact labor and benefits such as a slower projected rise in benefits costs for retirement and health care. The budget continues to build on efforts to contain benefit costs, the largest of which are the employer pension contribution and health care expense. In 2012, pursuant to the California Public Employees' Pension Reform Act (PEPRA), the Board of Directors implemented a change in the District's Employee Retirement System, referred to as the 2013 Plan. New employees receive a reduced pension benefit and fund a greater share of that benefit themselves. This budget projects a growth in the number of employees in the 2013 Plan, thereby slowing the increase for the District's share of retirement costs.

The following table shows the different employer pension contribution rates since FY20. Most new employees are part of the 2013 Plan and all other employees participate in the 1955/1980 Plan. Approximately 42 percent of employees are part of the 2013 Plan. The FY22 contribution rates were changed based on updated actuarial assumptions adopted by the Retirement System in November 2020 and an

updated Actuarial Valuation adopted in January 2021. The actual FY23 rate will not be available until it is calculated by the actuary and adopted by the Retirement Board in 2022.

Employer Pension Contribution Rates			
Plan	FY20	FY21	FY22
1955/1980 Plan	37.86%	37.86%	42.37%
2013 Plan	31.24%	31.24%	33.32%

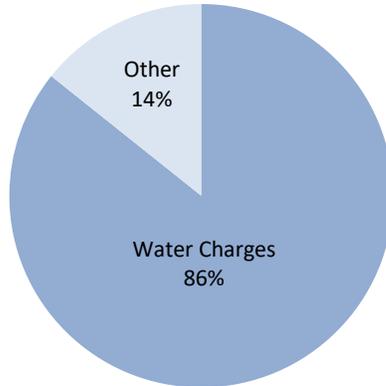
In the District's continuing efforts of cost containment, changes were made to health benefit provider options starting in 2019. The fiscal impact of these changes is expected to slow the growth of health care costs projected for this budget. This budget assumes a health benefit cost increase of approximately 5.0 percent each year.



Staff performing vegetation management on the Pardee watershed

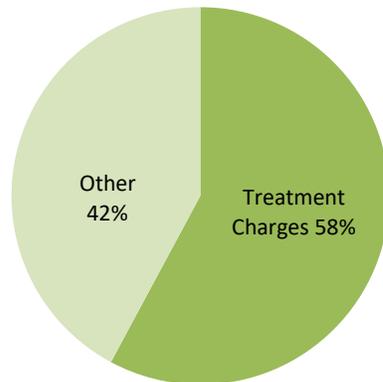
SOURCES OF FUNDS

FY22 & FY23 Water System Operating Revenue (Total = \$1.46 Billion)



The principal source of Water System operating revenue is Water Charges which account for 86 percent of revenues. As such, Water System revenue is highly sensitive to changes in customer water use.

FY22 & FY23 Wastewater System Operating Revenue (Total = \$299.6 Million)



The principal source of Wastewater System operating revenue is Treatment Charges which account for 58 percent of revenues. The Wastewater System is not as sensitive to changes in customer water use as the Water System since Treatment Charges are a smaller percentage of overall Wastewater revenue.



Wastewater Clarifier – Oakland, CA



Pumping Plant – Piedmont, CA

FUND SUMMARIES

The following table summarizes the beginning and ending Water System and Wastewater System fund balance based on projected sources and use of funds.

WATER SYSTEM FUND SUMMARY			
OPERATING & CAPITAL (\$ Millions)			
	FY22	FY23	%
	Balance	Balance	Change
Beginning Balance (Projected)	436.0	458.3	5.1%
Source of Funds			
Operating Revenues	713.0	745.4	4.5%
Capital**	<u>177.3</u>	<u>176.4</u>	-0.5%
Total Sources	890.3	921.8	3.5%
Use of Funds			
Operating			
Operations	314.7	328.7	4.4%
Debt Service	211.9	222.4	4.9%
Capital			
Revenue Funded	164.1	200.8	22.4%
Non-revenue Funded	<u>177.3</u>	<u>176.4</u>	-0.5%
Total Uses	868.0	928.2	6.9%
Sources less Uses	22.3	(6.4)	-128.9%
Ending Balance *	458.3	451.9	-1.4%
WASTEWATER SYSTEM FUND SUMMARY			
OPERATING & CAPITAL (\$ Millions)			
	FY22	FY23	%
	Balance	Balance	Change
Beginning Balance (Projected)	103.7	99.3	-4.2%
Source of Funds			
Operating Revenues	147.7	151.9	2.8%
Capital**	<u>9.8</u>	<u>19.6</u>	100.0%
Total Sources	157.5	171.5	8.8%
Use of Funds			
Operating			
Operations	85.4	89.7	5.1%
Debt Service	30.7	31.9	3.8%
Capital			
Revenue Funded	36.0	30.2	-16.0%
Non-revenue Funded	<u>9.8</u>	<u>19.6</u>	100.0%
Total Uses	161.9	171.5	5.9%
Sources less Uses	(4.4)	0.0	-100.0%
Ending Balance *	99.3	99.3	0.0%

* Includes reserves for working capital, self-insurance, worker's compensation, contingency, rate stabilization, and capital projects.

** Includes bonds, reimbursements, and grants.

RATES, CHARGES, AND FEES

This section explains the components of the District's water and wastewater rates, charges, and fees. Rates, charges and fees for water and wastewater services are used to fund operating costs, debt service requirements, and revenue funded capital projects. An increase is necessary to fund the FY22 and FY23 operating and capital budgets.

WATER SYSTEM

Water Rates

To meet revenue requirements with the lower consumption levels, overall water rate increases of 4.0 percent for FY22 and 4.0 percent for FY23 have been adopted, and will apply to the water service charge, water flow charge, elevation surcharge, and private fire service charge. Water charges have five customer classes: single family residential, multi-family residential, non-residential, private fire service, and non-potable/recycled water; and the charges have the following components:

- **Water Service Charge (paid by all customers):** a fixed charge based on the size of the water meter servicing the property and is calculated to recover a portion of the District's fixed costs, such as meter reading, billing, repairs, and customer service. Water meters range in size from 5/8" up to 18".
- **Water Flow Charge (paid by all customers):** a variable charge calculated per CCF (one hundred cubic feet which equals 748 gallons) of water delivered to a property. It is designed to recover the cost of providing water, including water supply, treatment, and distribution. For single family residential customers, the charge consists of three tiers that impose higher rates per CCF of water as consumption increases.
 - Tier 1 = First 172 gallons per day (gpd) (0 – 7 CCF per month)
 - Tier 2 = All water used in excess of 172 gpd up to 393 gpd (8 – 16 CCF per month)
 - Tier 3 = All water used in excess of 393 gpd (in excess of 16 CCF per month)
- **Elevation Surcharge (only paid by certain customers based on their location):** applied to each CCF of water delivered to properties only in pressure zones located 200 feet or more above sea level and is calculated to recover the increased cost of power and facility costs required to pump water to these higher elevations.
 - Pressure Zone 1 = 0 to 199 feet (no elevation surcharge)
 - Pressure Zone 2 = 200 to 600 feet
 - Pressure Zone 3 = above 600 feet
- **Private Fire Service Charge (only paid by customers with private fire service):** a fixed charge based on the size of the meter, applicable only to properties that have private fire service connections and is calculated based on EBMUD's costs of maintaining adequate water pressure to serve the fire service connection.

In addition to the charges listed above, the District maintains a system of Drought Surcharges that are assessed during a declared drought or water shortage emergency as a percentage of the Water Flow Charges on potable water use. The current adopted Drought Surcharges percentages will remain in effect for FY22 and FY23 in the event of a drought or water shortage emergency. Details of the rates and charges can be accessed online at EBMUD.com under [Water rates](#).

For FY22, the average single family residential (SFR) customer using 8 CCF per month will see an increase in their monthly water bill of \$2.53, or 4.0 percent over their FY21 water bill.

For FY23, the average single family residential customer will see an increase in their monthly water bill of \$2.66 or 4.0 percent over their FY22 water bill.

The following table illustrates by customer class monthly water charges based on the adopted FY22 and FY23 rates, and average water use.

AVERAGE WATER BILLS BY CUSTOMER CLASS								
(\$/Month)								
Customer Class / Meter Size	Water Use	FY21	FY22 Adopted	FY22 Change vs FY21	% Change	FY23 Adopted	FY23 Change vs FY22	% Change
SFR 5/8" or 3/4"	8 ccf	63.47	66.00	2.53	4.0%	68.66	2.66	4.0%
Multi-Family 4 units 1"	25 ccf	192.35	200.03	7.68	4.0%	208.03	8.00	4.0%
Multi-Family 5+ Units 1"	50 ccf	342.60	356.28	13.68	4.0%	370.53	14.25	4.0%
Commercial 1"	50 ccf	341.10	354.78	13.68	4.0%	369.03	14.25	4.0%
Industrial 2"	500 ccf	3,110.35	3,235.16	124.81	4.0%	3,365.17	130.01	4.0%



Historical bill printing

The following table illustrates the history of monthly water bills for the average single family residential customer based on average use of 8 CCF per month.

AVERAGE SINGLE FAMILY RESIDENTIAL WATER CHARGE			
(\$/Month)			
Fiscal Year	Monthly Water Bills	Residential % Increase	Overall % Increase*
2014	37.83	9.8%	9.7%
2015	41.40	9.4%	9.5%
2016	44.05	6.4%	8.0%
2017	47.15	7.0%	7.0%
2018	51.49	9.2%	9.2%
2019	56.12	9.0%	9.0%
2020	59.78	6.5%	6.5%
2021	63.47	6.2%	6.3%
2022	66.00	4.0%	4.0%
2023	68.66	4.0%	4.0%

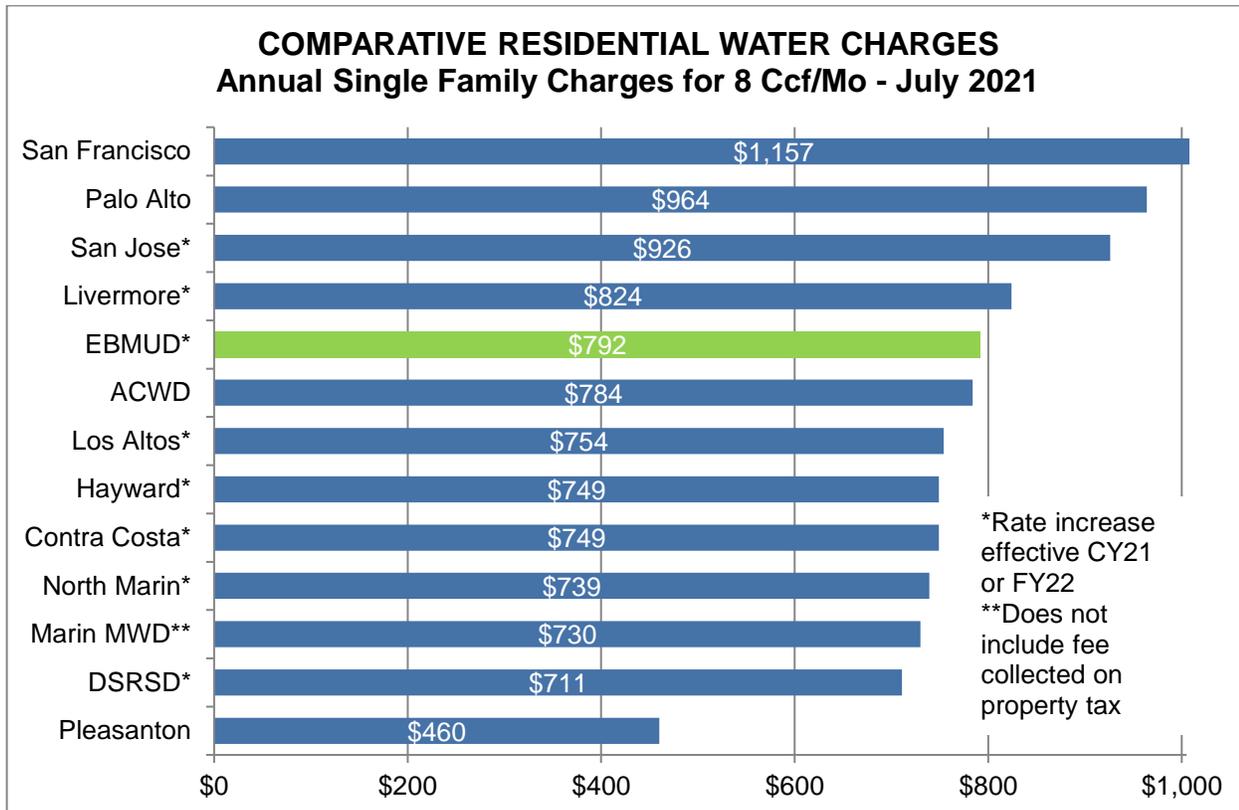
* Overall % increase includes the water charge for all customer classes.

The table below shows the various adopted water rate components.

WATER RATE COMPONENTS						
(\$/Month)						
Charge Type	Components	FY21	FY22 Adopted	% Change	FY23 Adopted	% Change
Service Charge*	5/8" or 3/4" meters	27.87	28.98	4.0%	30.14	4.0%
	2" meter	120.35	125.16	4.0%	130.17	4.0%
	4" meter	362.25	376.74	4.0%	391.81	4.0%
	6" meter	717.90	746.62	4.0%	776.48	4.0%
Flow Charge	SFR - Tier 1 (0-7 ccf)	4.25	4.42	4.0%	4.60	4.1%
	SFR - Tier 2 (7-16 ccf)	5.85	6.08	3.9%	6.32	3.9%
	SFR - Tier 3 (>16 ccf)	7.72	8.03	4.0%	8.35	4.0%
	Multi-family residential	6.01	6.25	4.0%	6.50	4.0%
	All other	5.98	6.22	4.0%	6.47	4.0%
	Nonpotable / Recycled	4.66	4.85	4.1%	5.04	3.9%
Elevation Surcharge	Pressure Zone 1 / ccf	0.00	0.00	0.0%	0.00	0.0%
	Pressure Zone 2 / ccf	0.86	0.89	3.5%	0.93	4.5%
	Pressure Zone 3 / ccf	1.79	1.86	3.9%	1.93	3.8%
Private Fire Service*	5/8" & 3/4" meters	14.83	15.42	4.0%	16.04	4.0%
	2" meter	50.73	52.76	4.0%	54.87	4.0%
	4" meter	144.67	150.46	4.0%	156.48	4.0%
	6" meter	282.80	294.11	4.0%	305.87	4.0%

* These charges are based on meter sizes that can range up to 18"

The following chart is a comparison of the average annual SFR water bill based on water use of 8 CCF per month for EBMUD and other local water agencies for their proposed or adopted FY22 rates or adopted CY21 rates. The District is above the median of these other agencies.



For comparative purposes, the chart displays the average SFR water use based on EBMUD's average SFR water use of 8 ccf/mo. The actual average consumption at other agencies may be lower or higher.

Customer Assistance Program

EBMUD offers a Customer Assistance Program (CAP) to help pay a portion of the water bill for qualified low-income residential customers and eligible homeless shelters. For residential customers the dwelling unit must be a single unit for receiving water service, have an individual water meter, be the primary residence of the applicant, and customers must meet household income requirements. Eligible customers may qualify for:

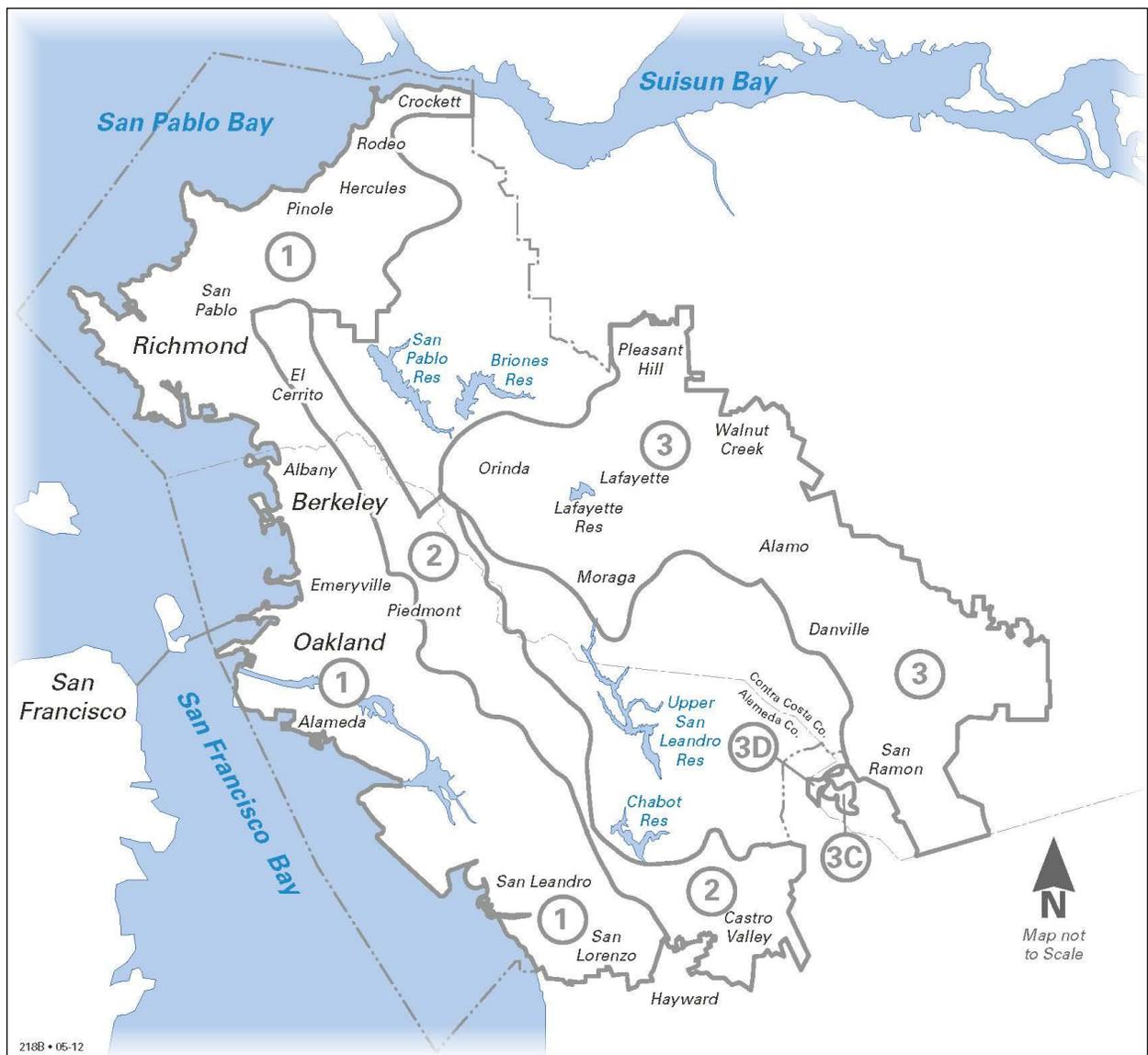
- A 50 percent discount on the water service charge and a 50 percent discount on the water flow charge, up to a maximum of 1,050 gallons per person per month.
- A 35 percent discount on the wastewater service charge and flow charges.

Water System Capacity Charges

There is a continuing need to construct both water supply and water distribution system improvements to assure that there will be reliable and secure water service for each new connection to the District's system. The System Capacity Charge (SCC) was established to assess new water customers an appropriate share of the costs of existing water distribution capital improvements and future water supply improvements within the SCC regions.

All applicants for water service are required to pay the SCC when the installation of a new service or upsizing of an existing connection is needed. The SCC is applied on a regional basis and is updated annually to reflect construction cost escalation for facilities that have already been built or increased cost estimates for facilities yet to be constructed.

East Bay Municipal Utility District SCC Regions



The Board directed staff to update the SCC to consider recent changes in customer water use, which is a key component in the determination of the SCC. The District retained a consultant to perform the SCC Study. The results of the 2021 SCC study were used to calculate the FY22 SCC.

The FY21 and adopted FY22 SCC rates are shown in the following table for single family residential 3/4" and non-residential 5/8" customers. These meter connections account for the majority of all future water service connections. Large meters pay proportionately more than the residential 3/4" and non-residential 5/8" customers based on expected water use. Non-residential and single family residential connections pay more in some regions due to higher consumption in those regions.

SCC RATES					
(\$)					
Customer Type	Region	FY21	FY22 Adopted	\$ Chg	% Chg
Single-Family Residential (3/4")	1	18,100	11,700	(6,400)	-35.4%
	2	31,350	18,810	(12,540)	-40.0%
	3	40,040	34,760	(5,280)	-13.2%
	3C	91,930	106,030	14,100	15.3%
	3D	103,450	107,210	3,760	3.6%
Non-Residential (5/8")	1	25,850	15,150	(10,700)	-41.4%
	2	46,590	29,920	(16,670)	-35.8%
	3	43,140	32,630	(10,510)	-24.4%
	3C	See Note 1			
	3D	103,450	107,210	3,760	3.6%

Note 1: The SCC for non-residential for Region 3C shall be uniquely calculated in accordance with the Wiedemann Agreement

The SCC rates consist of the following components:

- System-Wide Buy-In Component – calculated to recover a portion of the cost of existing facilities that serve the system as a whole;
- Regional Facilities Buy-In Component – calculated to recover a portion of the costs of existing facilities that serve one of the three SCC Regions;
- Future Water Supply (FWS) Component – calculated to recover a portion of the costs of future water supply projects that are allocated to new connections; and
- Additional Region Post 2000 – applies only to regions 3C and 3D to recover the costs of the additional facilities that were built to serve new connections in these regions.

The District also has a Standard Participation Charge (SPC), a District-wide connection charge that is applicable to only a few remaining contracts for service entered into prior to 1983. The SPC was designed to recover the District-wide average cost of distribution facilities constructed to serve new connections and was superseded by the SCC in 1983 and is less than the SCC in most regions. Customers eligible for service under the SPC regulations can pay for service under the more favorable of either the SPC or SCC terms and conditions.

The following table shows the various components that comprise the SCC charges for each region, and the charges are calculated based on each 100 gpd of consumption:

FY22 ADOPTED WATER UNIT CHARGES					
(\$/100 GPD)					
Region	System-Wide Facilities Buy-In	Regional Facilities Buy-In	Future Water Supply	Additional Region Post-2000	Total
1	3,575	1,787	798	n/a	6,160
2	3,575	4,585	798	n/a	8,958
3	3,575	2,720	798	n/a	7,093
3C	3,575	2,234	646*	7,226	13,681
3D	3,575	2,234	798	7,226	13,833

* Future Water Supply component is set by the July 20, 1993 Weidemann Agreement, indexed to the U.S. City Average of the Consumer Price Index.

The SCC for each region is derived from the total of the unit charges of each of the SCC components, multiplied by the estimated average daily water consumption in that SCC region SFR and non-residential consumption as listed in the table below. Because of the large number of SCCs processed each year, the District has determined average daily water consumption for single family residential and non-residential meters up through 1-1/2 inches within each SCC region, and established SCC rates based on those averages. For larger meters the SCC is determined using the same methodology as for smaller meters but is calculated on a case by case basis from the unit charges of the SCC components multiplied by the estimated required demand of the requested service installation.

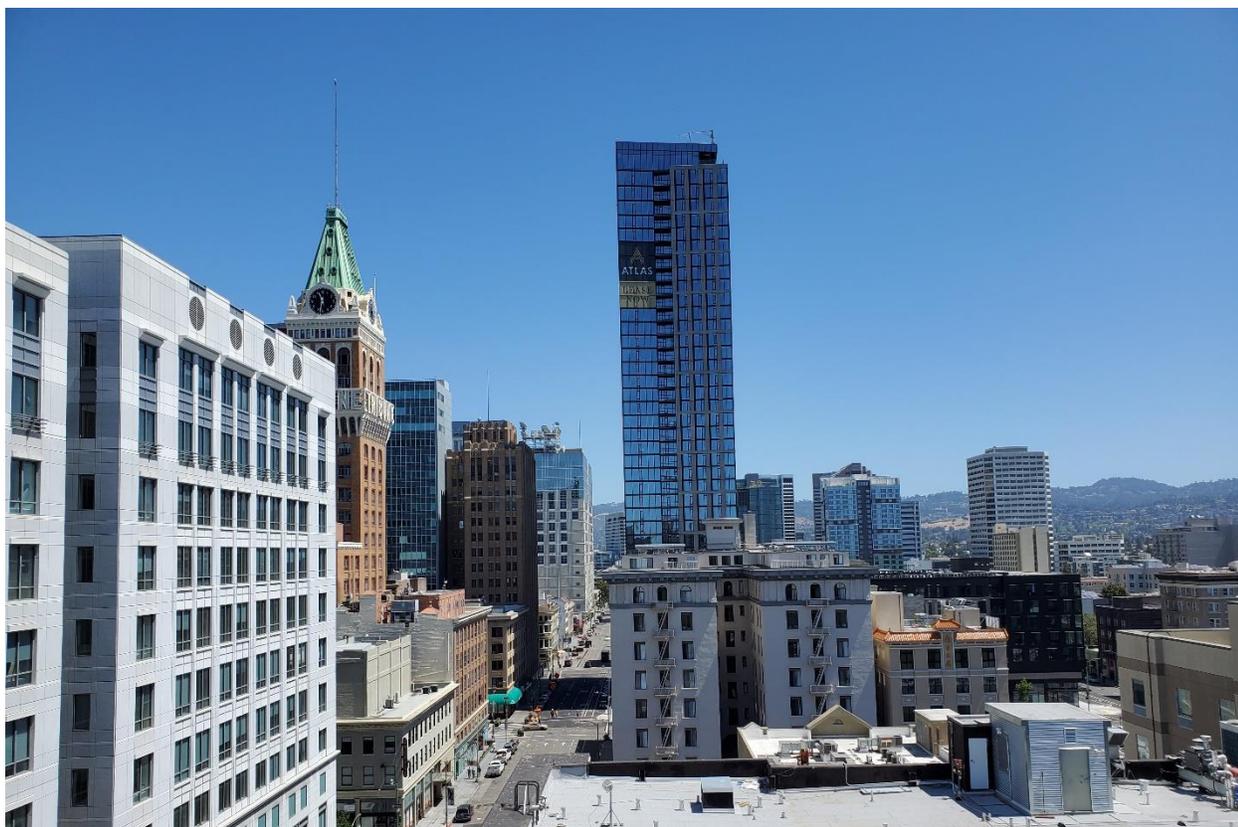
The following table shows calculations of SCC Rates for single family residential 3/4" connections and non-residential 5/8" connections.

SCC RATE CALCULATION				
Customer Type	Region	Consumption Per Connection (per 100 GPD)	SCC Charge for Each 100 GPD Consumption (\$)	SCC Rate (\$)
Single Family Residential (3/4")	1	1.90	6,160	11,700
	2	2.10	8,958	18,810
	3	4.90	7,093	34,760
	3C	7.75	13,681	106,030
	3D	7.75	13,833	107,210
Non-Residential (5/8")	1	2.46	6,160	15,150
	2	3.34	8,958	29,920
	3	4.60	7,093	32,630
	3C	7.75	13,681	See Note 1
	3D	7.75	13,833	107,210

Note 1: Calculated based on a 1993 Agreement with HCV & Associates LTD, Wiedemann Ranch, Inc., and Sue Christensen.

Applicants for non-potable/recycled water service have their SCC calculated based solely on the FWS Component. These customers are not served by the potable water system; they are served through a separate non-potable/recycled water system.

See the Biennial Report and Recommendation of the General Manager FY22 & FY23 for additional details. This report can be accessed on-line at EBMUD.com under Water, Water Rates, Budget and Rates, or at [Biennial Report and Recommendation of The General Manager Fiscal Years 2022 & 2023](#).



The tallest mixed use residential building with 634 dwelling units in Oakland was completed in 2020.

WASTEWATER SYSTEM

Wastewater Rates

The adopted changes to the Wastewater System rates and charges address the District's revenue requirement from its adopted biennial budget for FY22 and FY23. In 2019, the District conducted a cost of service (COS) study of the wastewater system to ensure that wastewater charges align with the cost to treat wastewater from residential and non-residential customers. Using the results of the COS study, wastewater rates and charges for FY22 will increase 4.0 percent overall from the FY21 rates and charges. For FY23, wastewater rates and charges will increase an additional 4.0 percent. The adopted changes to the Wastewater System rates and charges will apply to the Treatment Service Charge, Flow Charge and Strength Charge, and the Wet Weather Facilities Charge. There is no increase to the San Francisco Bay Pollution Prevention Fee. Wastewater charges have three customer classes: residential, multi-family residential, and non-residential. Non-residential customers are further classified based on the type of business operated: their business classification code (BCC). The wastewater charges have the following components:

- **Service Charge:** a fixed monthly charge per service connection/account and is calculated to recover a portion of EBMUD's fixed costs of providing wastewater services.
- **Flow Charge:** a variable monthly charge determined on the basis of a customer's metered water use and assumptions regarding the volume of water returned to the sewer system. For residential customers in dwellings up to four units the charge is capped at 9 CCF per month. The charge recovers a portion of EBMUD's costs of collecting and treating wastewater.
- **Strength Charge:** a monthly charged based on the estimated amount of constituents that a customer discharges into the sewer system and is calculated to recover EBMUD's costs of treating such constituents. Since residential customers' wastewater is very homogeneous, their treatment strength costs are recovered from a fixed strength charge.
- **San Francisco Bay Pollution Prevention Fee:** a fixed monthly charge calculated on the basis of the costs of EBMUD's pollution prevention program, established in the 1980s, to prevent pollutants from reaching the San Francisco Bay.
- **Wet Weather Facilities Charge collected on the property tax bill:** a fixed annual charge assessed by lot size for properties connected to the wastewater system. It is calculated on the basis of EBMUD's costs of its multi-million dollar Wet Weather Program mandated by the U.S. Environmental Protection Agency to improve the District's capacity to collect and treat all sewer flows during rainy weather.

Details of the rates and charges can be accessed online at EBMUD.com under [Wastewater rates](#).

For FY22, the average single family residential customer that discharges 6 CCF per month will see a monthly wastewater treatment charge increase from \$23.02 to \$23.91, a 3.9 percent increase. For FY23, the average single family residential customer will see a monthly wastewater treatment charge increase from \$23.91 to \$24.89 or 4.1 percent.

The following table illustrates by customer class the monthly wastewater charges collected on the water service bill based on the adopted FY22 and FY23 rates.

WASTEWATER CHARGES ON WATER BILL							
(\$/Month)							
Customer Class	FY21	FY22 Adopted	FY22 Change vs FY21	% Change	FY23 Adopted	FY23 Change vs FY22	% Change
Average Single Family Residential	23.02	23.91	0.89	3.9%	24.89	0.98	4.1%
Multi-Family Residential 4 units	71.50	74.24	2.74	3.8%	77.32	3.08	4.1%
Multi-Family Residential 5+ units	155.30	161.59	6.29	4.1%	168.39	6.80	4.2%
Commercial	159.78	166.07	6.29	3.9%	172.87	6.80	4.1%
Industrial	9,387.78	9,748.07	360.29	3.8%	10,158.37	410.30	4.2%

Includes Service, Flow and Strength Charges and SF Bay Pollution Prevention Fee.

The Wet Weather Facilities Charge is collected on the property tax bill and is based on the square footage of each customer's lot. The Wet Weather Facilities Charge will increase by 4.0 percent in FY22 and 4.0 percent in FY23.

The following table illustrates the annual Wet Weather Facilities Charge collected on the property tax bill based on the adopted FY22 and FY23 rates.

ANNUAL WET WEATHER FACILITIES CHARGE			
(\$/Lot)			
Lot Size	FY21	FY22	FY23
Small Lot 0 - 5,000 sq. ft.	115.70	120.34	125.16
Medium Lot 5,000 - 10,000 sq. ft.	180.74	187.98	195.50
Large Lot >10,000 sq. ft.	413.10	429.62	446.80

The following table illustrates the history of annual total wastewater charges, including Wet Weather and SF Bay Residential Pollution Prevention fee for the average single family residential customer discharging 6 CCF per month.

AVERAGE SINGLE FAMILY RESIDENTIAL SEWER CHARGE			
(\$/Year)			
Fiscal Year	Annual Sewer Charge*	Residential % Increase	Overall % Increase**
2014	295.82	8.24%	9.00%
2015	320.34	8.29%	8.50%
2016***	317.74	-0.81%	5.00%
2017	333.26	4.88%	5.00%
2018	349.48	4.87%	5.00%
2019	367.14	5.05%	5.00%
2020	377.04	2.70%	4.00%
2021	391.94	3.95%	4.00%
2022	407.26	3.91%	4.00%
2023	423.84	4.07%	4.00%

* Annual Sewer Charge includes the Wet Weather Facilities Charge collected on the property tax bill for an under 5,000 square foot lot.

** Overall % increase includes the treatment rates for all customer classes.

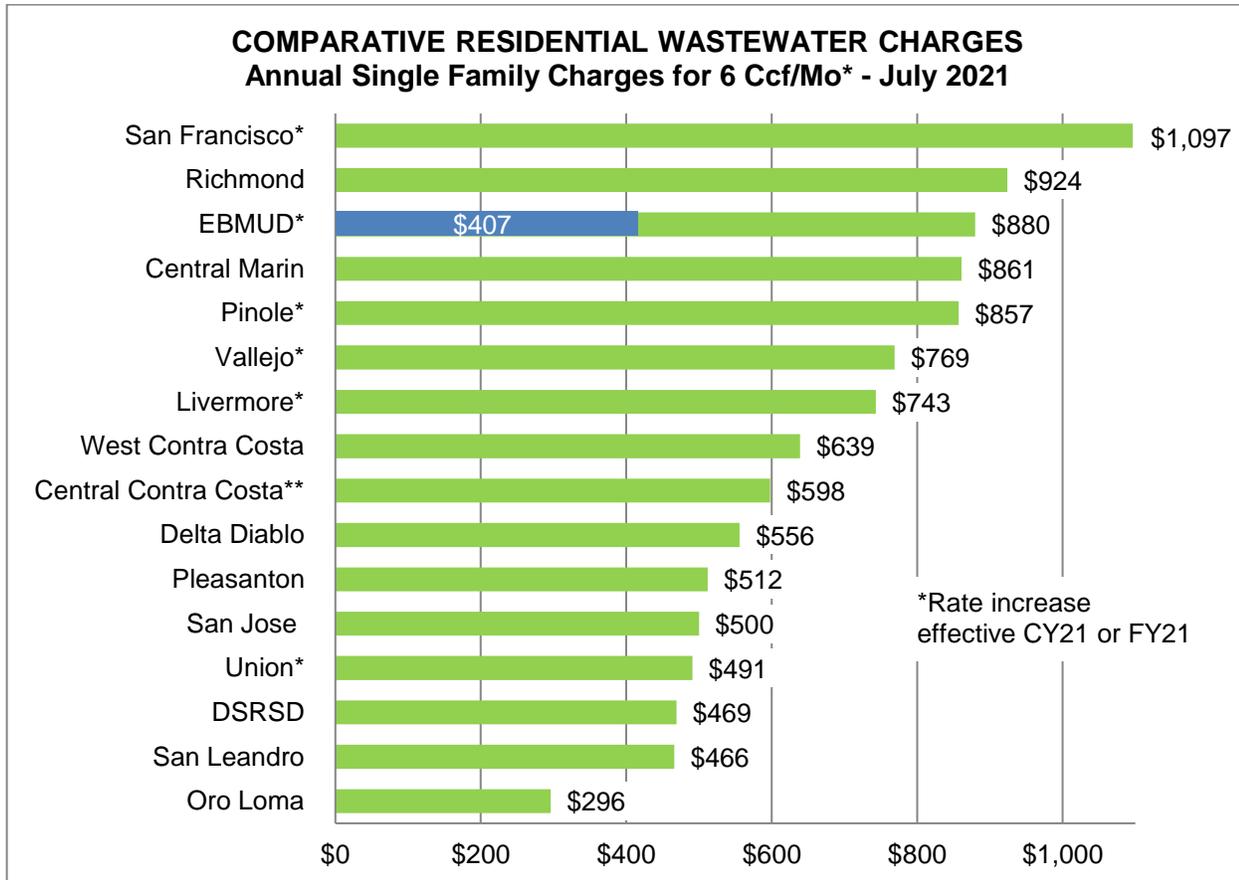
*** In 2016 the Cost of Service Study resulted in decreased charges for SFR customers.

The table below shows the various adopted wastewater rate components including the service charge, flow, strength which is comprised of Chemical Oxygen Demand (COD) and Total Suspended Solids (TSS), and San Francisco Bay Pollution Prevention Fee.

WASTEWATER TREATMENT UNIT RATE COMPONENTS					
(\$)					
Unit Rates	FY21	FY22 Adopted	% Change	FY23 Adopted	% Change
Service Charge (\$/month)	7.30	7.59	4.0%	7.89	4.0%
Flow (\$/ccf)	1.317	1.370	4.0%	1.425	4.0%
Strength - COD (\$/pound)	0.134	0.139	3.7%	0.145	4.3%
Strength - Total TSS (\$/pound)	0.551	0.573	4.0%	0.596	4.0%
Residential Pollution Prevention Fee \$/dwelling unit (up to 4 dwelling units)	0.20	0.20	0.0%	0.20	0.0%
Multi-Family Pollution Prevention Fee for 5+ dwelling units	1.00	1.00	0.0%	1.00	0.0%
Non-Residential Pollution Prevention Fee	5.48	5.48	0.0%	5.48	0.0%

The following chart is a comparison of the average annual SFR wastewater bill on flows of 6 CCF per month for EBMUD and other local communities. EBMUD provides only a portion of the total wastewater service in its operating area; other local collection system agencies provide service from the customer to the EBMUD sewer interceptor. The total charge varies by community according to the level of local agency charges.

EBMUD's FY22 Wastewater charge for the average single family residential customer is \$407 annually, which includes treatment charges on the water bill of \$287 and the Wet Weather Facilities Charge on the property tax bill of \$120.



Includes collection and treatment based on flow of 6 ccf/mo.
 EBMUD rate based on adopted Treatment rate, SF Bay Residential Pollution Prevention Fee, and Wet Weather Fee, \$407/year plus average community collection charge of \$473/year.

Wastewater Capacity Fees

The Wastewater Capacity Fee (WCF) was established in 1984 to recover costs for providing wastewater treatment capacity for new or expanded system use. The WCF is based on an equity approach whereby new users “buy-in” to a wastewater system that has adequate capacity to serve both existing demands and new growth. The WCF is expressed in terms of wastewater flow volume (flow) and strength factors including COD and TSS. The WCF applies to all new customers and dischargers who increase wastewater volume or strength.

For example, an additional capacity fee may be required if a property is developed and connects to the wastewater system, changes use, or is redeveloped and increases the volume or strength of the wastewater it discharges. An additional capacity fee may also be required if a flow review by the District demonstrates the volume and/or strength of the wastewater discharged from a non-residential property has significantly increased or is greater than anticipated at the time a WCF was first paid.

The WCF is based on the anticipated flow contributions multiplied by the average wastewater strength measured or assigned for each customer classification, and the unit capacity rates for flow and strength factors. The single family residential capacity fee is based on a standard flow and strength of new single family residential accounts to the wastewater system. For non-residential customers, a review of the actual flow and strength may be conducted within 24 months, once the business is fully established, to verify the estimated demand for wastewater capacity. The review may result in the assessment of additional capacity fees if the actual flow or strength exceeds the original estimate.

The adopted FY22 WCF unit capacity rates and the single-family residential capacity fee are shown in the tables below. FY23 rates are tied to the 2021 Engineering News Record Construction Cost Index and are not available until 2022.

NON-RESIDENTIAL UNIT CAPACITY FEE RATES			
(\$)			
Unit Capacity Rate	FY21	FY22	% Increase
Flow/ccf/year	14.12	14.35	1.6%
COD/lbs/year	1.48	1.51	2.0%
TSS/lbs/year	6.79	6.90	1.6%

SINGLE-FAMILY RESIDENTIAL CAPACITY FEE			
(\$)			
Customer Class	FY21	FY22	% Increase
Single-Family	2,810	2,850	1.4%

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CHAPTER 3: WATER SYSTEM

This chapter provides a detailed description of the Water System including discussions of the following topics:

- Fund Summary
- Sources of Funds
- Use of Funds
- Staffed Department Operations
- Debt Service and Financing
- Capital Improvement Program
- Five-Year Financial Forecast



Lafayette Reservoir – Lafayette, CA

The Water System is an enterprise fund consisting of an operating and a capital budget. The Water System collects, transmits, and distributes water to communities within Alameda and Contra Costa Counties. In addition, the Water System provides and charges the Wastewater System for administrative, financial, and other support services.

The following are key projections and assumptions used in the FY22 and FY23 budget.

Water System Fund – Key Assumptions		
	FY22	FY23
Water Sales Volume (mgd)	144.3	145.8
% Rate Increase	4.00%	4.00%
Average monthly single family residential bill based on 8 ccf/month	\$66.00	\$68.66



Mokelumne Watershed Snow

FUND SUMMARY

The following fund summary table shows the Water System beginning and ending fund balance, and projected revenue and expenditure budgets for FY22 and FY23.

WATER SYSTEM DETAILED FUND SUMMARY			
SOURCES & USES (\$ Millions)			
	FY22	FY23	%
	Balance	Balance	Change
Beginning Balance (Projected)	436.0	458.3	5.1%
Source of Funds - Operating			
Water Charges	610.2	640.0	4.9%
Property Taxes	40.0	40.0	0.0%
Power Sales	5.0	5.0	0.0%
Interest Income	1.2	2.5	108.3%
SCC Revenue	25.0	25.7	2.8%
Reimbursements	13.0	13.4	3.1%
All Other Revenue	<u>18.6</u>	<u>18.8</u>	1.1%
Operating Sources	713.0	745.4	4.5%
Less: Revenue Funded Capital	<u>(164.1)</u>	<u>(200.8)</u>	22.4%
Net Operating Sources	548.9	544.6	-0.8%
Source of Funds - Capital			
New Bond Proceeds	147.0	147.0	0.0%
Revenue Funded Capital	164.1	200.8	22.4%
Loan Proceeds	0.0	0.0	0.0%
Grants	0.0	0.0	0.0%
Reimbursements	30.3	29.4	-3.0%
Commercial Paper	<u>0.0</u>	<u>0.0</u>	0.0%
Net Capital Sources	341.4	377.2	10.5%
Net Sources of Funds	890.3	921.8	3.5%
Use of Funds - Operating			
Labor	254.7	258.6	1.6%
Contract Services	22.1	22.2	0.0%
Other	93.7	97.3	3.8%
Contingency	9.4	17.2	82.0%
Debt Service	211.9	222.4	4.9%
Less: Capital Support	(51.0)	(52.0)	2.0%
Less: Intradistrict	<u>(14.3)</u>	<u>(14.6)</u>	2.1%
Net Operating Uses	526.6	551.0	4.6%
Use of Funds - Capital			
Project Cash Flows	290.4	325.2	12.0%
Plus: Capital Support	<u>51.0</u>	<u>52.0</u>	2.0%
Net Capital Uses	341.4	377.2	10.5%
Net Uses of Funds	868.0	928.2	6.9%
Total Sources	890.3	921.8	3.5%
Total Uses	868.0	928.2	6.9%
Total Sources less Uses	22.3	(6.4)	-128.8%
Ending Balance *	458.3	451.9	-1.4%

* Ending Balance includes all policy reserves and reserves for capital projects.

SOURCES OF FUNDS

The Water System has a variety of revenue sources that are used to fund operations, and a portion of the capital expense. The remaining capital expense is funded primarily by new bond proceeds and reimbursements.

The table below shows actuals and budgets for operating revenues and capital funding sources.



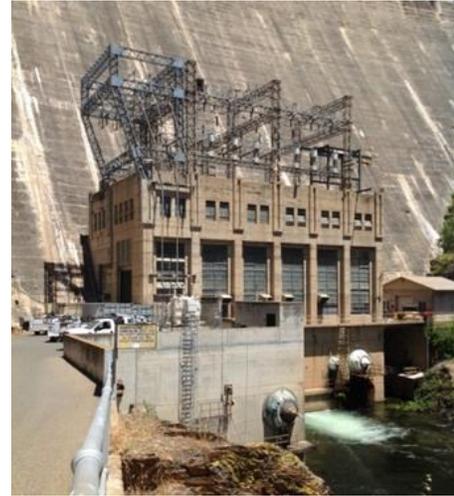
Water Treatment Plant Ozone System

Water System Sources of Funds (\$ Millions)					
	FY19 Actuals	FY20 Actuals	FY21 Budget	FY22 Budget	FY23 Budget
Operating Revenues					
Water Charges	520.6	567.4	582.5	610.2	640.0
Property Taxes	35.7	40.3	35.8	40.0	40.0
Power Sales	10.4	6.8	5.0	5.0	5.0
Interest Income	9.8	11.6	9.6	1.2	2.5
SCC Revenue	73.5	53.3	40.0	25.0	25.7
Reimbursements	11.3	12.7	12.6	13.0	13.4
All Other Revenue	<u>19.7</u>	<u>18.8</u>	<u>18.4</u>	<u>18.6</u>	<u>18.8</u>
Total Operating Revenues	680.9	710.9	703.9	713.0	745.4
Revenue Funded Capital	(259.2)	(67.1)	(197.0)	(164.1)	(200.8)
Capital Funding Sources					
Revenue Funded Capital	259.2	67.1	197.0	164.1	200.8
New Bond Proceeds	0.0	200.0	156.7	147.0	147.0
Grants	0.9	0.8	0.0	0.0	0.0
Reimbursements	<u>23.8</u>	<u>17.8</u>	<u>31.7</u>	<u>30.3</u>	<u>29.4</u>
Total Capital Funding Sources	283.9	285.7	385.4	341.4	377.2
Total Water Sources of Funds	705.6	929.5	892.3	890.3	921.8

Operating Revenue

Water System operating revenues for FY22 are budgeted to increase \$9.1 million, or 1.3 percent compared to FY21, for a total of \$713.0 million. FY22 water sales are increasing slightly to 144.3 million gallons per day (MGD) compared to the FY21 budget of 143.0 MGD and reflects a rate increase of 4.0 percent. The FY22 budget also includes an increase in Property Taxes of \$4.2 million, small increases in Reimbursements and All Other, Power sales remaining steady at \$5.0 million, and decreases in SCC revenue of \$15.0 million and Interest Income of \$8.4 million.

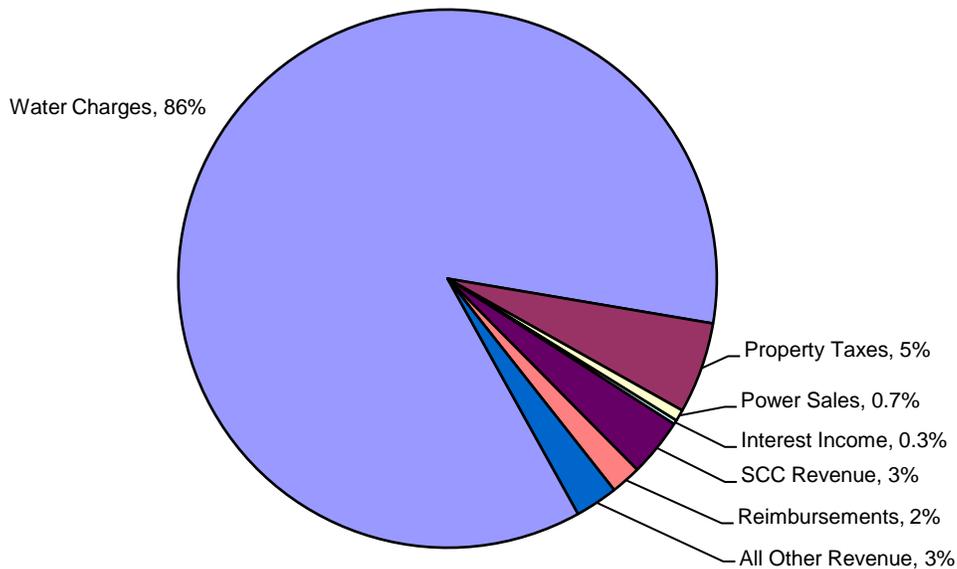
In FY23, Water System operating revenues are budgeted to increase \$32.4 million, or 4.5 percent for a total of \$745.4 million. This increase is comprised primarily of \$29.8 million from Water Charges due to a slightly higher projected consumption of 145.8 MGD and the 4.0 percent increase in water rates.



Pardee Dam Hydroelectric Powerhouse

The figure below illustrates the various sources of revenue and the percentage of each source. Water Charges is the largest source of revenue comprising 86 percent of FY22 and FY23 total operating revenue.

FY22 & FY23 Water System Operating Revenue
(Total = \$1.46 Billion)



Operating Revenue Descriptions

The following are descriptions of the sources of operating revenue, including information about the projected revenues for FY22 and FY23.

Water Charges

Water Charges consist of a monthly service charge, a volume charge for the amount of water used and an elevation charge for those customers located at higher elevations that require pumping. The Water Charges increase 4.0 percent in FY22 and an additional 4.0 percent in FY23.

FY22 Revenue (\$ Millions)			FY23 Revenue (\$ Millions)		
	<u>Amount</u>	<u>% of Total</u>		<u>Amount</u>	<u>% of Total</u>
Monthly Service Charge	177.5	29.1	Monthly Service Charge	185.0	28.9
Volume Charge	400.7	65.7	Volume Charge	421.4	65.8
Elevation Charge	<u>32.0</u>	<u>5.2</u>	Elevation Charge	<u>33.6</u>	<u>5.3</u>
Total	610.2	100.0	Total	640.0	100.0

FY22 Water Charges are projected to increase \$27.7 million, for a total of \$610.2 million, or 4.8 percent compared to FY21 as projected consumption increases slightly from 143.0 MGD to 144.3 MGD, and a 4.0 percent rate increase. FY23 Water Charges are projected to increase \$29.8 million, for a total of \$640.0 million, or 4.9 percent compared to FY22 as projected consumption increases slightly from 144.3 MGD to 145.8 MGD, and a rate increase of 4.0 percent.

Property Taxes

The District receives approximately 1.25 percent of the 1.0 percent county tax levy on properties within District boundaries. For FY22 and FY23, budgeted Property Tax revenue of \$40.0 million is based upon FY20 actual property tax receipts and uncertainty about COVID-19 recovery to the local economy.

Power Sales

The District operates hydroelectric power generation facilities at the Pardee and Camanche Dams. For FY22 and FY23, projecting normal precipitation, earnings of approximately \$5.0 million each year are expected, primarily from sales of power to other agencies.

Interest Income

Funds not needed for current expenditures are placed in short-term investments in accordance with the District's investment policy and may include money market funds, commercial paper, medium-term corporate notes, and short-term U.S. government securities. Interest earned on these funds in FY22 is projected to be \$1.2 million, an \$8.4 million decrease from FY21 due to a drop in interest rates from the 2.5 percent assumed for the FY21 budget. For FY23 Interest Income is projected to be \$2.5 million, a \$1.3 million increase over FY22. Interest earned is assumed to be 0.25 percent in FY22 reflecting current conditions, and 0.5 percent in FY23.

SCC Revenue

System Capacity Charges (SCC) are collected from customers requesting new water service and are designed to recover costs of facilities necessary to serve new customers. These costs include distribution and treatment facilities, facilities that serve the system as a whole such as Pardee and Camanche Reservoirs, terminal storage reservoirs, administrative facilities, and a portion of the costs of supplemental water supply. The purpose of the SCC is to assure that existing customers do not bear the cost of customer growth and that new customers pay for their share of the existing water system facilities. Funds collected from the SCC are held either in dedicated reserves or accounted for as a capital contribution from developers. Funds held in the dedicated reserve account are used to pay the debt service for the bonds issued to build supplemental water supply projects.

Due to the increase in building activity in the service area, the SCC revenue has been over \$50.0 million in each of the past four years. During FY21, the District updated the SCC calculation that results in a reduction in the SCC adopted for FY22. SCC revenue under the adopted SCC update is projected to be \$25.0 million for FY22, a \$15.0 million decrease from the amount budgeted for FY21, and \$25.7 million for FY23. The budgeted SCC revenue assumes that the level of building activity slows.

Reimbursements

The Water System receives reimbursement for services provided to other agencies and from the Wastewater System for administrative costs, space rental in the Administration Building, and for providing billing and collection services. The Water System also receives reimbursements from several cities for providing billing and collection services for the cities' sewer charges. Total reimbursements for FY22 and FY23 are projected at \$13.0 million and \$13.4 million respectively.

All Other Revenue

All Other Revenue includes receipts from the sale or rental of District properties, fees for use of District recreational lands and facilities, insurance and property damage reimbursements, sales of surplus District equipment and vehicles, sales of District publications, reimbursements from the U.S. Treasury under the Build America Bonds program, reimbursement of operating expenses from the Richmond Advanced Recycled Expansion (RARE) project and other miscellaneous revenues. All Other Revenue is projected at \$18.6 million for FY22 and \$18.8 million for FY23.

Capital Funding

The following describe the sources of capital funding. The Capital Improvement Program (CIP) will be funded with bond proceeds, water revenues, reimbursements, and grants. It is anticipated that the District will receive \$147 million in new revenue bond proceeds in FY22 and \$147 million in FY23, combined with revenue funded capital of \$164.1 million in FY22 and \$200.8 million in FY23.

New Bond Proceeds

The District has the ability to issue long-term bonds to fund its capital program. The proceeds of the bond sales can be used to pay for capital expenses over several years. The repayment of the bonds is generally over 30 years and is made from water rate revenues.

Commercial Paper Issues

In addition to issuing long-term bonds, the District has used short-term borrowing in the form of commercial paper to raise revenues for capital expenses. The term of commercial paper can be up to 270 days. The repayment of commercial paper is made from water rate revenues.

Grants and Loans Proceeds

The District pursues federal and state grants and low-interest loans to fund some of its capital projects when they meet the conditions of the District's grant and loan programs.

Reimbursements

Some capital projects are performed at the request of other agencies, and the District is reimbursed for its expenses. An example would be the relocation of a water main at the request of a city or state agency. Also, work to expand the distribution system to meet new connections not covered by the System Capacity Charge is paid for directly by the applicants.

Revenue Funded Capital

Annual capital expenses that are not paid from debt funding, grants, loans or reimbursements are paid from operating revenues, either from current year revenues or from reserves.

Please refer to the section on Debt Service and Financing for details on debt funding of capital projects.

USE OF FUNDS

The Water System has three types of expenditures:

Operations – the annual costs of providing all water services;

Debt Service – the repayment of bonds for making capital investments in the water system along with other debt-related expenses; and

Capital Cash Flow – the annual costs of the CIP for long-term projects.

The following table shows the breakdown of expenses by the type of expenditure.

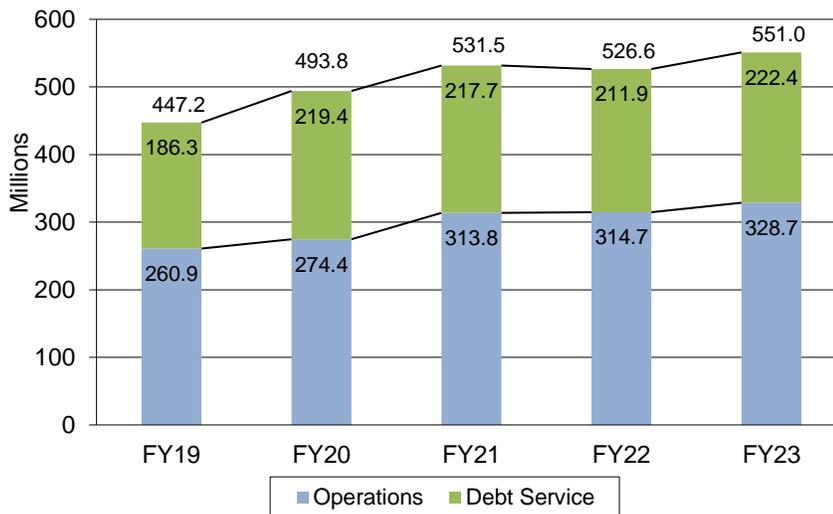
Use of Funds (\$ Millions)					
Expenditure Type	FY19 Actuals	FY20 Actuals	FY21 Budget	FY22 Budget	FY23 Budget
Operations	260.9	274.4	313.8	314.7	328.7
Debt Service	186.3	219.4	217.7	211.9	222.4
Capital Cash Flow	<u>283.9</u>	<u>285.7</u>	<u>385.5</u>	<u>341.4</u>	<u>377.2</u>
Total Expenditures	731.1	779.5	917.0	868.0	928.2

Operating Budget

This section describes the major components of the Water System operations budget. Typical operations expenditures include, but are not limited to labor, benefits, chemicals, energy, parts, materials, insurance, District vehicle fleet costs, and computer hardware and software.

In FY22, the operations and debt service budget is decreasing \$4.9 million or 0.9 percent of the FY21 budget, and in FY23 will increase \$24.4 million or 4.6 percent as shown below.

FY19-FY23 Operations and Debt Service
(\$ Millions)



The operations budget is also shown by department on the following pages.

Department Operating Budgets

The Water System operations budget is comprised of various departments. The majority of these departments are referred to as staffed departments indicating employees are assigned to work in these areas. The staffed department budget funds the day-to-day operations of the District, and includes funding for labor, benefits, outside contract services, and other non-labor expenses such as electricity, chemicals, fuel, computer hardware, self-insured liability claims, and workers compensation claims. A description of each staffed department is included later in this chapter.

A small number of departments do not have personnel assigned to them and are referred to as non-staffed departments, described as follows:

Contingency – Funds are budgeted each fiscal year to cover projected labor-related expenses such as the employee cost of living adjustment which is based upon each year’s February Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) in the San Francisco-Oakland-Hayward area. The budget funds a cost of living adjustment for each fiscal year. In FY23, contingency increases to account for the combination of the cost of living adjustments paid in the prior year and the current year. The contingency budget also includes funding for unanticipated needs which may arise before the next budget cycle.

Intradistrict – Certain internal service accounts are included in balance sheets to assure that internal expenses are not counted twice within the operations budget. Examples of these accounts include warehouse stores overhead and fleet vehicle expenses.

Capital Support – Costs that are not directly attributable to specific capital projects, but indirectly support the CIP. Capital support costs in the operations budget are reallocated to the capital budget and will decrease operating expenses by a like amount.

The following table presents the total FY22 and FY23 Water System operating budget by department.

Operating Budget by Department (\$ Millions)							
Departments	FY19 Actuals	FY20 Actuals	FY21 Budget	FY22 Budget	% Chg	FY23 Budget	% Chg
Administration	0.4	0.4	0.4	0.4	8.5%	0.4	0.8%
Customer & Community Services	19.3	21.4	24.8	24.2	-2.6%	24.6	1.9%
Engineering & Construction	17.6	19.0	22.5	22.4	-0.8%	22.4	0.3%
Finance	27.8	30.6	28.5	29.0	2.1%	29.8	2.7%
Human Resources	11.3	11.6	12.5	14.6	17.0%	15.3	4.4%
Information Systems	29.7	31.2	31.6	33.9	7.4%	34.8	2.6%
Maintenance & Construction	100.0	74.2	75.5	79.2	4.9%	80.1	1.2%
Natural Resources	15.8	16.2	18.2	18.4	1.3%	18.7	1.5%
Office of General Counsel	4.6	5.2	5.3	5.6	5.4%	5.6	0.6%
Office of the General Manager	6.2	6.3	7.3	7.9	8.3%	8.4	5.4%
Operations & Maintenance Support	20.8	22.1	23.4	23.6	0.9%	24.2	2.2%
Water Operations	54.1	88.6	94.1	95.5	1.4%	97.3	1.9%
Water Recycling Program	4.4	5.4	6.1	6.1	0.5%	6.4	4.1%
Water Resources	<u>11.0</u>	<u>8.7</u>	<u>9.4</u>	<u>9.7</u>	2.3%	<u>10.0</u>	3.8%
Staffed Departments	323.1	341.0	359.7	370.5	3.0%	378.1	2.0%
Contingency	1.7	1.7	6.7	9.4	40.0%	17.2	82.0%
Intradistrict	(13.1)	(12.9)	(12.6)	(14.3)	13.7%	(14.6)	2.1%
Capital Support	<u>(50.7)</u>	<u>(55.4)</u>	<u>(40.0)</u>	<u>(51.0)</u>	27.5%	<u>(52.0)</u>	2.0%
Operations	260.9	274.4	313.8	314.7	0.3%	328.7	4.4%
Debt Service	<u>186.3</u>	<u>219.4</u>	<u>217.7</u>	<u>211.9</u>	-2.7%	<u>222.4</u>	4.9%
Total Operating	447.2	493.8	531.5	526.6	-0.9%	551.0	4.6%

Department Operations Budget Highlights

The Water System comprises 14 staffed departments that perform and provide operations, and also support functions for the Wastewater System. This section details the various departments including their labor and non-labor budgets, department goals and staffing.

The table below is a summary of the Water System staffed departments' budgets, which excludes the capital support overhead allocated from operations to capital.

Category (\$ Millions)	FY19 Actuals	FY20 Actuals	FY21 Budget	FY22 Budget	% Chg	FY23 Budget	% Chg
Total Labor and Benefits	307.1	327.7	353.5	355.4	0.5%	359.3	1.1%
Less: Capital Labor and Benefits	<u>89.8</u>	<u>92.0</u>	<u>100.8</u>	<u>100.7</u>	<u>-0.2%</u>	<u>100.6</u>	<u>-0.1%</u>
Operating Labor and Benefits	217.2	235.7	252.7	254.7	0.8%	258.6	1.6%
Contract Services	17.8	18.5	19.4	22.1	14.4%	22.2	0.0%
Other Costs	<u>88.1</u>	<u>86.7</u>	<u>87.6</u>	<u>93.7</u>	6.9%	<u>97.3</u>	3.8%
Operating Total	323.1	341.0	359.7	370.5	3.0%	378.1	2.0%

Labor and Benefits

Labor and benefits are allocated between the staffed departments and contingency for cost of living adjustments. Cost of living adjustments are not shown in the staffed departments' labor and benefits budgets since it is based on the CPI-W index and the amount is not known until the annual index is published. Once the index is published, and if funds are needed, contingency would be transferred to departments. The details of the departments' labor and benefits budget are shown later in this chapter.

A number of complex drivers affect the labor and benefits budget. A limited number of additional FTEs have been funded in this budget. They support capital projects, infrastructure maintenance, operations support, customer support program, racial justice and social equity strategies, internships, and K-12 school education program. In FY22, total labor and benefit costs increase \$1.9 million or 0.5 percent primarily due to:

- Increased overtime costs,
- Increased standby pay, and
- A rise in benefit costs for retirement and health care.

These increases are offset by:

- Less use of negotiated premium pay for eligible employees that report to a job site lacking basic facilities provided at District locations,
- Savings to account for the time required to fill positions given the number of retirements, additional positions and the recruitment lead time,
- Overall lower salaries in comparison to the prior biennial budget due to the significant number of new employees with salaries lower than the employees they replaced, and
- Lower actual cost of living increase than budgeted compared to the prior year.

In FY23, total labor and benefit costs increase \$3.9 million or 1.1 percent compared to FY22 primarily for scheduled step increases, and slightly higher overtime and standby costs. These increases are offset by a savings due to the time required to fill positions and a small decrease in the number of funded FTEs.

Non-Labor

In FY22, staffed department non-labor costs are budgeted to increase \$8.9 million or 8.3 percent compared to the prior fiscal year. The major drivers accounting for the increase include:

- Computer software by \$2.0 million for Sedaru, ArcGIS mapping system, Microsoft Office 365, and a new cloud-based Oracle financial system;
- Specialized outside services contracts by \$1.5 million to design, maintain, and operate Windows infrastructure, manage industrial control system security and software maintenance agreements for two water treatment plants to improve reliability and operational efficiency;
- Vehicles use charges by \$1.3 million for operating and maintenance costs associated with fleet vehicles and equipment;
- Self-insured liability claims by \$0.8 million consistent with multi-year trends;
- Other services and expenses by \$0.6 million for outside banking services for customer payment processing, and preparation for the District's 100-year anniversary;
- Insurance premiums by \$0.5 million due to rising market industry costs;
- Fuel by \$0.5 million based on projected market trends; and
- Outside services for buildings and grounds by \$0.5 million for vegetation control management, reservoir cleaning, and concrete services peak load work.

Due to a change in the budget process, another non-labor cost driver is previously unbudgeted retirement benefit payments of \$0.9 million made through an IRS 415(m) plan and a separate post-employment agreement.

Energy costs are anticipated to decrease \$1.1 million due to lower energy use which partially offsets the increases shown above.

In FY23, staffed department non-labor costs are budgeted to increase \$3.6 million or 3.1 percent compared to FY22. The major drivers accounting for the increase include:

- Fees and licenses by \$0.6 million primarily for Board election fees which occur in the second year;
- Vehicle use charges by \$0.3 million due to anticipated operating and maintenance costs for fleet vehicles and equipment;
- Energy costs by \$0.3 million primarily due to increased water production;
- Computer software by \$0.3 million for annual license cost increases;
- Self-insured liability claims by \$0.2 million based on prior multi-year trends;
- Laboratory services by \$0.2 million for the Water System's share of the costs of additional improvements to the District's laboratory;
- Chemicals by \$0.2 million due to higher water production and a rising price for chemicals;
- Security contracts by \$0.2 million due to scheduled annual contract increases;
- Specialized outside services by \$0.2 million due to maintenance for chlorination boosting stations, training for specialized pipe installation such as HDPE, proprietary software support for water treatment plant operations, and specialized street cleaning services in compliance with permits;
- Rents and leases by \$0.2 million for the one-time build out and annual cost to relocate the District's disaster recovery data center from Sacramento;
- Mailing costs by \$0.2 million due to Proposition 218 notices which occurs in the second year;
- Workers compensation claims by \$0.2 million consistent with prior year trends;
- Disbursements to outside agencies by \$0.2 million due to project cost-sharing allocations to the Freeport Regional Water Authority and Dublin San Ramon Services District East Bay Municipal Utility District Recycled Water Authority;

- Retirement benefits by \$0.1 million for the IRS 415(m) plan and a separate post-employment agreement;
- Fuel by \$0.1 million based on projected market trends; and
- Other costs by \$0.3 million such as charges from wastewater, parts and materials for building and grounds, vehicle and construct equipment rentals, property taxes and assessments, spoils and sludge spoils, publications, and subscriptions.

Planned reductions related to professional services of \$0.3 million offset increases in FY23.



1890-style fire plug



Current Model-64 fire hydrants

Department Operations by Budget Category

The table below depicts the Water System staffed departments operations budget by expense category. It excludes capital labor which is shown by department later in this chapter. Operating labor is the largest cost at almost 70 percent of the total operations budget.

FY22 & FY23 Department Operations by Categories (\$ Millions)								
Department	FY22				FY23			
	Labor	Contracts	Other	Total	Labor	Contracts	Other	Total
Administration	0.0	0.0	0.4	0.4	0.0	0.0	0.4	0.4
Customer & Community Services	20.8	0.3	3.0	24.2	21.1	0.3	3.2	24.6
Engineering & Construction	20.6	0.1	1.7	22.4	20.7	0.1	1.6	22.4
Finance	16.8	1.5	10.8	29.0	17.0	1.4	11.5	29.8
Human Resources	10.9	2.1	1.7	14.6	11.4	2.1	1.8	15.3
Information Systems	22.3	3.0	8.7	33.9	22.9	2.9	9.1	34.8
Maintenance & Construction	57.9	1.2	20.1	79.2	58.8	1.0	20.4	80.1
Natural Resources	11.3	3.2	4.0	18.4	11.4	3.2	4.1	18.7
Office of General Counsel	4.6	0.8	0.2	5.6	4.7	0.8	0.2	5.6
Office of the General Manager	6.4	0.4	1.1	7.9	6.6	0.2	1.5	8.4
Operations & Maintenance Support	12.4	4.6	6.7	23.6	12.5	4.8	6.9	24.2
Water Operations	61.5	4.9	29.0	95.5	62.3	5.1	29.8	97.3
Water Recycling Program	1.8	0.2	4.1	6.1	1.8	0.2	4.3	6.4
Water Resources	<u>7.5</u>	<u>0.1</u>	<u>2.1</u>	<u>9.7</u>	<u>7.4</u>	<u>0.4</u>	<u>2.2</u>	<u>10.0</u>
Total	254.7	22.1	93.7	370.5	258.6	22.2	97.3	378.1

STAFFED DEPARTMENT OPERATIONS

This section describes each of the staffed departments and includes the following topics:

Overview provides an overall statement about the key responsibilities of the department within the larger mission of the District as a whole.

Description of Services Provided describes the responsibilities of the department, by unit (division) or by function, including services required to meet regulatory or legal requirements.

FY22 & FY23 Goals highlight the highest priority work related to the budget, and the District Strategic Plan.

Department Budget Summary is a table that shows the Department's operating budget expenditures by category (Labor and Benefits, Contract Services, Other Costs). It also includes capital labor to provide a more comprehensive view of the departmental budgets.

Budget Highlights describe the significant changes in cost relative to the previous fiscal year and the reasons for those changes.

Staffing Summary is a table that shows the Full-Time Equivalent (FTE) for the department by appointment type (full-time, part-time, etc.).

Staffing Changes is a section included only if departments have position changes that require Board approval. It includes a table that enumerates position changes, followed by a brief description of the changes. The change in cost is determined by comparing the annual cost of the salaries and benefits of the top step of the current classification with the new classification at the top salary step.

The following guide lists each department and its divisions and includes the page number to locate each department in this chapter.

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ADMINISTRATION DEPARTMENT (ADM)

OVERVIEW

The Administration Department is currently unstaffed, and its functions have been distributed to the Customer and Community Services Department and the Human Resources Department.

DESCRIPTION OF SERVICES PROVIDED

The department has the budget for District-wide memberships in professional and trade organizations.

FY22 & FY23 GOALS

The department does not have any Strategic Plan goals in FY22 and FY23.

DEPARTMENT BUDGET SUMMARY

The department's projected spending is compared to prior years in the table below.

Category (\$ Millions)	FY19	FY20	FY21	FY22		FY23	
	Actuals	Actuals	Budget	Budget	% Chg	Budget	% Chg
Total Labor and Benefits	0.0	0.0	0.0	0.0	0.0%	0.0	0.0%
Less: Capital Labor and Benefits	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	0.0%	<u>0.0</u>	0.0%
Operating Labor and Benefits	0.0	0.0	0.0	0.0	0.0%	0.0	0.0%
Contract Services	0.0	0.0	0.0	0.0	0.0%	0.0	0.0%
Other Costs	<u>0.4</u>	<u>0.4</u>	<u>0.4</u>	<u>0.4</u>	8.5%	<u>0.4</u>	0.8%
Operating Total	0.4	0.4	0.4	0.4	8.5%	0.4	0.8%

BUDGET HIGHLIGHTS

FY22

The department has no personnel or contract budget due to transferring services to other departments. Other costs are increasing due to new memberships and a projected rise in cost for professional dues.

FY23

The District membership budget remains flat.

STAFFING SUMMARY (ADM)

The table below summarizes staffing and there are no other changes.

Position Type	FY19	FY20	FY21	FY22	Chg	FY23	Chg
Full-Time	2.0	2.0	1.0	1.0	0.0	1.0	0.0
Limited-Term / Temp Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intermittent	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Temporary / Part-Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total FTE	2.0	2.0	1.0	1.0	0.0	1.0	0.0

CUSTOMER AND COMMUNITY SERVICES DEPARTMENT (CUS)

OVERVIEW

The Customer and Community Services Department provides quality, responsive customer service through the use of efficient business practices, technology, value-added programs and services to District customers and stakeholders guided by fairness, consistency, efficiency, high standards of professionalism, and fiscal responsibility.

DESCRIPTION OF SERVICES PROVIDED

The department includes the Contact Center, Field Services, Customer Services Support, New Business Office, Water Conservation, Real Estate Services, and Contract Equity divisions. These divisions are the direct interfaces for external customers and internal stakeholders to support billing, collection, and service inquiries; field service operation requests; customer programs and services; Customer Information System administration, maintenance, systems integration and support; water conservation services and assistance; new service and development requests; property management and land acquisitions; payment processing, mailing services and distribution; and promote equity and opportunities for District contracts and procurement. In FY22, the Contract Equity function reports to the new Office of Diversity, Equity, and Development in the Office of the General Manager.

FY22 & FY23 GOALS

The department is primarily responsible for the Customer and Community Services Strategic Plan goal. Key department goals include:

- Building trust through our commitment to customers, timely resolution of customer and community inquiries and provide responsive and quality service to meet or exceed customer expectations;
- Advancing sustainable programs and services that support or benefit the community, residents, and businesses;
- Developing a portfolio of customer programs in support of the most vulnerable customers including a sustainable non-rate revenue funding strategy and increase participation through targeted outreach;
- Implementing the District's Water Conservation Master Plan to improve the efficiency of water conservation programs and lock-in water efficiency gains and savings by promoting water conservation to all customer sectors, and community and business partners;
- Expanding the District's land leasing program by leveraging land assets and implementing a long-term real estate utilization plan to enhance business operations and increase non-rate revenue in support of customer programs;
- Enhancing the use of a paperless billing and remittance process to reduce waste and provide greater convenience to customers; and
- Reinvesting in our community through projects and procurements by promoting contract equity and providing small business contracting incentives.

DEPARTMENT BUDGET SUMMARY (CUS)

The department's projected spending is compared to prior years in the table below.

Category (\$ Millions)	FY19	FY20	FY21	FY22		FY23	
	Actuals	Actuals	Budget	Budget	% Chg	Budget	% Chg
Total Labor and Benefits	18.2	19.3	21.8	21.3	-2.3%	21.5	1.3%
Less: Capital Labor and Benefits	<u>2.1</u>	<u>0.6</u>	<u>0.3</u>	<u>0.4</u>	21.9%	<u>0.4</u>	3.1%
Operating Labor and Benefits	16.1	18.7	21.4	20.8	-2.7%	21.1	1.3%
Contract Services	0.3	0.2	0.4	0.3	-20.0%	0.3	1.5%
Other Costs	<u>2.9</u>	<u>2.6</u>	<u>3.0</u>	<u>3.0</u>	0.1%	<u>3.2</u>	6.3%
Operating Total	19.3	21.4	24.8	24.2	-2.6%	24.6	1.9%

BUDGET HIGHLIGHTS

The department's operating budget in FY22 is decreasing \$0.6 million or 2.6 percent compared to FY21. In FY23, the budget will increase \$0.4 million or 1.9 percent compared to the prior fiscal year. Significant budget changes include:

FY22

Total labor and benefits are decreasing \$0.5 million primarily due to fewer funded FTEs, savings taken to account for time required to fill positions, and lower salaries for new employees with salaries lower than the employees they replaced. Capital labor and benefit costs are increasing \$0.1 million due to a shift from operating labor to capital to support the projected workload of new service applications. Contract services are decreasing \$0.07 million primarily due to the elimination of check payment processing support replaced by lockbox services. Other costs are decreasing \$0.05 million primarily because printing and distribution cost for Proposition 218 only occur in the second year of the biennial budget. These are offset by increases in property taxes/assessments and fulfillment services.

FY23

Total labor and benefit costs are increasing \$0.2 million primarily due to scheduled salary step increases. Other costs are increasing \$0.2 million primarily for Proposition 218 notice costs in the second year of the budget.

STAFFING SUMMARY

The table below summarizes the staffing changes that have occurred.

Position Type	FY19	FY20	FY21	FY22	Chg	FY23	Chg
Full-Time	124.0	124.0	124.0	123.0	(1.0)	123.0	0.0
Limited-Term / Temp Construction	0.0	0.0	0.0	4.0	4.0	4.0	0.0
Intermittent	3.0	3.0	3.0	3.0	0.0	3.0	0.0
Temporary / Part-Time	13.5	13.5	13.5	12.0	(1.5)	12.0	0.0
Total FTE	140.5	140.5	140.5	142.0	1.5	142.0	0.0

STAFFING CHANGES

The net change in cost represents the difference between the annual salary at the top step including benefits for the existing highest job classification versus the highest classification for the change.

FY	Action	From Classification(s)	To Classification(s)	Cost Chg	FTE Chg	Project/Program
2022	Add		(LT) New Business Representative I	162,631	1.0	Strong building activity
2022	Flex Class & Convert	(TEMP) Customer Services Representative I / II	(LT) Customer Services Representative I / II / III	82,633	0.5	Customer Support Program
2022	Flex Class & Convert	(TEMP) Senior Customer Services Representative	(LT) Customer Services Representative III / (LT) Senior Customer Services Representative	83,351	0.5	Customer Support Program
2022	Convert	(TEMP) Senior Customer Services Representative	(LT) Senior Customer Services Representative	83,351	0.5	Customer Support Program
2022	Delete	Customer Services Manager		(311,010)	(1.0)	Workload efficiencies
FY22 TOTAL				100,956	1.5	

In FY22, the department is adding one limited-term FTE New Business Representative I to process applicant work for development projects and converting three temporary positions to limited-term FTE in the Contact Center for the Customer Support Program. One Customer Services Manager will be deleted, as duties have been distributed among other staff.

ENGINEERING AND CONSTRUCTION DEPARTMENT (ENG)

OVERVIEW

The Engineering and Construction Department is responsible for developing plans, policies and programs that ensure the availability of adequate physical facilities for water treatment, storage and conveyance to meet future water service needs. These responsibilities include water system capital program implementation, infrastructure management, system expansions, and building facility improvements. The department provides technical leadership and innovation in engineering, construction, research and development, and operational efficiency improvements.

DESCRIPTION OF SERVICES PROVIDED

The department includes Water Distribution Planning, Design, Construction, Pipeline Infrastructure, and Engineering Services divisions. Services include planning, design, project management, and construction management and inspection of water system capital projects. Support services include cost estimating, contract specifications preparation, bid and award management, surveying, mapping, graphic design, hydraulic modeling, geotechnical engineering and dam safety, materials testing, engineering records storage and engineering support to other departments.

FY22 & FY23 GOALS

The department is primarily responsible for leading the Long-Term Infrastructure Investment goal and providing a supporting role to all other goals identified in the Strategic Plan. Key department goals include:

- Developing and maintaining coordinated master plans;
- Implementing the capital improvement program based on priorities identified in the plans to ensure resilient water infrastructure;
- Planning, design and supporting construction for the ramp-up of distribution pipeline infrastructure renewals and for system improvements and extensions;
- Planning, designing and constructing the rehabilitation of water supply and distribution facilities including pipelines, pumping plants, reservoirs, regulators, and rate control stations and dams;
- Planning, designing and constructing improvements at the water treatment plants to ensure continued safe and reliable plant operations and delivery of high-quality water to customers;
- Supporting the implementation and use of information technologies that improve the efficiency and effectiveness of business processes, such as Computer Aided Design and Building Information Management tools, geospatial tools, and radio frequency identification; and
- Providing engineering evaluations and recommendations as part of the District's Emergency Response Plan.

DEPARTMENT BUDGET SUMMARY (ENG)

The department's projected spending is compared to prior years in the table below.

Category (\$ Millions)	FY19	FY20	FY21	FY22		FY23	
	Actuals	Actuals	Budget	Budget	% Chg	Budget	% Chg
Total Labor and Benefits	53.2	57.6	62.0	63.6	2.5%	63.9	0.5%
Less: Capital Labor and Benefits	<u>37.0</u>	<u>40.1</u>	<u>41.1</u>	<u>43.1</u>	4.8%	<u>43.3</u>	0.5%
Operating Labor and Benefits	16.2	17.5	21.0	20.6	-1.9%	20.7	0.5%
Contract Services	0.1	0.1	0.1	0.1	-20.3%	0.1	1.3%
Other Costs	<u>1.3</u>	<u>1.4</u>	<u>1.4</u>	<u>1.7</u>	17.5%	<u>1.6</u>	-3.0%
Operating Total	17.6	19.0	22.5	22.4	-0.8%	22.4	0.3%

BUDGET HIGHLIGHTS

The department's operating budget in FY22 is decreasing \$0.1 million or 0.8 percent compared to FY21. In FY23, the budget will increase \$0.06 million or 0.3 percent compared to the prior fiscal year. Significant budget changes include:

FY22

Total labor and benefit costs are increasing \$1.6 million primarily due to funding a limited number of additional FTEs, overtime, a rise in retirement and health care, and partially offset by lower actual cost of living increase than budgeted compared to the prior year. Capital labor and benefit costs are increasing \$2.0 million primarily due to funding additional FTE, a shift from operating to capital, and overtime. Operating labor and benefit costs are decreasing \$0.4 million due to savings for the time required to fill positions, and less use of overtime. Other costs are increasing \$0.3 million primarily due to software licenses and fees for the State of California Division of Safety of Dams (DSOD).

FY23

Total labor and benefit costs for both capital and operating are increasing \$0.3 million primarily due to scheduled salary step increases. The operating labor budget is partially offset by the savings for the time required to fill positions. Other costs are decreasing \$0.1 million primarily due to one-time equipment purchases and office space configurations occurring in the prior year.

STAFFING SUMMARY

The below table summarizes the staffing changes and transfers that have occurred among departments. In FY22, a part-time FTE was returned to the Human Resources Department. In FY23, one limited-term FTE and a part-time FTE was returned to the Human Resources Department.

Position Type	FY19	FY20	FY21	FY22	Chg	FY23	Chg
Full-Time	257.0	272.0	272.0	274.0	2.0	274.0	0.0
Limited-Term / Temp Construction	14.0	11.0	11.0	10.0	(1.0)	9.0	(1.0)
Intermittent	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Temporary / Part-Time	4.5	4.0	3.5	3.0	(0.5)	2.5	(0.5)
Total FTE	275.5	287.0	286.5	287.0	0.5	285.5	(1.5)

STAFFING CHANGES

The net change in cost represents the difference between the annual salary at the top step including benefits for the existing highest job classification versus the highest classification for the change.

FY	Action	From Classification(s)	To Classification(s)	Cost Chg	FTE Chg	Project/Program
2022	Add		Engineering Designer I / II	203,049	1.0	Pipeline Rebuild; Applicant Pipelines
2022	Convert	(LT) Engineering Designer I / II / Drafter I / II / III	Engineering Designer I / II / Drafter I / II / III	0	0.0	Pipeline Rebuild; Applicant Pipelines
FY22 TOTAL				203,049	1.0	

In FY22, the department is adding one FTE in support of the Pipeline Rebuild Program and Applicant Pipelines Projects. In addition, one limited-term FTE will be converted to a full-time FTE in support of the Pipeline Rebuild Program and Applicant Pipelines Projects.

FINANCE DEPARTMENT (FIN)

OVERVIEW

The Finance Department is responsible for providing proactive and strategic management of District finances and ensuring the long-term financial stability of the District. These responsibilities include managing the finances to meet funding needs, ensuring adequate internal financial controls are maintained, reporting financials timely and accurately, managing the budget effectively and efficiently, implementing reasonable methodologically sound rates and charges consistent with legal requirements, optimizing investment of cash funds, maintaining good standing in the credit markets, and engaging actively with external stakeholders to promote fiscal transparency and accountability.

DESCRIPTION OF SERVICES PROVIDED

The department includes Accounting, Budget Office, Internal Audit, Treasury Operations, Purchasing, and Risk Management divisions. It provides a range of financial services including accounts payable and payroll, financial reporting, biennial budget management, grant administration, strategic planning coordination, debt management, credit rating agency and investor relations, rates and charges, investment of funds, procurement and supply chain management, liability and workers compensation claim management, insurance procurement, and internal controls. The department also supports the District's Employee Retirement System with respect to investment management.

FY22 & FY23 GOALS

The department supports all six Strategic Plan goals but is primarily responsible for leading the Long-Term Financial Stability Strategic Plan goal. Key department goals include:

- Developing the biennial budget for FY24 and FY25;
- Developing the FY24 and FY25 rates, fees, and charges;
- Developing a long-range financing plan in support of sustainability and resilience;
- Continuing to grow fiscal transparency, accountability in financial reporting, and understanding of the District's rates and charges for the District's ratepayers; and
- Completing replacement of aging financial and materials management information computer systems.

DEPARTMENT BUDGET SUMMARY (FIN)

The department's projected spending is compared to prior years in the table below.

Category (\$ Millions)	FY19	FY20	FY21	FY22		FY23	
	Actuals	Actuals	Budget	Budget	% Chg	Budget	% Chg
Total Labor and Benefits	16.7	17.9	19.9	18.9	-5.1%	18.8	-0.8%
Less: Capital Labor and Benefits	<u>1.4</u>	<u>1.8</u>	<u>2.0</u>	<u>2.1</u>	6.0%	<u>1.8</u>	-15.9%
Operating Labor and Benefits	15.3	16.0	18.0	16.8	-6.3%	17.0	1.1%
Contract Services	1.1	1.3	1.4	1.5	0.8%	1.4	-6.7%
Other Costs	<u>11.5</u>	<u>13.3</u>	<u>9.1</u>	<u>10.8</u>	18.9%	<u>11.5</u>	6.6%
Operating Total	27.8	30.6	28.5	29.0	2.1%	29.8	2.7%

BUDGET HIGHLIGHTS

The department's operating budget in FY22 is increasing \$0.5 million or 2.1 percent compared to FY21. In FY23, the budget will increase \$0.8 million or 2.7 percent compared to the prior fiscal year. Significant budget changes include:

FY22

Total labor and benefit costs are decreasing \$1.0 million primarily due to a number of new employees with salaries lower than the employees they replaced, funding four less FTEs, less use of overtime and standby, and lower actual cost of living increase than budgeted compared to the prior year. Capital labor and benefits are increasing \$0.1 million primarily due to a shift from operating to capital for the FIS/MMIS Replacement Project. Operating labor and benefit costs are decreasing \$1.2 million primarily due to a number of new employees with lower salaries and less use of overtime and standby. Contract services are increasing \$0.1 million primarily due to the cost of service study and IT vulnerability assessment work. Other costs are increasing \$1.7 million for self-insured liability claims and workers' compensation claims based on multi-year prior trends, insurance premiums, lockbox services for customer payment processing, printing services, and fees that are mandated by the State of California for self-insurance.

FY23

Total labor and benefit costs are decreasing \$0.1 million. Capital labor and benefits are decreasing \$0.3 million primarily due to completion of the procurement phase of the FIS/MMIS Replacement Project. Operating labor and benefit costs are increasing \$0.2 million primarily due to scheduled salary step increases, a rise in retirement and health care, and overtime. Contract services are decreasing \$0.1 million primarily due to cost of service study performed in the first year. Other costs are increasing \$0.7 million for insurance premiums, self-insured liability claims and workers' compensation claims.

STAFFING SUMMARY

The table below summarizes the staffing changes and transfers that have occurred among departments. In FY22, one full-time FTE was returned to the Natural Resources Department. One full-time FTE was transferred to the Office of the General Manager. One full-time FTE was transferred from the Human Resources Department. One temporary construction FTE was returned to the Wastewater Department.

Position Type	FY19	FY20	FY21	FY22	Chg	FY23	Chg
Full-Time	98.0	101.0	101.0	100.0	(1.0)	100.0	0.0
Limited-Term / Temp Construction	1.0	1.0	1.0	0.0	(1.0)	0.0	0.0
Intermittent	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Temporary / Part-Time	0.5	0.5	0.5	0.5	0.0	0.5	0.0
Total FTE	99.5	102.5	102.5	100.5	(2.0)	100.5	0.0

STAFFING CHANGES

The net change in cost represents the difference between the annual salary at the top step including benefits for the existing highest job classification versus the highest classification for the change.

FY	Action	From Classification(s)	To Classification(s)	Cost Chg	FTE Chg	Project/Program
2022	FlexClass & Character	Printing Technician II	(TC) Accounting and Financial Systems Analyst / (Reg) Printing Technician II	84,509	0.0	HRIS Replacement Project
2022	Convert	(Reg/LT) Senior Accounting & Financial Systems Analyst / (Reg) Management Analyst I / II	(Reg/TC) Senior Accounting & Financial Systems Analyst / (Reg) Management Analyst I / II	0	0.0	FIS / MMIS Replacement Project
2022	Convert	(LT) Sr. Accounting and Financial Systems Analyst / (Reg) Management Analyst I / II	(TC) Sr. Accounting and Financial Systems Analyst / (Reg) Management Analyst I / II	0	0.0	
2022	Convert	(Reg/LT) Admin Clerk / (LT) Information Systems Specialist I / II / III	(Reg/TC) Admin Clerk / (TC) Information Systems Specialist I / II / III	0	0.0	
2022	Reallocate & Flex Character	Administrative Clerk	(Reg/ LT) Information Systems Support Analyst II	88,501	0.0	
2022	Convert	(Reg/LT) Stores Supervisor / (Reg/LT) Material Storage Supervisor	(Reg/TC) Stores Supervisor / (Reg/TC) Material Storage Supervisor	0	0.0	
FY22 TOTAL				173,010	0	

In FY22, staffing changes will support the HRIS and FIS/MMIS Replacement Projects. Of which four limited-term FTEs are converted to temporary construction FTEs to complete implementation of the FIS/MMIS Replacement Project.

HUMAN RESOURCES DEPARTMENT (HRD)

OVERVIEW

The Human Resources Department recruits, develops, and retains a diverse, well-qualified and professional workforce that reflects the values of EBMUD, supports the District's core mission, and leads the organization in positive employee relations, talent management, succession planning, and employee engagement.

DESCRIPTION OF SERVICES PROVIDED

The department is comprised of Diversity and Inclusion, Employee Relations, Employee Services, Recruitment and Classification, and Employee and Organizational Development divisions. These divisions administer the District's Employee Retirement System, deferred compensation programs, and employee and retiree benefits; provide guidance to effectively resolve grievances, as well as facilitate labor contract negotiations; implement training and development opportunities to support leadership and managerial skill enhancement; administer a performance recognition program that acknowledges employee contributions toward meeting District goals; steward a "grow our own" strategy to address skills shortages by developing employees to meet workforce demands; respond to discrimination and harassment complaints; work with the community on outreach efforts to attract a diverse applicant pool; and create and implement workforce development programs to recruit and onboard highly qualified and diverse employees. In FY22, the Diversity and Inclusion and Employee and Organizational Development divisions will transition to the new Office of Diversity, Equity, and Development in the Office of the General Manager.

FY22 & FY23 GOALS

The department is primarily responsible for leading the Workforce Planning and Development Strategic Plan goal. Key department goals include:

- Coordinating with the departments, community organizations and schools to increase diversity in candidates for jobs including but not limited to internships and apprenticeships;
- Providing Manager and Supervisor Training programs that provide the tools leaders need to create and maintain effective working cultures that support staff in achieving the District's mission;
- Providing team building, organizational development, and change management assistance to divisions and departments;
- Identifying and implementing a new Human Resource Information System (HRIS) to modernize employee and retiree services;
- Supporting labor negotiations and implementing pay, benefit, and policy changes as needed;
- Completing recruitments and onboarding in a timely manner to expeditiously fill vacancies;
- Updating the job classification descriptions; and
- Continuing to inspire an inclusive values-driven culture that engages all employees to support the District's mission.

DEPARTMENT BUDGET SUMMARY (HRD)

The department's projected spending is compared to prior years in the table below.

Category (\$ Millions)	FY19	FY20	FY21	FY22		FY23	
	Actuals	Actuals	Budget	Budget	% Chg	Budget	% Chg
Total Labor and Benefits	9.1	9.7	10.6	11.6	10.0%	11.6	-0.3%
Less: Capital Labor and Benefits	<u>0.2</u>	<u>0.2</u>	<u>0.6</u>	<u>0.8</u>	24.3%	<u>0.2</u>	-76.1%
Operating Labor and Benefits	8.9	9.5	9.9	10.9	9.1%	11.4	5.1%
Contract Services	1.7	1.5	1.7	2.1	18.7%	2.1	-0.1%
Other Costs	<u>0.7</u>	<u>0.7</u>	<u>0.8</u>	<u>1.7</u>	106.6%	<u>1.8</u>	5.8%
Operating Total	11.3	11.6	12.5	14.6	17.0%	15.3	4.4%

BUDGET HIGHLIGHTS

The department's operating budget in FY22 is increasing \$2.1 million or 17.0 percent compared to FY21. In FY23, the operating budget will increase \$0.7 million or 4.4 percent. Significant budget changes include:

FY22

Total labor and benefit costs are primarily increasing \$1.0 million due to funding additional FTEs to support the expansion of the Ranger intern program, employee services, and diversity, equity, and inclusion initiatives. Capital labor and benefit costs are increasing \$0.2 million due to a higher portion of labor allocated to support implementation of the HRIS project. Contract services costs are increasing \$0.4 million primarily due to additional outsourcing of Equal Employment Opportunity (EEO) investigations. Other costs are increasing \$0.9 million primarily due to a change in the budget process made through an IRS 415(m) plan and a separate post-employment agreement.

FY23

Total labor and benefits costs will remain essentially flat. Operating labor and benefit costs are increasing \$0.5 million to account for the capital shift but are partially offset by a deletion of one FTE. Other costs are increasing \$0.1 million due to retirement benefits for the IRS 415(m) plan and a separate post-employment agreement.

STAFFING SUMMARY

The table below summarizes the staffing changes and transfers that have occurred among departments. In FY22, one full-time FTE was transferred to the Finance Department. Two limited-term FTEs were transferred from the Maintenance and Construction Department and converted as shown in the table below. Two part-time FTEs were returned to the Human Resources Department from the Engineering Department and the Water Resources Department. In FY23, one limited-term and one part-time FTE was returned from the Engineering Department.

Position Type	FY19	FY20	FY21	FY22	Chg	FY23	Chg
Full-Time	49.0	49.0	49.0	49.0	0.0	49.0	0.0
Limited-Term / Temp Construction	7.0	7.0	8.0	8.0	0.0	8.0	0.0
Intermittent	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Temporary / Part-Time	4.0	4.0	4.5	6.5	2.0	7.0	0.5
Total FTE	60.0	60.0	61.5	63.5	2.0	64.0	0.5

STAFFING CHANGES

The net change in cost represents the difference between the annual salary at the top step including benefits for the existing highest job classification versus the highest classification for the change.

FY	Action	From Classification(s)	To Classification(s)	Cost Chg	FTE Chg	Project/Program
2022	Add		Human Resources Technician, Conf	166,703	1.0	Employee support services and records management
2022	Convert	LT Special Employment Program Trainee	(P/T) Ranger Naturalist I Intern	(70,108)	(0.5)	Create bridge for qualified Ranger Naturalist candidates
2022	Convert	LT Special Employment Program Trainee	(P/T) Ranger Naturalist I Intern	(70,108)	(0.5)	Create bridge for qualified Ranger Naturalist candidates
FY22 TOTAL				26,486	0.0	
2023	Delete	(LT) Human Resources Technician		(166,632)	(1.0)	LT expired
FY23 TOTAL				(166,632)	(1.0)	

In FY22, the department is adding one full-time FTE to replace a vacant position that was reallocated to the Finance Department for the FIS/MMIS replacement project. The reallocation of two limited-term FTEs from a Special Employment Program Trainee to a Ranger Naturalist I is needed to create a bridge for qualified Ranger Naturalist candidates.

In FY23, the department is deleting one limited-term FTE as the limited-term status has expired.

INFORMATION SYSTEMS DEPARTMENT (ISD)

OVERVIEW

The Information Systems Department is responsible for planning, acquiring, developing, deploying, operating, and maintaining information technology and services in support of District functions. These responsibilities include providing security and recoverability for business systems and data critical to the operations of the District.

DESCRIPTION OF SERVICES PROVIDED

The department includes the Project Management Office, IT Applications, IT Operations, and IT Security divisions. Together, these divisions support the lifecycle of the District's technology and communication needs including initial planning, acquisition, development, deployment, and ongoing maintenance. The department also manages and supports: desktop, mobile, and cloud computing; remote access; network connectivity; telephone, radio, and microwave communications; application development and integration for a wide range of business functions; risk identification in computing and network environments; guidance to ensure District systems and data are properly secured and available; and planning to ensure business continuity of District computing resources.

FY22 & FY23 GOALS

The department has a key role in the Long-Term Financial Stability Strategic Plan goal. Key department goals include:

- Ensuring maintenance and project work is performed in a manner that supports the achievement of goals outlined in the District's Strategic Plan and IT Master Plan;
- Continuing efforts to improve the District's cybersecurity posture;
- Completing planning and beginning implementation of projects to improve communication with customers and to replace the human resources and work/asset management systems;
- Completing implementation of a new financial information system, including procurement and warehousing; and
- Implementing the IT Governance FY22-23 Project Portfolio.

DEPARTMENT BUDGET SUMMARY (ISD)

The department's projected spending is compared to prior years in the table below.

Category (\$ Millions)	FY19	FY20	FY21	FY22		FY23	
	Actuals	Actuals	Budget	Budget	% Chg	Budget	% Chg
Total Labor and Benefits	21.0	22.2	22.8	22.8	-0.2%	22.9	0.5%
Less: Capital Labor and Benefits	<u>0.8</u>	<u>0.4</u>	<u>0.0</u>	<u>0.5</u>	0.0%	<u>0.0</u>	-100.0%
Operating Labor and Benefits	20.2	21.8	22.8	22.3	-2.3%	22.9	2.6%
Contract Services	1.9	2.7	2.2	3.0	37.5%	2.9	-4.2%
Other Costs	<u>7.6</u>	<u>6.7</u>	<u>6.6</u>	<u>8.7</u>	31.1%	<u>9.1</u>	4.9%
Operating Total	29.7	31.2	31.6	33.9	7.4%	34.8	2.6%

BUDGET HIGHLIGHTS

The department's operating budget in FY22 is increasing \$2.3 million or 7.4 percent compared to FY21. In FY23, the budget will increase \$0.9 million or 2.6 percent compared to the prior fiscal year. Significant budget changes include:

FY22

Total labor and benefit costs are essentially flat. Capital labor and benefit costs are increasing \$0.5 million due to a shift from operating to capital for the implementation of computer software applications. Operating labor and benefit costs are decreasing due to the capital shift but is partially offset by a rise in overtime and standby. Contract services are increasing \$0.8 million primarily for SCADA IT security support and for NetApp storage maintenance. Other costs are increasing \$2.1 million due to computer software such as Sedaru, ArcGIS mapping system, Microsoft Office 365, and a new cloud-based Oracle financial system. Computer software costs are anticipated to increase in the future as more applications transition to a cloud-based platform.

FY23

Total labor and benefit costs are increasing \$0.1 million. Capital labor and benefits are decreasing \$0.5 million due to a shift to operating. Operating labor and benefit costs are increasing primarily due to the shift from capital and scheduled salary step increases. Contract services are decreasing \$0.1 million primarily due to consultant services no longer needed since the new cloud-based Oracle financial system will be live. Other costs are increasing \$0.4 million due to computer software and a one-time build out cost to relocate the District's disaster recovery data center from Sacramento.

STAFFING SUMMARY

The table below summarizes staffing and there are no other staffing changes.

Position Type	FY19	FY20	FY21	FY22	Chg	FY23	Chg
Full-Time	93.0	92.0	92.0	92.0	0.0	92.0	0.0
Limited-Term / Temp Construction	2.0	2.0	2.0	2.0	0.0	2.0	0.0
Intermittent	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Temporary / Part-Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total FTE	95.0	94.0	94.0	94.0	0.0	94.0	0.0

MAINTENANCE AND CONSTRUCTION DEPARTMENT (MCD)

OVERVIEW

The Maintenance and Construction Department is responsible for installing, replacing, rehabilitating, and maintaining the local water distribution system infrastructure, reading and maintaining the nearly 400,000 water meters, providing support services, and maintaining all vehicles and heavy equipment.

DESCRIPTION OF SERVICES PROVIDED

The department includes the Distribution Maintenance and Construction, Pipeline Construction and Equipment, and Maintenance Support divisions. Distribution Maintenance and Construction installs new services and pipelines and supports the maintenance, replacement, and installation of the water distribution system by identifying and repairing leaks, maintaining valves and hydrants, and replacing pipeline appurtenances. Pipeline Construction and Equipment installs replacement pipelines and provides paving services. Maintenance Support provides District-wide construction support and janitorial services, and is responsible for vehicle and equipment procurement, maintenance, and replacement, maintenance, repair, and reading meters, and backflow prevention.

FY22 & FY23 GOALS

The department has a key role in the Long-Term Infrastructure Investment Strategic Plan goal. Key department goals include:

- Replacing 20 miles of distribution pipe in FY22 and 22.5 miles FY23;
- Reading, testing, and replacing revenue-generating water meters;
- Leading the industry in water loss control through using new and innovative technology, effective maintenance practices, and efficient operations;
- Maintaining and procuring the District's fleet of vehicles and equipment to support District operations and meet greenhouse gas reduction goals; and
- Implementing preventive, predictive, and corrective maintenance plans for infrastructure such as pipelines, valves, hydrants, and meters to improve safety, reliability, and efficiency.

DEPARTMENT BUDGET SUMMARY (MCD)

The department's projected spending is compared to prior years in the table below.

Category (\$ Millions)	FY19	FY20	FY21	FY22		FY23	
	Actuals	Actuals	Budget	Budget	% Chg	Budget	% Chg
Total Labor and Benefits	113.1	94.7	104.0	104.4	0.3%	106.3	1.8%
Less: Capital Labor and Benefits	<u>43.0</u>	<u>40.4</u>	<u>48.6</u>	<u>46.5</u>	-4.2%	<u>47.5</u>	2.1%
Operating Labor and Benefits	70.1	54.3	55.5	57.9	4.3%	58.8	1.6%
Contract Services	3.6	1.3	0.9	1.2	28.1%	1.0	-18.9%
Other Costs	<u>26.3</u>	<u>18.6</u>	<u>19.1</u>	<u>20.1</u>	5.5%	<u>20.4</u>	1.3%
Operating Total	100.0	74.2	75.5	79.2	4.9%	80.1	1.2%

BUDGET HIGHLIGHTS

The department's operating budget in FY22 is increasing \$3.7 million or 4.9 percent compared to FY21. In FY23, the budget will increase \$0.9 million or 1.2 percent compared to the prior fiscal year. Significant budget changes include:

FY22

Total labor and benefit costs are increasing \$0.4 million primarily due to funding a limited number of FTEs supporting the pipeline maintenance/replacement and to reduce reliance on fully-maintained and operated (FM&O) services, meter reading and maintenance, and fleet operations support and are partially offset by lower actual cost of living increase than budgeted compared to the prior year. As a result, the capital labor and benefit costs are decreasing \$2.1 million primarily due to a shift from capital labor to operating. Operating labor and benefit costs are increasing \$2.4 million primarily due to funding additional FTEs. Contract services are increasing \$0.3 million primarily attributable to concrete services used to manage peak workloads to meet key performance indicators. Other costs are increasing \$1.0 million primarily for vehicle use charges, equipment rentals, fuel and are partially offset by savings from paving materials and pipe products.

FY23

Total labor and benefit costs are increasing \$1.9 million primarily due to scheduled salary step increases, slightly higher overtime costs and a rise in retirement and health care. Contract services are decreasing \$0.2 million as it is anticipated that most of the prior year increase in concrete services will no longer be needed. Other costs are increasing \$0.3 million primarily for vehicle use charges and fuel.

STAFFING SUMMARY

The table below summarizes the staffing changes and transfers that have occurred among departments. In FY22, two limited-term FTEs were transferred to the Human Resources Department and two limited-term FTEs were transferred to the Water Operations Department.

Position Type	FY19	FY20	FY21	FY22	Chg	FY23	Chg
Full-Time	721.0	594.0	596.0	598.0	2.0	598.0	0.0
Limited-Term / Temp Construction	21.0	19.0	19.0	13.0	(6.0)	13.0	0.0
Intermittent	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Temporary / Part-Time	2.5	2.5	2.5	2.5	0.0	2.5	0.0
Total FTE	744.5	615.5	617.5	613.5	(4.0)	613.5	0.0

STAFFING CHANGES

The net change in cost represents the difference between the annual salary at the top step including benefits for the existing highest job classification versus the highest classification for the change.

FY	Action	From Classification(s)	To Classification(s)	Cost Chg	FTE Chg	Project/Program
2022	Reauthorize	(LT) Meter Reader/ Mechanic	(LT) Meter Reader/ Mechanic	884,170	-	Reauthorize six LTs for meter reading and maintenance.
2022	Delete	LT Special Employment Program Trainee		(172,430)	(2.0)	Special Employment Program
FY22 TOTAL				711,741	(2.0)	

In FY22, six limited-term FTEs scheduled to revert to temporary status are reauthorized as limited-term to record water consumption for billing accuracy and deleting two limited-term FTEs since the Special Employment Program is no longer operational.

NATURAL RESOURCES DEPARTMENT (NRD)

OVERVIEW

The Natural Resources Department develops and implements plans, policies, and programs necessary to manage over 50,000 acres of water, watershed lands and related facilities. The department develops and implements programs for water quality, fisheries and wildlife enhancement and protection, natural resource management and monitoring, wildfire suppression and fuels management, and public recreation areas and trails on these lands, reservoirs, rivers, and streams.

DESCRIPTION OF SERVICES PROVIDED

The department includes the East Bay Watershed and Recreation, Mokelumne Watershed and Recreation, Fisheries and Wildlife, and Natural Resources Administration divisions. Both the East Bay and Mokelumne Watershed and Recreation divisions manage and protect the local and upcountry watershed lands owned by the District, including overseeing environmental, recreation, and public education programs. The Fisheries and Wildlife Division develops and maintains the scientific information necessary to manage and protect wildlife and fisheries on District-owned lands and the fisheries resources of the lower Mokelumne River, conducts monitoring to comply with water right agreements, provides biological support for capital projects, and responds to service area water discharge incidents. The Natural Resources Administration Division supports all divisions with planning, grant administration, budgeting, regional collaborations, initiatives, and special projects as assigned by the Department Director.

FY22 & FY23 GOALS

The department has a key role in the Water Quality and Environmental Protection Strategic Plan goal. Key department goals include:

- Implementing the water quality protection, environmental stewardship, and recreation and public use programs consistent with the East Bay and Mokelumne Watershed Master Plans;
- Continuing to build on the successful fisheries program for the Mokelumne River including expansion of the science programs on outmigration survival, juvenile barging, hatchery genetics management, and working collaboratively with public organization, non-profit, and local landowner partners along the lower Mokelumne River;
- Continuing to implement the East Bay Habitat Conservation Plan through pond maintenance, fencing, invasive species management, and monitoring;
- Participating and collaborating in addressing fire and fuels management and forest health issues in the East Bay and Mokelumne watersheds;
- Continuing to support the Mokelumne Safe Harbor Agreement; and
- Partnering with the Operations and Maintenance Department in ongoing water quality monitoring in the Mokelumne watershed.

DEPARTMENT BUDGET SUMMARY (NRD)

The department's projected spending is compared to prior years in the table below.

Category (\$ Millions)	FY19 Actuals	FY20 Actuals	FY21 Budget	FY22 Budget	% Chg	FY23 Budget	% Chg
Total Labor and Benefits	10.4	10.5	11.4	11.3	-0.7%	11.4	1.1%
Less: Capital Labor and Benefits	<u>0.2</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	0.1%	<u>0.1</u>	0.9%
Operating Labor and Benefits	10.2	10.4	11.3	11.3	-0.7%	11.4	1.1%
Contract Services	2.6	2.7	3.1	3.2	1.0%	3.2	0.9%
Other Costs	<u>3.0</u>	<u>3.1</u>	<u>3.7</u>	<u>4.0</u>	7.8%	<u>4.1</u>	3.1%
Operating Total	15.8	16.2	18.2	18.4	1.3%	18.7	1.5%

BUDGET HIGHLIGHTS

The department's operating budget in FY22 is increasing \$0.2 million or 1.3 percent compared to FY21. In FY23, the budget will increase \$0.3 million or 1.5 percent compared to the prior fiscal year. Significant budget changes include:

FY22

Total labor and benefit costs are decreasing \$0.1 million due to overall lower salaries for new employees with salaries lower than the employees they replaced, less use of overtime and standby pay. Contract services costs are increasing \$0.1 million primarily due to annual increases for security provided by the East Bay Regional Parks Joint Powers Agreement for watershed areas, four reservoirs, and two recreation areas. Other costs are increasing \$0.3 million primarily due to increased vehicle use charges, higher small tools and instruments expenses, and increased Lower Mokelumne River Joint Settlement Agreement (JSA) Partnership Fund expenses with the California Department of Fish and Wildlife and the United States Fish and Wildlife Service.

FY23

Total labor and benefit costs are increasing \$0.1 million due to scheduled salary step increases. Contract services costs are increasing slightly primarily due to annual contract escalation for security. Other costs are increasing \$0.1 million due to JSA expenses and vehicle use charges.

STAFFING SUMMARY

The table below summarizes the staffing changes and transfers that have occurred among departments. In FY22, a 1.0 FTE was returned from the Finance Department.

Position Type	FY19	FY20	FY21	FY22	Chg	FY23	Chg
Full-Time	66.0	64.0	64.0	64.0	0.0	64.0	0.0
Limited-Term / Temp Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intermittent	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Temporary / Part-Time	2.5	2.5	2.5	2.5	0.0	2.5	0.0
Total FTE	68.5	66.5	66.5	66.5	0.0	66.5	0.0

STAFFING CHANGES

The table below summarizes the FTE changes excluding transfers among departments.

FY	Action	From Classification(s)	To Classification(s)	Cost Chg	FTE Chg	Project/Program
2022	Delete	Manager of Natural Resources		(428,792)	(1.0)	Workload efficiencies
FY22 TOTAL				(428,792)	(1.0)	

In FY22, the department is deleting one FTE position due to workload efficiencies.

OFFICE OF THE GENERAL COUNSEL (OGC)

OVERVIEW

The Office of the General Counsel (OGC) provides the legal advice and assistance necessary to implement the District's mission, policies, and programs in a manner consistent with the law and to take charge of litigation and other legal matters in which the District is a party or in which it is legally interested.

DESCRIPTION OF SERVICES PROVIDED

The department provides legal assistance and litigation support to the Board, General Manager and staff in such areas as: resources law; municipal and public law; environmental law; public works contracting; construction and real estate law; personnel, benefits, retirement and labor law; risk management and insurance; public finance and governmental law; tort law; and rates, regulations, and public policy matters.

FY22 & FY23 GOALS

Key department goals include:

- Providing the District, its officers, and its employees with competent, responsible, and effective representation in all proceedings in which the District is a party or has an interest, and obtain the best results possible given the facts and law applicable to the specific case;
- Ensuring that all documents with legal significance presented to the OGC for review, or are originally prepared by OGC, accomplish the purpose for which they are intended, protect the District from legal risk to the full extent staff considers appropriate for the transaction, and are written in clear and understandable language in an appropriate legal form;
- Providing accurate, clear, and practical oral legal advice that is responsive to the questions and facts presented;
- Providing accurate, clear, and practical written legal memoranda and opinions that are thoroughly researched, timely, and in an appropriately professional form;
- Providing forceful and persuasive advocacy on behalf of the District in non-judicial settings when requested to do so;
- Ensuring that all legal services provided to the District are cost-effective, responsive to the directions of the Board, and professionally competent; and
- Adhering to the highest standards of professional conduct and legal ethics including those standards set forth in the Rules of Professional Conduct.

DEPARTMENT BUDGET SUMMARY (OGC)

The department's projected spending is compared to prior years in the table below.

Category (\$ Millions)	FY19	FY20	FY21	FY22		FY23	
	Actuals	Actuals	Budget	Budget	% Chg	Budget	% Chg
Total Labor and Benefits	3.9	4.2	4.3	4.6	6.9%	4.7	0.8%
Less: Capital Labor and Benefits	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	0.0%	<u>0.0</u>	0.0%
Operating Labor and Benefits	3.9	4.2	4.3	4.6	6.9%	4.7	0.8%
Contract Services	0.6	0.8	0.8	0.8	0.0%	0.8	0.0%
Other Costs	<u>0.1</u>	<u>0.1</u>	<u>0.2</u>	<u>0.2</u>	-6.8%	<u>0.2</u>	0.4%
Operating Total	4.6	5.2	5.3	5.6	5.4%	5.6	0.6%

BUDGET HIGHLIGHTS

The department's operating budget in FY22 is increasing \$0.3 million or 5.4 percent compared to FY21. In FY23, the budget will increase \$0.03 million or 0.6 percent compared to the prior fiscal year. Significant budget changes include:

FY22

Total labor and benefits are increasing \$0.3 million primarily due to funding an additional full-time FTE and professional staff career progression. Other costs are decreasing \$0.1 million due to less use of legal research services.

FY23

Total labor and benefits will increase \$0.1 million primarily due to fund the professional staff career progression that occurred in the prior fiscal year.

STAFFING SUMMARY

The table below summarizes staffing and there are no other changes.

Position Type	FY19	FY20	FY21	FY22	Chg	FY23	Chg
Full-Time	16.0	16.0	16.0	16.0	0.0	16.0	0.0
Limited-Term / Temp Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intermittent	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Temporary / Part-Time	1.0	1.0	1.0	1.0	0.0	1.0	0.0
Total FTE	17.0	17.0	17.0	17.0	0.0	17.0	0.0

OFFICE OF THE GENERAL MANAGER (OGM)

OVERVIEW

The Office of the General Manager manages the overall operations of the District and implements the policies and priorities of the elected Board of Directors with an emphasis on effectively communicating with all stakeholders and advancing EBMUD's policy objectives with the state legislature and congress.

DESCRIPTION OF SERVICES PROVIDED

The department includes five divisions: Office of the General Manager, Inter-Governmental Affairs, Public Affairs, Office of the Secretary, and the Office of Diversity, Equity, and Development. The Office of the General Manager provides several District-wide functions including: legislative and intergovernmental agency advocacy; public and community education and outreach; support to the Board of Directors and District-wide records management including managing responses to public records requests, and work on initiatives including racial justice and social equity strategies.

FY22 & FY23 GOALS

The department supports all the Strategic Plan goals. Key department goals include:

- Providing cross-departmental direction to cohesively and effectively manage operations and implement Board policies and priorities;
- Supporting water and wastewater program goals through engaging and communicating with the public and employees about operations and infrastructure, Board policy proposals and decisions, and stewardship of the District's natural, financial, and human resources;
- Educating stakeholders on the need for investment in infrastructure and other priorities as expressed through the Strategic Plan;
- Supporting water and wastewater program goals through legislative efforts to advance policy objectives, acquire state and federal funding, and proactively influence legislation through active outreach and customer education; and
- Exploring ways to work better together to continue providing administrative and ministerial support to the Board of Directors, the General Manager, and staff in carrying out the District's mission.

DEPARTMENT BUDGET SUMMARY (OGM)

The department's projected spending is compared to prior years in the table below.

Category (\$ Millions)	FY19	FY20	FY21	FY22		FY23	
	Actuals	Actuals	Budget	Budget	% Chg	Budget	% Chg
Total Labor and Benefits	5.2	5.7	6.1	6.4	6.0%	6.6	3.1%
Less: Capital Labor and Benefits	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	0.0%	<u>0.0</u>	0.0%
Operating Labor and Benefits	5.2	5.7	6.1	6.4	6.0%	6.6	3.1%
Contract Services	0.2	0.2	0.1	0.4	171.6%	0.2	-50.4%
Other Costs	<u>0.8</u>	<u>0.5</u>	<u>1.1</u>	<u>1.1</u>	1.6%	<u>1.5</u>	36.3%
Operating Total	6.2	6.3	7.3	7.9	8.3%	8.4	5.4%

BUDGET HIGHLIGHTS

The department's operating budget in FY22 is increasing \$0.6 million or 8.3 percent compared to FY21. In FY23, the budget will increase \$0.5 million or 5.4 percent compared to the prior fiscal year. Significant budget changes include:

FY22

Total labor and benefit costs are increasing \$0.3 million primarily due to funding additional FTEs for initiatives such as racial justice and social equity strategies and K-12 education program outreach, overtime which was not funded in FY21, and an increase in standby pay as the proportion of hours shifts more to eligible employees. Contract services are increasing \$0.3 million due to the District-wide customer survey conducted in the first year of the budget. Other costs are staying flat as costs associated with the 100-year anniversary are offset by reduced operating expenses such as the Board of Director election fees are not incurred in this year.

FY23

Total labor and benefit costs are increasing \$0.2 million due to funding one student intern FTE and scheduled salary step increases. Contract services are decreasing \$0.2 million due to the anticipated completion of several projects including the District-wide customer survey, social media animated videos to increase customer outreach, and a standardized guide for District publications. Other costs are increasing \$0.4 million primarily due to the Board election fees mentioned above which occur in the second year and a rise in price for the JD Power Water Satisfaction Study offset by completion of most work associated with the 100-year anniversary.

STAFFING SUMMARY

The table below summarizes the staffing changes and transfers that have occurred among departments. In FY22, one full-time FTE was transferred from the Finance Department.

Position Type	FY19	FY20	FY21	FY22	Chg	FY23	Chg
Full-Time	25.0	26.0	27.0	29.0	2.0	29.0	0.0
Limited-Term / Temp Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intermittent	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Temporary / Part-Time	0.5	0.5	0.5	0.5	0.0	0.5	0.0
Total FTE	25.5	26.5	27.5	29.5	2.0	29.5	0.0

STAFFING CHANGES

The net change in cost represents the difference between the annual salary at the top step including benefits for the existing highest job classification versus the highest classification for the change.

FY	Action	From Classification(s)	To Classification(s)	Cost Chg	FTE Chg	Project/Program
2022	Add		Special Assistant III / IV	398,114	1.0	Diversity and equity strategies
FY22 TOTAL				398,114	1.0	

In FY22, the department is adding one full-time FTE to lead the newly created division of the Office of Diversity, Equity, and Development.

OPERATIONS AND MAINTENANCE SUPPORT DEPARTMENT (OSD)

OVERVIEW

The Operations and Maintenance Support Department is responsible for managing and improving the operational information systems, water system infrastructure, processes and assets, and providing District-wide support and leadership in health and safety, environmental compliance, emergency preparedness, business continuity, and facility security.

DESCRIPTION OF SERVICES PROVIDED

The department includes the Regulatory Compliance Office, and Asset Management Division. The Regulatory Compliance Office provides environmental compliance guidance and assistance, security services, emergency preparedness support, and workplace health and safety support to the entire District. The Water Quality Office provides technical review and oversight of water quality issues at the treatment plants and in the distribution system, as well as review of upcoming legislative and regulatory changes that may impact water quality. The Asset Management Division develops and maintains work management systems and tools, including mobile and GIS technologies for field operations and staff; coordinates technical training and educational programs for department staff; and provides leadership and guidance for knowledge retention efforts.

FY22 & FY23 GOALS

The department has primary responsibility for leading the Water Quality and Environmental Protection Strategic Plan goal and supporting the Customer and Community Services and Workforce Planning and Development goals. Key department goals include:

- Ensuring compliance with water discharge, air emission, and land disposal requirements to protect and preserve the environment;
- Supporting the accelerated pipeline infrastructure renewal capital program;
- Providing technical input and guidance in the development of the capital program for the water treatment plants (WTPs);
- Reviewing water quality data on a regular basis and assessing strategies for improvements;
- Operating and maintaining District facilities to anticipate and meet all water discharge, air emission, and land disposal regulations to protect and preserve the environment;
- Minimizing impacts to the environment by reducing, recycling, reusing and reclaiming waste, and by conserving natural resources;
- Supporting a safe and healthy workplace for all employees; and
- Maintaining active Emergency Preparedness and Business Continuity Programs to plan for and manage the District's functions during and following an emergency.

DEPARTMENT BUDGET SUMMARY (OSD)

The department's projected spending is compared to prior years in the table below.

Category (\$ Millions)	FY19	FY20	FY21	FY22		FY23	
	Actuals	Actuals	Budget	Budget	% Chg	Budget	% Chg
Total Labor and Benefits	12.3	12.3	12.9	13.0	0.5%	13.1	1.1%
Less: Capital Labor and Benefits	<u>1.1</u>	<u>0.7</u>	<u>0.4</u>	<u>0.6</u>	50.0%	<u>0.6</u>	2.9%
Operating Labor and Benefits	11.2	11.6	12.5	12.4	-1.1%	12.5	1.0%
Contract Services	3.9	4.1	4.3	4.6	8.2%	4.8	3.4%
Other Costs	<u>5.6</u>	<u>6.4</u>	<u>6.7</u>	<u>6.7</u>	-0.1%	<u>6.9</u>	3.7%
Operating Total	20.8	22.1	23.4	23.6	0.9%	24.2	2.2%

BUDGET HIGHLIGHTS

The department's operating budget in FY22 is increasing \$0.2 million or 0.9 percent compared to FY21. In FY23, the budget will increase \$0.6 million or 2.2 percent compared to the prior fiscal year. Significant budget changes include:

FY22

Total labor and benefit costs are increasing \$0.1 million and are partially offset by lower actual cost of living increase than budgeted compared to the prior year. Capital labor and benefit costs are increasing \$0.2 million due to funding a limited number of FTEs supporting capital related work. Operating labor and benefit costs are decreasing \$0.1 million primarily due to not funding a senior management position and less use of overtime but is offset by a rise in retirement and health care. Contract services are increasing \$0.3 million primarily due to annual security contract price adjustments and expansion of security support as needed.

FY23

Total labor and benefit costs primarily in operating are increasing \$0.1 million due to scheduled salary step increases and a slight rise in retirement and health care. Contract services will increase \$0.2 million primarily due to annual security contract price adjustments. Other costs will increase \$0.2 million primarily due to an increase in the Water System's cost share for District laboratory services.

STAFFING SUMMARY

The table below summarizes the staffing changes that have occurred among departments.

Position Type	FY19	FY20	FY21	FY22	Chg	FY23	Chg
Full-Time	52.0	54.0	53.0	54.0	1.0	54.0	0.0
Limited-Term / Temp Construction	2.0	1.0	0.0	0.0	0.0	0.0	0.0
Intermittent	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Temporary / Part-Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total FTE	54.0	55.0	53.0	54.0	1.0	54.0	0.0

STAFFING CHANGES

The net change in cost represents the difference between the annual salary at the top step including benefits for the existing highest job classification versus the highest classification for the change.

FY	Action	From Classification(s)	To Classification(s)	Cost Chg	FTE Chg	Project/Program
2022	Add		Assistant / Associate Engineer	253,647	1.0	Trench Soils Management
FY22 TOTAL				253,647	1.0	

In FY22, the department is adding one FTE to develop, plan, and implement the trench soils master plan projects.

WATER OPERATIONS DEPARTMENT (WOD)

OVERVIEW

The Water Operations Department is responsible for the operation and maintenance of all water and power generation facilities spanning six counties, including Freeport Regional Water Authority facilities. Duties include oversight over all raw and treated water operations, dam operation and maintenance, support for water supply projects, support for water rights negotiation and interpretation, and management of the District's federal Central Valley Project supply.

DESCRIPTION OF SERVICES PROVIDED

The department includes Facilities Maintenance and Construction, Water Quality Office, Water Treatment and Distribution, and Water Supply divisions. Facilities Maintenance and Construction provides support for the water treatment and distribution infrastructure and other facilities including the computer systems used to operate the water system. Water Treatment and Distribution Division is responsible for providing high quality water by meeting or exceeding public health and water quality standards. Water Supply Division is responsible for raw water operation including flood control and Mokelumne River regulation, maintaining the District's aqueduct rights of way, operation and maintenance of upcountry water and wastewater systems and facilities, water system regulatory compliance and monitoring, water customer complaint investigation, and emergency response preparedness. The Water Quality Office provides technical review and oversight of water quality issues at the treatment plants and in the distribution system, as well as review of upcoming legislative and regulatory changes that impact water quality.

FY22 & FY23 GOALS

The department has a key role in implementing the Water Quality and Environmental Protection Strategic Plan goal. Key department goals include:

- Implementing OP/NET system improvements and cyber security controls for the industrial control systems and centralized security systems;
- Operating the water system to meet multiple objectives including municipal water supply, water quality, power generation, river flow regulation, environmental protection, and flood control;
- Meeting Joint Settlement Agreement (JSA) Mokelumne River minimum flow releases 100 percent of the time;
- Improving maintenance programs and asset management;
- Meeting water quality regulations and water quality goals 100 percent of the time;
- Managing Freeport Regional Water Facilities and other supplemental supply projects and supporting development of new supply projects;
- Operating the water system efficiently to minimize costs; and
- Leading the District's Energy Management Strategy.

DEPARTMENT BUDGET SUMMARY (WOD)

The department's projected spending is compared to prior years in the table below.

Category (\$ Millions)	FY19	FY20	FY21	FY22		FY23	
	Actuals	Actuals	Budget	Budget	% Chg	Budget	% Chg
Total Labor and Benefits	34.0	62.9	66.4	66.3	-0.2%	67.2	1.4%
Less: Capital Labor and Benefits	<u>1.9</u>	<u>5.4</u>	<u>5.8</u>	<u>4.8</u>	-16.8%	<u>4.8</u>	1.0%
Operating Labor and Benefits	32.1	57.5	60.6	61.5	1.4%	62.3	1.4%
Contract Services	1.5	3.5	3.9	4.9	27.0%	5.1	3.4%
Other Costs	<u>20.5</u>	<u>27.6</u>	<u>29.6</u>	<u>29.0</u>	-2.0%	<u>29.8</u>	2.8%
Operating Total	54.1	88.6	94.1	95.5	1.4%	97.3	1.9%

BUDGET HIGHLIGHTS

The department's operating budget in FY22 is increasing \$1.4 million or 1.4 percent compared to FY21. In FY23, the budget will increase \$1.8 million or 1.9 percent compared to the prior fiscal year. Significant budget changes include:

FY22

Total labor and benefits are slightly decreasing \$0.1 million primarily due to lower actual cost of living increase than budgeted compared to the prior year and partially offset by additional funded FTEs. Capital labor and benefits are decreasing \$1.0 million primarily due to the shift from capital labor to operating. Operating labor and benefit costs are increasing \$0.9 million primarily due to funding additional FTEs to perform electrical engineering support for regulatory compliance and landscape maintenance work. Contract services are increasing \$1.0 million primarily due to water operations software maintenance agreements, temporary support for electrical engineering during recruitment for the new FTE, vegetation management, and algaecide treatment for the Briones reservoir. Other costs are decreasing \$0.6 million primarily due to lower energy use estimates and equipment rentals but are offset by increases in vehicle use charges and higher chemical costs due to an increase in water production and prices.

FY23

Total labor and benefits are increasing \$0.9 million due to scheduled salary step increases and a rise in retirement and health care. Contract services are increasing \$0.2 million primarily due to maintenance support for chlorination boosting stations, water operations software maintenance agreements, and tree trimming/removal for fire abatement. Other costs are increasing \$0.8 million mainly driven by energy, vehicle use charges, chemicals for a slight increase in water production, and Freeport Regional Water Authority project cost-sharing allocations.

STAFFING SUMMARY

The table below summarizes the staffing changes and transfers that have occurred among departments. Two full-time FTEs were transferred to the Maintenance and Construction Department. Two limited-term FTEs were transferred from the Maintenance and Construction Department.

Position Type	FY19	FY20	FY21	FY22	Chg	FY23	Chg
Full-Time	183.0	336.0	335.0	334.0	(1.0)	334.0	0.0
Limited-Term / Temp Construction	1.0	4.0	3.0	4.0	1.0	4.0	0.0
Intermittent	0.0	0.75	0.75	0.75	0.0	0.75	0.0
Temporary / Part-Time	2.5	2.5	2.5	2.0	(0.5)	2.0	0.0
Total FTE	186.5	343.3	341.3	340.75	(0.5)	340.75	0.0

STAFFING CHANGES

The net change in cost represents the difference between the annual salary at the top step including benefits for the existing highest job classification versus the highest classification for the change.

FY	Action	From Classification(s)	To Classification(s)	Cost Chg	FTE Chg	Project/Program
2022	Add		Assistant Engineer	229,715	1.0	Engineering support for regulatory compliance
2022	Delete	(PT) Housekeeper		(57,544)	(0.5)	Workload efficiencies
2022	Delete	(LT) Associate Engineer		(253,540)	(1.0)	LT expired
FY22 TOTAL				(81,368)	(0.5)	

In FY22, the department is adding one full-time FTE to provide engineering support for regulatory compliance. The department is also deleting one part-time FTE due to workload efficiencies and one limited-term FTE as the limited-term status has expired.

WATER RESOURCES DEPARTMENT (WRD)

OVERVIEW

The Water Resources Department develops and administers the plans, policies and programs necessary to protect existing District water resources, and develops additional water supplies and assures the availability of physical facilities to meet future needs.

DESCRIPTION OF SERVICES PROVIDED

The department includes the Bay-Delta Section, Water Resources Planning, and Water Supply Improvements Divisions. The Bay-Delta Section provides the District's technical and policy evaluation and advocacy efforts related to the state and federal plans to restore the San Francisco Bay-Delta ecosystem, technical and project management support to the department, and legislative and policy review and development. Water Resources Planning Division administers the District's licenses, permits and agreements for current water supplies and hydropower facilities; conducts water resource modeling to support operations and planning; performs hydrologic and hydraulic analysis of the District's facilities; and prepares reports and plans needed to comply with state and federal regulations. The Water Supply Improvements Division plans and implements supplemental supply and water recycling projects needed to meet current and future water supply needs.

FY22 & FY23 GOALS

The department is primarily responsible for the Long-Term Water Supply Strategic Plan goal. Key department goals include:

- Preserving and managing the District's Mokelumne and East Bay water rights entitlements and agreements, and complying with Federal Energy Regulatory Commission (FERC) hydropower license requirements and U.S. Bureau of Reclamation Central Valley Project contract entitlements;
- Continuing collaborative partnerships for ensuring dry-year water supply including a long-term water transfer agreement with Placer County Water Agency, potential participation in an expanded Los Vaqueros Reservoir, development of a groundwater banking demonstration project with San Joaquin County, and regional water supply reliability partnerships in the Bay Area and with upcountry agencies;
- Preparing the 2020 Urban Water Management Plan, a comprehensive five-year water supply plan that incorporates the state mandated Water Shortage Contingency Plan;
- Continuing to evaluate use of recycled water to further reduce demand on Mokelumne River and East Bay water supplies;
- Participating in State Water Resources Control Board (SWRCB) hearings on the Water Quality Control Plan and the state's Delta Conveyance Project; and
- Continuing to work collaboratively with other departments to incorporate Climate Change adaptation and mitigation strategies into key District Planning efforts and initiatives.

DEPARTMENT BUDGET SUMMARY (WRD)

The department's projected spending is compared to prior years in the table below.

Category (\$ Millions)	FY19	FY20	FY21	FY22		FY23	
	Actuals	Actuals	Budget	Budget	% Chg	Budget	% Chg
Total Labor and Benefits	8.3	8.8	9.3	9.3	-0.4%	9.3	0.5%
Less: Capital Labor and Benefits	<u>2.3</u>	<u>2.1</u>	<u>2.0</u>	<u>1.8</u>	-9.1%	<u>1.9</u>	2.8%
Operating Labor and Benefits	6.0	6.7	7.3	7.5	2.0%	7.4	0.0%
Contract Services	0.2	0.1	0.3	0.1	-73.1%	0.4	305.6%
Other Costs	<u>4.8</u>	<u>2.0</u>	<u>1.8</u>	<u>2.1</u>	17.3%	<u>2.2</u>	4.3%
Operating Total	11.0	8.7	9.4	9.7	2.3%	10.0	3.8%

BUDGET HIGHLIGHTS

The department's operating budget in FY22 is increasing \$0.3 million or 2.3 percent compared to FY21. In FY23, the budget will increase \$0.3 million 3.8 percent compared to the prior fiscal year. Significant budget changes include:

FY22

Total labor and benefit costs are essentially flat compared to FY21. Operating labor and benefits are increasing \$0.2 million primarily for a small shift from capital labor to operating. Contract services costs are decreasing \$0.2 million due to completion of the Dam Safety Program Audit, hydrologic/hydraulic probabilistic analyses, the Historic Properties Management Plan (an amendment to the FERC license per regulatory recommendation), and delay of required low flow analyses on the lower Mokelumne River. Other costs are increasing \$0.3 million primarily due to an increase in the District's share of payments to the joint Dublin San Ramon Services District/EBMUD Recycled Water Authority (DERWA) for recycled water use and fees and licenses including an increase to the water rights fees paid to the State of California.

FY23

Total labor and benefit costs are essentially flat. Contract services costs will increase \$0.3 million to comply with FERC regulatory mandates requiring an independent consultant performed every five years. Other costs will increase \$0.1 million primarily due to an increase to the District's share of payments to DERWA for recycled water use and water rights fees paid to the state.

STAFFING SUMMARY

The table below summarizes the staffing changes and transfers that have occurred among departments. In FY22, a 0.5 FTE was transferred to the Human Resources Department. There are no other staffing changes.

Position Type	FY19	FY20	FY21	FY22	Chg	FY23	Chg
Full-Time	36.0	37.0	37.0	37.0	0.0	37.0	0.0
Limited-Term / Temp Construction	0.0	1.0	1.0	1.0	0.0	1.0	0.0
Intermittent	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Temporary / Part-Time	1.0	0.5	0.5	0.0	(0.5)	0.0	0.0
Total FTE	37.0	38.5	38.5	38.0	(0.5)	38.0	0.0

WATER RECYCLING PROGRAM (WRP)

OVERVIEW

The Water Recycling Program develops and implements projects that provide recycled water for appropriate uses by the District and its customers to reduce the demand on high quality drinking water supplies.

DESCRIPTION OF SERVICES PROVIDED

The program operates and maintains the North Richmond Water Reclamation Plant and the Richmond Advance Recycled Expansion (RARE) facility that provide recycled water for use in the Chevron refinery, and the East Bayshore Recycled Water treatment facility that provides recycled water to customers for irrigation applications. While this program is managed and budgeted under the Water System, the Wastewater Department is responsible for the ongoing operations and maintenance of the facilities that produce recycled water.

FY22 & FY23 GOALS

The department supports the Long-Term Water Supply Strategic Plan goal. Key department goals include:

- Continuing to operate and maintain the three recycled water treatment facilities (RARE, North Richmond, and East Bayshore) to meet regulatory standards for recycled water and to maximize the production;
- Maintaining contractual obligations with Chevron; and
- Continuing to offset the use of drinking water for non-potable applications as part of the District's water recycling goal.

DEPARTMENT BUDGET SUMMARY (WRP)

The department's projected spending is compared to prior years in the table below.

Category (\$ Millions)	FY19	FY20	FY21	FY22		FY23	
	Actuals	Actuals	Budget	Budget	% Chg	Budget	% Chg
Total Labor and Benefits	1.8	1.9	1.9	1.9	-1.9%	1.9	0.1%
Less: Capital Labor and Benefits	<u>0.0</u>	<u>0.1</u>	<u>0.0</u>	<u>0.1</u>	1222.9%	<u>0.1</u>	0.0%
Operating Labor and Benefits	1.8	1.9	1.9	1.8	-4.6%	1.8	0.1%
Contract Services	0.1	0.1	0.1	0.2	77.5%	0.2	-1.3%
Other Costs	<u>2.5</u>	<u>3.4</u>	<u>4.0</u>	<u>4.1</u>	1.2%	<u>4.3</u>	6.2%
Operating Total	4.4	5.4	6.1	6.1	0.5%	6.4	4.1%

BUDGET HIGHLIGHTS

The department's FY22 operating budget is increasing \$0.03 million or 0.5 percent compared to FY21. In FY23, the operating budget will increase \$0.3 million or 4.1 percent. Significant budget changes include:

FY22

Total labor and benefit costs are decreasing \$0.04 million primarily due to operating savings for the time required to fill positions, reduced standby pay, and lower actual cost of living increase than budgeted compared to the prior year, partially offset by increases in overtime, and a rise in retirement and health care. Capital labor and benefits are increasing \$0.05 million due to a shift of operating labor to capital. Operating labor and benefit costs are decreasing \$0.09 million. Contract services are increasing \$0.07 million due to shift of specialized maintenance services from Wastewater to WRP and RARE membrane process support and training for microfiltration and reverse osmosis systems at RARE Water Treatment Plant. Other costs are increasing \$0.05 million primarily due to charges from Wastewater and chemical costs offset by lower energy costs and fees and licenses. West County Wastewater District fees have decreased due to less discharge from RARE.

FY23

Other costs will increase \$0.25 million primarily due to chemicals, discharge fees, and charges from Wastewater.

STAFFING SUMMARY

The table below summarizes staffing and there are no other changes.

Position Type	FY19	FY20	FY21	FY22	Chg	FY23	Chg
Full-Time	8.0	8.0	8.0	8.0	0.0	8.0	0.0
Limited-Term / Temp Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intermittent	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Temporary / Part-Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total FTE	8.0	8.0	8.0	8.0	0.0	8.0	0.0

STAFFING

Appointment Types

The majority of the workforce is comprised of full-time civil service or full-time civil service exempt positions. Limited-term positions are intended to augment regular staff to accomplish extra work or other operational programs or activities of a limited duration, with appointments for a maximum of 4 years. Temporary construction positions are also of a limited and specified duration typically associated with capital projects. Intermittent positions represent the smallest number of appointment types and typically work 32 hours instead of 40 hours per week. Part-time positions are normally restricted to 832 hours per year. Temporary positions are limited to a 6-month duration and are full-time during that duration.

The table below provides the full-time equivalent (FTE) by department and compares the changes from year-to-year. Depending upon the appointment type, the FTE value will be different.

- Full-time, limited-term and temporary construction appointment types equal 1.0 FTE;
- Intermittent appointment types equal 0.75 FTE; and
- Part-time and temporary appointment types equal 0.5 FTE.

FY22 & FY23 Department Staffing					
Department	FY21	FY22		FY23	
	Budget	Budget	FTE Chg	Budget	FTE Chg
Administration	1.0	1.0	0.0	1.0	0.0
Customer & Community Services	140.5	142.0	1.5	142.0	0.0
Engineering & Construction	286.5	287.0	0.5	285.5	(1.5)
Finance	102.5	100.5	(2.0)	100.5	0.0
Human Resources	61.5	63.5	2.0	64.0	0.5
Information Systems	94.0	94.0	0.0	94.0	0.0
Maintenance & Construction	617.5	613.5	(4.0)	613.5	0.0
Natural Resources	66.5	66.5	0.0	66.5	0.0
Office of General Counsel	17.0	17.0	0.0	17.0	0.0
Office of the General Manager	27.5	29.5	2.0	29.5	0.0
Operations & Maintenance Support	53.0	54.0	1.0	54.0	0.0
Water Operations	341.25	340.75	(0.5)	340.75	0.0
Water Recycling Program	8.0	8.0	0.0	8.0	0.0
Water Resources	38.5	38.0	(0.5)	38.0	0.0
Water System Total	1,855.25	1,855.25	0.0	1,854.25	(1.0)

In FY22, a net total of one FTE is being added to the Water System, but the Water System is transferring another FTE to the Wastewater System.

In FY23, one full-time FTE will be deleted in the Human Resources Department.

For a more detail description of the staffing changes, please see the specific department sections in this chapter.

Bargaining Unit Changes

Tables below show the net change in bargaining unit status of authorized FTEs represented by different unions, management/confidential, non-represented groups, and civil service exempt positions. The tables reflect Board of Directors authorized additions and deletions in FY22 and FY23 and correspond to the staffing changes table in each department.

FY22 vs. FY21 Dept Net Change in Bargaining Unit Status							
Department	Local 2019	Local 444	Local 21	Local 39	MGR/CONF	NRP	EXMPT
Administration							
Customer & Community Services	2.5				(1)		
Engineering & Construction	1						
Finance							
Human Resources	1				1	(2)	
Information Systems							
Maintenance & Construction						(2)	
Natural Resources							(1)
Office of General Counsel							
Office of the General Manager							1
Operations & Maintenance Support	1						
Water Operations	(0.5)						
Water Recycling Program							
Water Resources							
Total Net Change	5	0	0	0	0	(4)	0

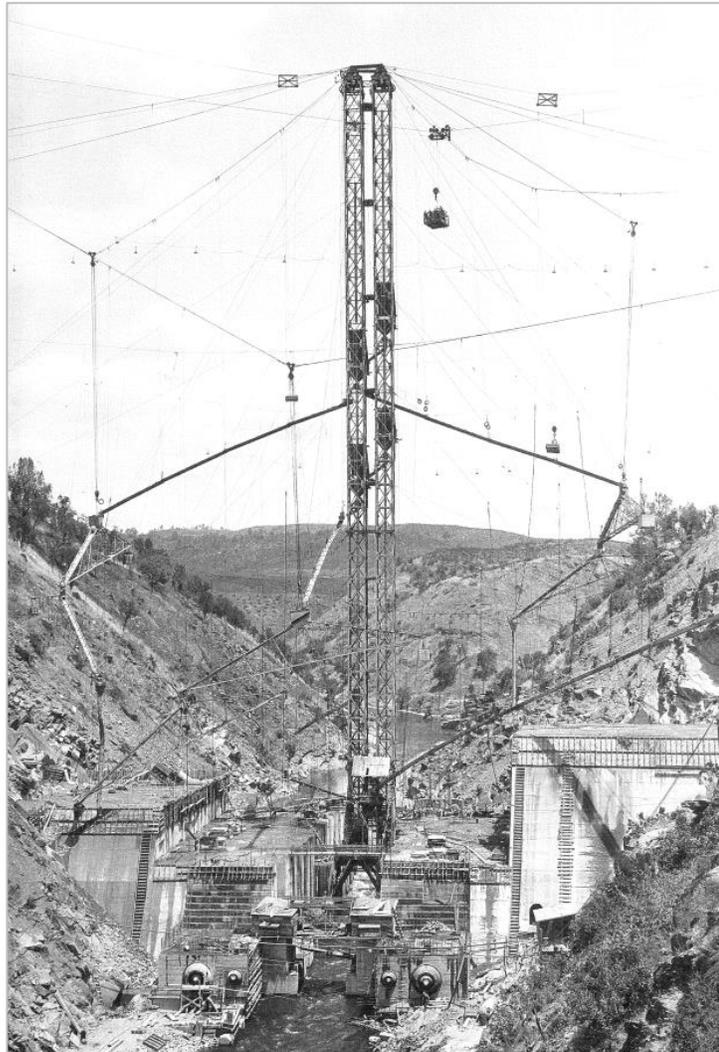
FY23 vs. FY22 Dept Net Change in Bargaining Unit Status							
Department	Local 2019	Local 444	Local 21	Local 39	MGR/CONF	NRP	EXMPT
Administration							
Customer & Community Services							
Engineering & Construction							
Finance							
Human Resources					(1)		
Information Systems							
Maintenance & Construction							
Natural Resources							
Office of General Counsel							
Office of the General Manager							
Operations & Maintenance Support							
Water Operations							
Water Recycling Program							
Water Resources							
Total Net Change	0	0	0	0	(1)	0	0

DEBT SERVICE AND FINANCING

This section describes the Water System's current and projected debt obligations, current credit ratings, and adherence to the District's debt financing policies.

The District incurs debt to finance capital projects or purchase, repair or replace assets which will have useful lives equal to or greater than the related debt. Issuance of revenue supported debt is authorized by the Board of Directors, subject to a referendum process. Individual revenue bond issues are authorized by the Board of Directors.

The annual debt service principal and interest payments are charged to the operating budget. However, debt is only issued to finance capital investment activities.



Pardee Dam construction in 1928 showing cableway used to place concrete

Outstanding Debt

The Water System's total outstanding debt is projected to be \$2.68 billion as of June 30, 2021. This figure incorporates an anticipated partial pay down of Water System commercial paper (CP) in FY21. The District's debt issues are summarized on the following page and discussed in detail thereafter.

Outstanding Debt (\$ Millions) As of June 30, 2021				
Issue	Date of Issue	Last Maturity	Amount Issued	Principal Outstanding
LONG-TERM DEBT				
Revenue Bonds				
Series 2008A	3/20/2008	6/1/2038	322.5	105.3
Series 2010B (Build America Bonds)	2/23/2010	6/1/2040	400.0	400.0
Series 2012A	10/10/2012	6/1/2037	191.8	81.8
Series 2012B	11/13/2012	6/1/2026	358.6	86.4
Series 2014A	6/11/2014	6/1/2035	128.3	128.3
Series 2014B	6/11/2014	6/1/2030	242.7	199.2
Series 2014C	6/26/2014	6/1/2044	75.0	75.0
Series 2015A	3/3/2015	6/1/2037	429.4	429.4
Series 2015B	6/17/2015	6/1/2045	74.3	74.3
Series 2015C	6/17/2015	6/1/2045	110.7	110.7
Series 2017A	6/22/2017	6/1/2045	185.4	185.4
Series 2017B	6/22/2017	6/1/2037	309.7	296.2
Series 2019A	6/27/2019	6/1/2049	<u>161.8</u>	<u>157.0</u>
Total Revenue Bonds			2,990.2	2,328.8
% of Total Outstanding Debt				87%
Loans				
State Loan (parity)	1/1/2003	1/1/2024	2.2	0.3
State Loan (parity)	5/22/2008	4/1/2028	20.1	8.0
State Loan (parity)	12/14/2017	7/1/2048	14.0	13.3
State Loan (parity)	4/18/2018	7/1/2049	<u>12.0</u>	<u>11.5</u>
Total Loans			48.3	33.2
% of Total Outstanding Debt				1%
Total Long-Term Debt			3,038.5	2,362.0
SHORT-TERM DEBT				
Commercial Paper	Various	Various	N/A	320.8
% of Total Outstanding Debt				12%
TOTAL OUTSTANDING DEBT				2,682.8

The District plans to issue \$150 million in revenue bonds in FY22 and \$150 million in FY23 to support capital investment activities. Each \$150 million bond issue generates \$147 million in proceeds after the assumed cost of issuance.

Debt Service

The Water System's total outstanding debt of \$2.68 billion as of June 30, 2021 is projected to cost \$1.59 billion in interest as shown in the table below. The principal includes the planned annual pay down of CP. However, CP has no final maturity and the CP principal pay down schedule could differ. Interest on synthetic fixed-rate debt was calculated at their associated swap rates. Interest on CP is assumed to be 0.5 percent in FY22, rising to 3.0 percent by 2032.

Projected Debt Service on Current Outstanding Debt			
(\$ Thousands)			
Fiscal Year	Principal	Interest	Debt Service
2022	82,188	117,459	199,648
2023	85,660	115,547	201,206
2024	88,996	111,807	200,803
2025	92,729	108,671	201,400
2026	94,474	105,287	199,761
2027	98,635	102,330	200,966
2028	102,957	97,805	200,763
2029	107,545	93,015	200,560
2030	112,368	87,994	200,362
2031	117,462	82,702	200,165
2032	122,626	79,585	202,211
2033	128,036	73,909	201,944
2034	133,430	68,248	201,679
2035	139,055	62,369	201,425
2036	145,170	55,991	201,161
2037	151,881	49,026	200,907
2038	159,321	41,513	200,835
2039	167,277	33,114	200,391
2040	83,728	23,871	107,599
2041	67,935	19,707	87,642
2042	70,687	16,653	87,340
2043	73,579	13,466	87,045
2044	76,526	10,220	86,746
2045	58,459	6,834	65,293
2046	19,737	4,361	24,098
2047	20,190	3,610	23,799
2048	20,663	2,836	23,499
2049	20,845	2,039	22,884
2050	10,257	1,226	11,483
TOTAL	2,652,417	1,591,197	4,243,614

The debt service in the table is less than the budgeted debt service because the latter includes:

- Payments on new debt issues in FY22 and FY23, and
- Costs for liquidity fees, remarketing fees, basis spread, and debt service administration.

Debt Ratings

Credit risk is the risk that the issuer of a financial obligation, such as a revenue bond, will not fulfill its payment obligations to the holder of the investment. Credit ratings are assigned to bonds by Nationally Recognized Statistical Credit Rating Organizations based on published methodologies. The ratings reflect the organizations' opinions about the issuer's ability and willingness to meet its financial obligations on time and in full.

The Water System's strong credit ratings provide tangible benefits to ratepayers in the form of reduced debt service costs. A strong credit rating provides better access to capital markets, lower interest rates, better terms on debt, and access to a greater variety of debt products. Prudent financial management policies have contributed to the Water System's strong ratings.

As of January 1, 2021, ratings on the Water System's debt were as follows:

Water System Debt Ratings			
Debt by Type	Standard & Poor's	Moody's Investors Service	Fitch
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	A-1+	P-1	F1+

Definitions of the District's fixed rate and long-term debt ratings are shown below.

Standard & Poor's

An obligation rated 'AAA' has the highest rating assigned by S&P Global Ratings. The obligor's capacity to meet its financial commitments on the obligation is extremely strong.

Moody's Investors Service

Obligations rated 'Aa' are judged to be of high quality and are subject to very low credit risk. The modifier 1 indicates that the obligation ranks in the higher end of its generic rating category.

Fitch

'AA' ratings denote expectations of very low default risk. They indicate very strong capacity for payment of financial commitments. This capacity is not significantly vulnerable to foreseeable events. The modifiers "+" or "-" may be appended to a rating to denote relative status within major rating categories.

Debt Management Policy and Debt Service Coverage

The District is subject to legal debt limits prescribed in the Municipal Utility District (MUD) Act which describes three types of legal limitations: general debt limits, revenue bond limits, and short-term borrowing limits.

The District's general debt indebtedness cannot exceed the ordinary annual income and revenue of the District without a two-thirds approval of the voters. However, revenue bonds are not included in general debt limits.

The District is authorized to issue revenue bonds with the approval of a resolution from the Board of Directors, subject to a 60-day referendum period. The resolution specifies the maximum principal amount of bonds that may be issued pursuant to the authorization. The Board of Directors also approves individual series of revenue bonds issued under the broader authorization.

The MUD Act authorizes the District to issue short-term indebtedness without an election of the voters. The amount of short-term borrowing cannot exceed the lesser of 1) the annual average total revenue of the three preceding years or 2) 25 percent of the District's total outstanding bonds. This provision is substantially the same as the District's internal policy discussed below.

The District has also established its own policy regarding debt management (Policy 4.27: Debt Management – see Appendix). The purpose of the debt policy is to maintain a balance between current funding sources and debt financing over each five-year plan horizon to retain financing flexibility and achieve the lowest cost of financing.

The District's debt management policy is to:

- a) maintain an annual revenue bond debt service coverage ratio of at least 1.6 times;
- b) limit debt-funded capital to no more than 65 percent of the total capital program over each five-year planning period; and
- c) limit commercial paper / variable rate debt to 25 percent of outstanding long-term debt.

Debt Service Coverage Ratio

The debt service coverage policy ensures that the District has sufficient annual operating revenues to pay its operating expenses and meet its debt service obligations on its revenue bonds and other parity debt. The revenue bond debt service coverage ratio is defined as the District's net operating revenue (current year's operating revenue less the current year's operating expenses) divided by the current year's debt service on all revenue bonds and other parity debt. Net revenues are reduced by any Rate Stabilization Fund deposits and increased by any withdrawals. In FY22 and FY23, the projected debt coverage ratios are 2.02 and 2.02, respectively.

Debt-Funded Capital

The percentage of the capital program that is funded by debt over the five-year planning period FY22-26 is projected at 42.2 percent, which is below the financial policy maximum target of 65 percent. The debt percentage funding levels for FY22 and FY23 are shown in the table below.

Projected Debt Percentage of Funding		
(\$ Millions)		
	FY22	FY23
Expenditures		
Capital Cash Flow	290.4	325.2
Capital Support	<u>51.0</u>	<u>52.0</u>
Total Expenditures	341.4	377.2
Project Funding		
New Bond Proceeds	<u>147.0</u>	<u>147.0</u>
Total Resources	147.0	147.0
Debt Percentage of Funding	43.1%	39.0%

Commercial Paper and Variable Rate Debt Ratio

The District has authorized a short-term CP borrowing program consistent with the MUD Act and the District's debt management policy. Under this program, the District may issue CP notes at prevailing interest rates for periods of not more than 270 days from the date of issuance. The program is supported by liquidity agreements. The Water System CP is subordinate to the Water System's revenue bonds.

As of June 30, 2021, \$320.8 million of Water System CP is projected to be outstanding after an anticipated partial pay down of principal in FY21. Water System CP comprises about 12 percent of the \$2.68 billion in total outstanding debt.

Water System outstanding variable rate debt projected as of June 30, 2021 will be approximately \$105.3 million. Since FY14, the District has converted over \$340.0 million of its variable rate debt into fixed rate debt by terminating existing interest rate swap contracts and replacing the underlying variable rate bonds with fixed rate bonds. Going forward, the District expects to finance its capital program through a combination of available funds and fixed-rate debt.

CAPITAL IMPROVEMENT PROGRAM

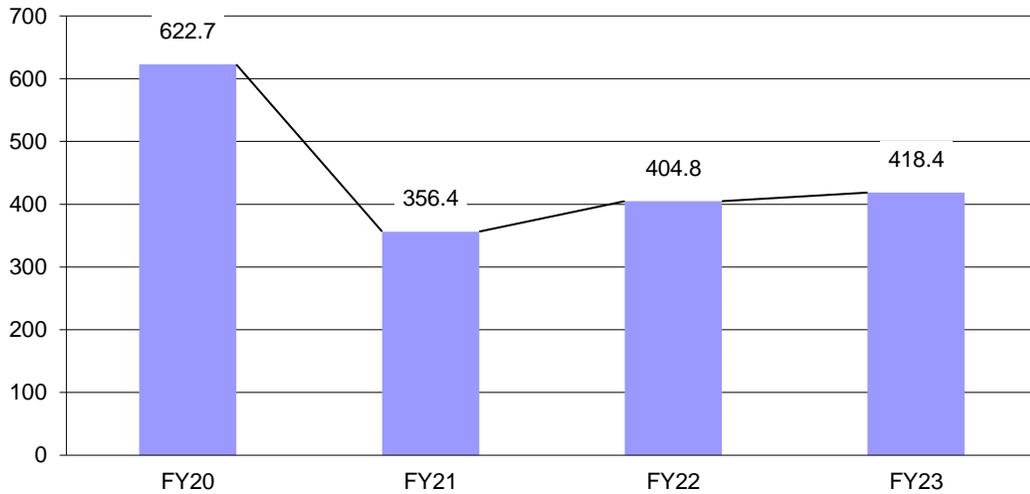
The CIP consists of projects that typically result in the construction of new facilities, or the rehabilitation or upgrade of existing facilities. Project costs include all expenditures required to study, plan, design, construct or upgrade new or existing facilities. Projects can also include large equipment purchases and the creation or replacement of computer systems.

Capital Appropriation

Capital appropriations are the amounts approved by the Board to be spent on projects in the CIP. Since these appropriations are often spent over multiple years, the amounts appropriated for each fiscal year will vary depending upon project scope and timing, and any unspent appropriation a project may already have.

The Water System's FY22 appropriation is increasing by \$48.3 million or 13.6 percent from FY21. In FY23, the appropriation is increasing by \$13.7 million or 3.4 percent from FY22. The appropriations for FY22 and FY23 and the prior two years are summarized below.

Four-Year Summary Capital Appropriation
(\$ Millions)



The FY22-26 Water System CIP requires \$2.22 billion in project appropriations, a decrease of \$22.9 million or 1.0 percent from the FY20-24 CIP. The decrease is primarily due to the Non-Program Specific Strategy as little additional appropriations are needed for contingency. Also, as capital work is being restructured, pumping plant and reservoir projects have been moved out of the Extensions & Improvements Strategy and into the Maintaining Infrastructure Strategy. Also, Capital Support is increasing to be more in line with projected spending.

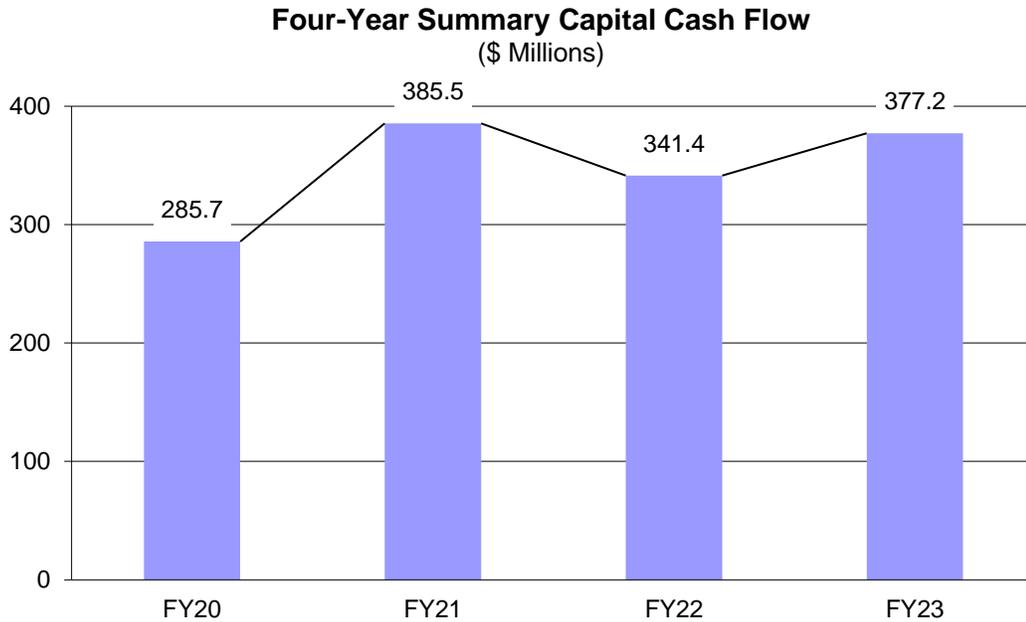
The Maintaining Infrastructure Strategy is the main focus of the CIP and comprises 57 percent of the total appropriations. The Water System appropriations by strategy are shown in the following table.

FY20-24 vs. FY22-26 Appropriation				
Capital Improvement Program by Strategy (\$ Thousands)				
Strategy	Appropriation		\$ Chg	% Chg
	FY20-24	FY22-26		
Extensions & Improvements	497,676	17,887	(479,789)	-96%
Facilities, Services & Equipment	78,053	164,402	86,349	111%
Maintaining Infrastructure	970,057	1,268,837	298,780	31%
Regulatory Compliance	46,266	84,948	38,682	84%
Resource Management	9,294	6,255	(3,039)	-33%
Water Quality	186,217	199,988	13,771	7%
Water Supply	218,503	211,530	(6,973)	-3%
Non-Program Specific	<u>31,564</u>	<u>3,568</u>	<u>(27,996)</u>	-89%
Strategy Subtotal	2,037,630	1,957,415	(80,215)	-4%
Capital Support	<u>207,970</u>	<u>265,324</u>	<u>57,354</u>	28%
Total Water	2,245,600	2,222,739	(22,861)	-1%

Capital Cash Flow

Capital cash flows are the amounts projected to be spent each fiscal year on projects in the CIP. Cash flow spending varies each year as projects progress from one phase to another, such as from planning to design and then construction, and as projects are completed and new ones started.

The Water System's FY22 cash flow is decreasing by \$44.1 million or 11.4 percent from FY21. In FY23, the cash flow is increasing by \$35.8 million or 10.5 percent from FY22. The cash flows for FY22 and FY23 and the prior two years are shown below.



The FY22-26 CIP identifies \$2.02 billion in projected cash flow spending, an increase of \$126.0 million or 6.6 percent compared to the FY20-24 CIP. The increase is primarily attributable to the Maintaining Infrastructure Strategy for replacing deteriorated water distribution pipelines, and the Water Quality Strategy for water treatment plant upgrades. Also, Capital Support is increasing to be more in line with projected spending.

The Water System cash flows by strategy are summarized below.

FY20-24 vs. FY22-26 Cash Flows				
Capital Improvement Program by Strategy (\$ Thousands)				
Strategy	Cash Flows		\$ Chg	% Chg
	FY20-24	FY22-26		
Extensions & Improvements	218,211	28,222	(189,990)	-87%
Facilities, Services & Equipment	113,561	144,422	30,862	27%
Maintaining Infrastructure	847,980	915,847	67,868	8%
Regulatory Compliance	61,641	90,280	28,639	46%
Resource Management	11,462	10,819	(643)	-6%
Water Quality	226,463	343,150	116,687	0%
Water Supply	208,620	223,863	15,243	7%
Non-Program Specific	<u>0</u>	<u>0</u>	<u>0</u>	0%
Strategy Subtotal	1,687,938	1,756,604	68,666	4%
Capital Support	<u>207,970</u>	<u>265,324</u>	<u>57,354</u>	28%
Total Water	1,895,908	2,021,928	126,020	7%

Based on a ten-year capital planning horizon, \$2.4 billion of work has been tentatively identified for FY27-31. These estimates will be revised as studies are completed, priorities are redefined, and new needs emerge. Therefore, the focus is on the first five years of the CIP.

Select programs and projects are discussed in more detail in the following pages. In addition, a description of each project including recent accomplishments and future work is provided in a supplemental volume of this budget book for each project that has work planned in FY22-26.

Capital Labor

The capital labor component of the CIP totals over \$100 million per fiscal year. The following table shows the capital labor and benefits budget by department.

Capital Labor By Department (\$ Thousands)						
	FY20 Actuals	FY21 Budget	FY22		FY23	
			Budget	% Chg	Budget	% Chg
Administration	0	0	0	0.0%	0	0.0%
Customer & Community Services	614	349	425	21.9%	438	3.1%
Engineering & Construction	40,050	41,068	43,052	4.8%	43,271	0.5%
Finance	1,834	1,969	2,087	6.0%	1,755	-15.9%
Human Resources	212	615	764	24.3%	182	-76.1%
Information Systems	450	0	474	0.0%	0	-100.0%
Maintenance & Construction	40,403	48,555	46,502	-4.2%	47,487	2.1%
Natural Resources	105	72	72	0.1%	72	0.9%
Office of General Counsel	0	0	0	0.0%	0	0.0%
Office of the General Manager	0	0	0	0.0%	0	0.0%
Operations & Maintenance Support	713	401	601	50.0%	618	2.9%
Water Operations	5,410	5,760	4,790	-16.8%	4,839	1.0%
Water Recycling Program	61	4	57	1222.9%	57	0.0%
Water Resources	2,126	2,024	1,839	-9.1%	1,890	2.8%
Total Departments	91,977	100,816	100,664	-0.2%	100,611	-0.1%

The Water System capital labor budget is decreasing slightly, by less than \$0.2 million in FY22 and less than \$0.1 million in FY23 due to a small shift in labor from capital to operating, less use of negotiated premium pay for eligible employees that report to a job site lacking the basic facilities provided at District locations, and overall lower salaries due to the number of new employees with salaries lower than the employees they replaced.

Capital Program Highlights

The Water System FY22-26 appropriations are shown below by strategy and program, with select programs and projects discussed in more detail to provide a sense of the work that is projected to take place over the next ten years.

EXTENSIONS & IMPROVEMENTS TO THE SYSTEM STRATEGY

This strategy furthers the District's objectives to improve the infrastructure to ensure reliable, high quality service by performing water demand studies, environmental reviews, hydraulic modeling and pressure zone planning studies to optimize service levels. The strategy also updates the District's drafting, mapping and control systems to enhance modeling capabilities and remote water system operations. Work under this strategy focuses on planning for improvements to various components of pressure zones such as pipelines, reservoirs, pumping plants and water treatment plants (WTPs) to improve system reliability for existing customers, and to provide service to new customers. The five-year program strategy appropriations are as follows:

Appropriations (\$ Thousands)						
Programs	FY22	FY23	FY24	FY25	FY26	Total
Mapping	2,504	2,446	2,341	2,499	2,571	12,361
OP/NET	0	1,543	1,169	1,079	1,097	4,888
Pressure Zone Improvements	638	0	0	0	0	638
Total	3,142	3,989	3,510	3,578	3,668	17,887

Pressure Zone Improvement Program

The Pressure Zone Improvements (PZI) Program includes studying individual pressure zones to provide data to aid in planning for water distribution system projects, such as upgrading or replacing reservoirs, pumping plants or pipelines to optimize storage capacity and improve water quality. The studies are compiled into the various master plans to prioritize future work. Planned work for FY22-26 includes completion of the Maloney Pressure Zone (PZ) Planning Study, Colorados PZI Update, Swainland Reservoir Study, East of Hills System Study, and the Lake Chabot Golf Course service relocation.

Distribution system valve studies are conducted to improve existing practices for valves, spacing, inspection, installation, maintenance, and asset management. The design and installation of remote control Dual Tank Isolation Valves are part of this program.

This program also includes completing environmental documentation to implement the recommended improvements. Individual projects are grouped together into several Environmental Impact Reports (EIR), Mitigated Negative Declarations (MND), and Notice of Exemptions (NOE). In FY20-21, planning started on the Wildcat Pumping Plant MND, Fontaine Pumping Plant MND, Sobrante Water Treatment Plant EIR, and West of Hills (WHO) Central Pipelines EIR. Planned work for FY22-26 includes completing the projects started in FY20-21 and starting the WOH Southern Pipelines EIR in FY25.

Mapping Program

This program develops and upgrades the Computer-Aided Drafting and Mapping System (CAD/CAM) and Geographic Information System (GIS) which are integral for providing data, engineering drawings, and maps required for infrastructure planning, emergency response, and maintenance. In FY21, CAD systems were modernized, and Building Information Modeling was implemented to improve project coordination, utilize 3-D modeling, and streamline workflow process. In FY22-26, work includes GIS database and desktop software upgrades, water network data model migration, and major software updates to improve functionality and increase productivity.

OP/Net Program

The OP/NET System is used by operators, engineers and planners to provide operations staff with the ability to control and monitor water production, treatment, distribution, hydroelectric power generation and field facilities. The system consists of the Industrial Control System (ICS), the Supervisory Control and Data Acquisition (SCADA) system, and Remote Terminal Units (RTU). In FY22-26, upgrade of the SCADA system and ICS infrastructure will continue, and deployment of additional wireless communication and security/network equipment will coincide with RTU replacement. Also, an ICS cyber security assessment will be performed, and recommendations will be evaluated and implemented.



Vine St. pumping plant, in Berkeley. One of many local plants which pump water to the tanks and higher elevations in the hills, Construction photographs of Pardee Dam, California, UC Berkeley, Bancroft Library

Note: The pumping plant has been decommissioned and was designated as a landmark in 1999. In 2005 it opened for business as a wine shop.

FACILITIES, SERVICES & EQUIPMENT STRATEGY

This strategy furthers the District's objectives to ensure the security of the water supply system; to evaluate facilities and implement corrective maintenance programs; to implement changes in technology; and to maintain a safe, well equipped workplace. Work associated with this strategy includes making improvements to District facilities and constructing new service centers, making security improvements at various facilities, implementing new computer systems, and replacing vehicles and equipment as needed. The five-year program strategy appropriations are as follows:

Appropriations (\$ Thousands)						
Programs	FY22	FY23	FY24	FY25	FY26	Total
Area Service Center / Building	1,350	3,590	12,475	39,950	30,283	87,648
Communications	11,070	799	3,139	1,940	3,469	20,417
Security	0	0	2,229	2,635	5,167	10,031
Vehicle / Equipment	15,894	9,126	7,872	6,615	6,800	46,307
Total	28,314	13,515	25,715	51,140	45,719	164,403

Area Service Center / Building Program

The Area Service Center/Building Program is comprised of various projects to upgrade District buildings. Elevator upgrades, LED lighting installations, HVAC systems, and data center reliability improvements at the Administration Building (AB) in Oakland were recently completed.

FY22-26 work includes HVAC and lighting upgrades at the Adeline Maintenance Center (AMC) in Oakland; electrical modifications at the East Area Service Center in Walnut Creek to enable operation as an incident command base; and the expansion of the Fleet Maintenance East facility in Walnut Creek. Planning and community outreach for a new service center in West Oakland will be completed and the site will be used for equipment and materials storage and staging operations.

FY27-31 projects include new warehouse and storage facilities at the Oakport Storage Center in Oakland; renovation of a service center at AMC; expansion of the Castenada Service Center in San Ramon; and re-sealing the joints and pre-cast concrete panels on the exterior of the AB.

Communications Program

The Communications Program is comprised of projects that replace and upgrade computer and communication systems. Replacement of the Materials Management Information System (MMIS) used for purchasing and the Financial Information System (FIS) used for accounting purposes will be completed in FY22, along with replacing the budget system. Various modules of the Human Resource Information System (HRIS) will be replaced in FY22-23. Replacement of various work management systems including general work orders, concrete orders, and paving orders will take place in FY22-24. This program also provides for the periodic replacement of personal computers, laptops, servers, and network and data security equipment.

Vehicles / Equipment Program

The Vehicle / Equipment Program is ongoing and involves the periodic replacement of vehicles and construction equipment as needed. It also involves procuring additional vehicles and equipment for new staff and crews and upgrading fuel facilities. In FY22-23, equipment will be purchased to outfit additional staff, replace long-term leased vehicles, and decrease the reliance on FM&O contracts. In FY22-23, improvements will be made to fueling facilities including the replacement of fuel dispensers at 16 sites, and the installation of enhanced vapor recovery equipment for the above ground storage tanks.

MAINTAINING INFRASTRUCTURE STRATEGY

This strategy furthers the District's objectives to improve, rehabilitate and replace aging infrastructure in a cost-effective manner to ensure the sustainable delivery of reliable, high quality water service now and in the future. Work under this strategy focuses on pipeline projects to improve system reliability for existing customers and to provide service to new customers; rehabilitating and replacing pumping plants; and rehabilitating water treatment plants and storage reservoirs to improve water quality. The five-year program strategy appropriations are as follows:

Appropriations (\$ Thousands)						
Programs	FY22	FY23	FY24	FY25	FY26	Total
Corrosion	215	2,413	6,759	4,875	8,196	22,458
Electrical Hazard Prevention	0	0	150	150	150	450
Pipelines / Appurtenances	22,541	23,265	24,016	24,787	25,586	120,195
Pipelines / Regulators	70,321	90,073	95,431	112,916	114,884	483,625
Polybutylene Lateral Replacement	0	14,992	15,479	15,982	16,501	62,954
Pumping Plant Rehabilitation	2,913	38,408	60,145	41,806	73,971	217,243
Reservoir Rehabilitation	32,736	113,571	71,921	67,144	76,540	361,912
Total	128,726	282,722	273,901	267,660	315,828	1,268,837

Pipelines / Appurtenances Program

This program maintains efficient pipeline operations by replacing appurtenances such as valves, hydrants and meters at the end of their useful life and installing services for new customers. The New Service Installations Project installs taps on the main, laterals, and meter sets for new customers. The need for new services has increased. In FY18-21, 600 to 700 new services were installed each year, and this rate is expected to continue in FY22 and beyond. In addition to new services, approximately 100 hydrants are expected to be installed each year to service new developments.

Water meters are routinely replaced at the end of their useful life, as are meters that are believed to be reading inaccurately. In FY21, approximately 18,000 meters were replaced, and the number of annual replacements is expected to increase to over 20,000 starting in FY22.

Pipelines / Regulators Program

Pipelines/Regulators is an ongoing program to replace deteriorated pipelines and expand the distribution system. This is the District's largest capital program.

The Pipeline Infrastructure Renewals project replaces deteriorating water distribution pipelines to help maintain the reliability of the distribution infrastructure. In FY20, pipeline replacements totaled 17.5 miles and are on track to meet the goal of replacing 20 miles per year in FY21-22. Pipeline replacement will increase to 22.5 miles per year in FY23-24, and 25 miles in FY25-26. Production is expected to increase as more efficient replacement installation methods and materials are used.

The Large Diameter Pipelines project replaces the large transmission pipes that form the backbone of the distribution system and installs new pipelines to improve the distribution system. FY22-26 work includes completing design for Summit Pressure Zone (PZ) Phase 2 and Alameda Crossing #2 and #3; completing construction on Wildcat Berkeley, Wildcat El Cerrito, Summit PZ Phase 1 and Alameda Crossing #1; and starting construction on D Street, East 15th Street, Alameda Crossing #2, and Summit PZ Phase 2.

Pumping Plant Rehabilitation Program

The Distribution Pumping Plant (PP) Infrastructure Rehabilitation Plan was updated in 2020 and identifies the highest priority pumping plants for rehabilitation, replacement, or demolition. FY22-26 work includes planning, design and/or construction at 31 of the 130 distribution pumping plants. FY27-31 work includes the existing Larkey (Walnut Creek), Summit North (El Cerrito), Pearl (Richmond), Stott (Pinole), Quarry (Hayward) and Summit South (Berkeley) PP, and a new Withers PP (Lafayette).

Reservoir Rehabilitation Program

This program includes the rehabilitation, replacement, and demolition of steel and concrete distribution reservoirs, along with open-cut reservoirs. The Reservoir Rehabilitation and Maintenance Project extends the service lives of the steel and reinforced concrete distribution tanks by replacing coating systems, repairing or replacing roofs, and performing structural upgrades to improve water quality and enhance worker safety. Work is prioritized through the Infrastructure Rehabilitation Plan.

FY22-26 work includes completing construction at 13 reservoirs throughout the District. Design and construction work is expected to commence at 18 other reservoirs. The reservoir roof safety program to improve reservoir roofs and ladders will continue.

The Open-Cut Reservoir Rehabilitation project includes the rehabilitation and replacement of large open-cut reservoirs and clearwells. FY22-26 work includes completing construction of the San Pablo Clearwell replacement, demolition of Seneca Reservoir in Oakland, planning and design for the replacement of Central Reservoir in Oakland, and the commencement of two major open-cut design projects: replacement of Leland Reservoir in Lafayette and Almond Reservoir in Castro Valley. FY27-31 work includes construction of the replacement reservoirs for Central, Leland, and Almond.



Upstream face of Lafayette Dam during construction in 1928



Lafayette Reservoir today

REGULATORY COMPLIANCE STRATEGY

This strategy furthers the District’s objectives to operate and maintain facilities to meet all air, land and water discharge requirements; implement preventative and corrective maintenance programs; and improve the infrastructure to ensure delivery of reliable, high quality service. The work under this strategy focuses on modifications to reservoir towers, trench soils management, and upcountry wastewater treatment. The five-year program strategy appropriations are as follows:

Appropriations (\$ Thousands)						
Programs	FY22	FY23	FY24	FY25	FY26	Total
Dam Safety	2,000	5,000	500	200	200	7,900
Penn Mine	0	0	73	73	80	226
Remediation	9,600	0	10,350	0	8,000	27,950
Trench Spoils	9,326	20,909	2,050	16,586	0	48,871
Total	20,926	25,909	12,973	16,859	8,280	84,947

Dam Safety Program

This program upgrades dams, reservoir outlet towers, clearwells and spillways to meet flood and earthquake safety requirements. The Reservoir Tower Modifications Project encompasses the seismic retrofit of six reservoir towers. Retrofits to Chabot Tower were completed in FY18 as part of the Chabot Dam seismic upgrades. Retrofits to the Upper San Leandro and San Pablo Towers were completed in FY19.

Upcoming work is planned at Briones and Lafayette Reservoir Towers, which require upgrades to resist earthquake loads. Construction of the Briones Tower upgrades is planned for FY22-23, along with improvements to the tower’s mechanical components and controls. The isolation valve of the Briones Tower is at the bottom of a 250 feet deep shaft and access to it is difficult and unsafe. The valve will be relocated to a more accessible location.

Lafayette Tower modifications include seismic and gate control upgrades, and modifications to the tower to act as a spillway capable of handling the revised Probable Maximum Flood. Planning, permitting, and design studies are underway. Completion of California Environmental Quality Act and design work will occur in FY22-23, with construction planned for FY23-24.

Remediation Program

The Upcountry Wastewater Improvement Project will upgrade the wastewater collection, treatment, and disposal systems that serve the Pardee and Camanche facilities to protect the environment from potential spills and overflows. The improvements will reconnect the mobile homes to the wastewater collection system, correct system layout deficiencies, and increased system dependability with the installation of backup power to crucial lift stations.

FY21-22 priorities include design and construction of the sewer collection system improvements for all remaining areas at Camanche South Shore. Design and construction for improvements to the collection system at Camanche North Shore will take place in FY23-24. Design and construction for the remainder of the collection systems at Pardee Center and Pardee Recreation Area will take place in FY24-25.

Trench Spoils Program

Trench soils are generated from pipeline installations and repairs and are temporarily stockpiled at three sites for reuse or disposal: Miller Road in Castro Valley, Briones in Orinda, and Amador in San Ramon. The project includes site management in accordance with regulatory requirements, periodic removal of the trench soils, and evaluation of soils reduction and disposal alternatives.

FY22-26 priorities include environmental review and potential purchase of the quarry site for additional trench soils purposes, and implementation of master plan recommendations including long-term solutions for slurry waste and development of contracts for more frequent off-hauls. FY27-31 efforts will focus on the development of the quarry site.



Historical pipe installation



Pipe installation today

RESOURCE MANAGEMENT STRATEGY

This strategy furthers the District's objectives to manage the Mokelumne and East Bay watersheds to ensure a high-quality water supply; protect natural resources; and provide public access and recreational opportunities compatible with water quality and natural resource protection. Work under this strategy focuses on making improvements to recreational facilities at Camanche, Pardee and East Bay Reservoirs, and the Mokelumne fish hatchery. The five-year program strategy appropriations are as follows:

Appropriations (\$ Thousands)						
Programs	FY22	FY23	FY24	FY25	FY26	Total
Recreation Areas	300	260	210	10	10	790
Watershed Recreation	925	1,050	1,285	1,245	960	5,465
Total	1,225	1,310	1,495	1,255	970	6,255

Recreation Areas Program

The Pardee and Camanche Recreation Area facilities require periodic replacements and upgrades to the roads, parking lots, fuel docks, launch ramps, docks, boat berths, stores, campgrounds, and bathroom and shower buildings.

In FY22-26, a new restroom/shower facility in the Oaks campground at the Pardee Recreation area will be constructed and an environmental enhancement program initiated at the Camanche Hills Hunting Preserve. At the Mokelumne River Day Use Area projects include design and construction of a new ADA interpretive trail, improvements to the access roads and public parking areas, and a new restroom facility installed.

Watershed Recreation Program

This program provides for protecting and enhancing the District's watershed lands including trails and recreation facilities in accordance with master plans and regulatory requirements.

Projects planned for FY22-26 include upgrading the sewer force main and lift station, rental boat dock, and crew locker room/shop at the Lafayette Reservoir Recreation Area; and upgrading the sewer force main, all-access dock, and roadway paving at the San Pablo Reservoir Recreation Area. Watershed projects include staging area upgrades and implementation of watershed fire management strategies. At the Orinda Watershed Headquarters, new roofs will be installed on the administrative, warehouse, and vehicle storage buildings; conference room technology will be upgraded; and parking lots repaved.

In FY22-23, work at the Mokelumne Watershed Headquarters includes a back-up generator, construction of a modular warehouse/shop building, and vehicle access improvements.

WATER QUALITY STRATEGY

This strategy furthers the District's objectives to operate and maintain facilities to surpass federal and state drinking water regulations, and to make system improvements that meet or surpass regulatory requirements. Work under this strategy focuses on making improvements to Water Treatment Plants (WTPs) to improve water quality. The five-year program strategy appropriations are as follows:

Appropriations (\$ Thousands)						
Programs	FY22	FY23	FY24	FY25	FY26	Total
Water Quality Improvement	2,750	0	3,250	570	50	6,620
Water Treatment Upgrade	128,730	652	26,228	37,035	723	193,368
Total	131,480	652	29,478	37,605	773	199,988

Water Treatment Upgrade Program

The Treatment Plant Upgrades Project addresses compliance with water quality regulations and improves the safety, operation and reliability of the five Water Treatment Plants (WTPs). In FY22-26, planned work includes:

- All WTPs (except San Pablo) – complete chemical system safety improvements.
- Orinda WTP – complete the installation of a filter air scour system and the ultraviolet (UV) disinfection facility and chlorine contact basin to improve disinfection reliability, minimize disinfection by-products and improve chemical dosing.
- Upper San Leandro WTP – modernize the control systems and complete the reliability improvements.
- Sobrante WTP – modernize the control systems and complete design of the reliability improvements.
- Walnut Creek WTP – rehabilitate the old filters and design new pretreatment and ozone system improvements.
- Lafayette WTP – upgrade the control systems.

San Pablo WTP is only operated during Orinda WTP/Claremont Tunnel outages or to support drought operations. In support of the Orinda WTP shutdown control system improvements will be made and minor mechanical and structural issues addressed.

At San Pablo Reservoir, a hypolimnetic oxygenation system will be installed to improve water quality and reduce taste and odor issues.

At Briones and Pardee Reservoirs, the causes of water quality degradation will be studied, and alternatives will be developed to improve the water quality.

In FY27-31 planned work includes constructing the new Walnut Creek WTP pretreatment system for particulate and microbial removal, and an ozone system to remove taste and odor compounds.

WATER SUPPLY STRATEGY

This strategy furthers the District's objectives to ensure a reliable, high quality water supply for the future; preserve current entitlements; augment the water supply; and reduce the demand for potable water through conservation and recycling. The immediate focus of this strategy is on maintaining the raw water aqueducts and water recycling projects. The five-year program strategy appropriations are as follows:

Appropriations (\$ Thousands)						
Programs	FY22	FY23	FY24	FY25	FY26	Total
Aqueduct	25,208	8,499	4,641	4,214	35,044	77,606
Supply Reservoirs	3,375	4,401	1,440	2,300	2,158	13,674
Water Conservation	0	2,372	2,402	1,947	2,010	8,731
Water Recycling	685	11,893	11,407	5,716	10,917	40,618
Water Supply Management	7,635	10,624	8,275	4,752	39,617	70,903
Total	36,903	37,789	28,165	18,929	89,746	211,532

Aqueduct Program

This program evaluates and makes improvements to the raw water aqueduct system. Various Mokelumne Aqueduct gully crossings will be recoated in FY22-31 to provide protection from the corrosive Delta environment.

The program also includes replacing the deteriorated cement motor lining in the Mokelumne Aqueducts that protects the steel pipeline from internal corrosion. Inspections of the elevated Delta reach revealed that 10 miles of the lining in aqueduct #2 and #3 need replacement. Inspections of the below ground pipeline indicate that an additional 65 miles of lining in aqueduct #2 requires replacement. Prior to relining, it is necessary to construct a raw water treatment facility to minimize corrosion.

FY22-26 work includes design and construction of the Raw Water Treatment Facility, Phase 1 of the Mokelumne Aqueduct #2 relining, and design of the aqueduct #3 relining of the above-ground portion. FY27-31 work includes construction of the aqueduct #3 above-ground relining, and design and construction of the aqueduct #2 below-ground relining.

The Raw Water Infrastructure Project maintains the integrity of the raw water system. FY22-26 work includes design of the Lafayette Aqueduct #1 relining; planning and design of Pardee Tunnel Access Improvements; continuing design of temperature anchors on Mokelumne Aqueduct #1; completing the inspection of San Pablo and Upper San Leandro Raw Water (RW) Tunnels; planning for Moraga RW PP upgrades; planning, design, and construction of Briones PP improvements; and design and construction of the Pardee Center RW Tank Replacement.

FY27-31 work includes completing the Pardee Tunnel Access improvements and the Mokelumne Aqueduct #3 base isolator improvements and completing the 2030 Raw Water Master Plan.

Supply Reservoirs Program

Under this program, efforts will be pursued to develop a five-megawatt photovoltaic project on the watershed lands in Orinda in FY22-23. The program will also upgrade a generator, overhaul a turbine, and make other improvements to the hydro-electric powerhouses at Pardee and Camanche Reservoirs.

Water Conservation Program

This program includes implementing activities to help meet water savings goals and to comply with state water use efficiency regulations. In FY21, the Water Conservation Master Plan was updated which provides a roadmap for meeting these goals.

Over the next five years, the Water Conservation Program will continue to offer traditional rebates, incentives, and education programs, while increasing its focus on providing digital tools to help customers manage their water use. The program will expand the use of its web portal, home water reports, leak alerts, and other communication tools.

Water Recycling Program

To help reduce potable water demand, the District has undertaken a variety of recycled water projects. The East Bayshore Recycled Water Project is planned to provide 2.3 MGD of recycled water to customers in Albany, Berkeley, Emeryville, Oakland, and Alameda. Phase 1A began operating in 2008 and currently delivers 0.2 MGD to customers in Oakland and Emeryville. Phase 1B will expand service by an additional 0.25 MGD, for a total of 0.65 MGD. Phase 2, estimated at 1.7 MGD, is planned for implementation after FY31. The crossing of the estuary to Alameda (slip lining of existing pipe) will take place in FY25-30.

EBMUD's portion of the San Ramon Valley Recycled Water Program includes customer retrofits and connecting customers to the distribution system in San Ramon, Danville and Blackhawk. Phase 1 began operating in 2006 and delivers up to 0.7 MGD of recycled water to EBMUD customers in San Ramon. Phase 2 distribution pipelines have been completed, and customer retrofits completed. The Phase 3 pump station on the border between San Ramon and Danville will be completed in FY26 with distribution pipelines constructed in FY27, and site retrofits completed in FY28.

Water Supply Management Program

As part of the Water Supply Management Program (WSMP 2040), water supply efforts are being pursued to ensure the reliability of the water supply into the future, particularly during dry years, emergencies, and in response to changing climate and legislation.

Key projects in FY22-26 include evaluating the expansion of Los Vaqueros Reservoir in Contra Costa County, developing and implementing water transfer and exchange opportunities, participating in the Upper Mokelumne Regional Water Authority and the Bay Area Regional Reliability partnership, investigating groundwater banking opportunities in both San Joaquin and Sacramento County, and developing and protecting the East Bay Plain Sub-basin.

To comply with measures associated with California Senate Bill 555, a Water Loss Control project has been created to reduce apparent and real water losses through meter replacement, leak detection, and pressure management. In FY20-21, the size of the automated acoustic leak detection network was doubled. Planned work in FY22-26 includes completing improvements to flow meters for water treatment plants and large customers, the water loss control master plan, two manual leak detection surveys, and annual verification of water treatment plant flow rates to improve the accuracy of the water audit. Planned work in FY27-31 includes completing improvements to flow meters for additional large customers and compliance with the State Water Resources Control Board's regulatory limit for water loss.

NON-PROGRAM SPECIFIC STRATEGY

This strategy furthers the District’s objective to maintain a strong financial position to meet both short and long-term needs. The Contingency Program focuses on making funds available for unanticipated needs, and for projects that are seeking grants to pay for a substantial portion of the project’s cost. The five-year program strategy appropriations are as follows:

Appropriations (\$ Thousands)						
Programs	FY22	FY23	FY24	FY25	FY26	Total
Contingency	3,068	500	0	0	0	3,568
Total	3,068	500	0	0	0	3,568

Contingency Program

Contingency provides funding for unanticipated needs that may arise before the next budget cycle, such as replacement or repairs to facilities and equipment as a result of failures or safety deficiencies, and new projects or the acceleration of planned projects requiring funding before the next budget cycle. Funds may also be set aside for projects where grants are being sought in the event that the grant application is successful as most grants require the District to fund the project and then apply for reimbursement of allowable costs.

In FY22, funds have been set aside for possible costs related to grant awards to cover Mokelumne River restoration projects for salmon spawning, nine miles of new Mokelumne Coast to Crest Trails, and water loss control acoustic leak detection surveys.



Planting crew of EBMUD [East Bay Municipal Utility District] planting Monterey pines in older planting of Incense cedars. San Pablo Watershed. Metcalf. Jan. 1953, Fritz-Metcalf Photograph Collection, UC Berkeley, Bioscience & Natural Resources Library

Note: Vegetation management and fuel reduction efforts are being made to protect water quality and reduce erosion of sediment while preserving habitat for many species that live in the area, including the bald eagle.

Capital Appropriation Summary

This section shows the five-year appropriations for the Water System projects contained in the CIP, sorted by strategy and program. The Board of Directors approves the overall five-year CIP but adopts just the first two years. The remaining three years are for planning purposes only and are subject to revision.

Department Abbreviations

The abbreviation for the Lead Department responsible for each capital project is as follows:

- CUS – Customer and Community Services Department
- ENG – Engineering Department
- FIN – Finance Department
- ISD – Information Systems Department
- MCD – Maintenance & Construction Department
- NRD – Natural Resources Department
- OSD – Operations & Maintenance Support Department
- WOD – Water Operations Department
- WRD – Water Resources Department
- WRP – Water Recycling Program

Capital Improvement Projects	Dept	Prior Approp	FY22-26 APPROPRIATIONS (IN 000's)					
			FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	5 YR TOTAL
EXTENSIONS AND IMPROVEMENTS								
Mapping								
Engineering IT	ENG	39,329	2,504	2,446	2,341	2,499	2,571	12,361
Mapping Total		39,329	2,504	2,446	2,341	2,499	2,571	12,361
OP/NET								
OP/NET System	WOD	33,478	0	1,543	1,169	1,079	1,097	4,888
OP/NET Total		33,478	0	1,543	1,169	1,079	1,097	4,888
Pressure Zone Improvements								
Distribution System Upgrades	ENG	9,127	0	0	0	0	0	0
Miscellaneous Planning Studies	ENG	4,184	638	0	0	0	0	638
Pressure Zone Improvements	ENG	37,349	0	0	0	0	0	0
West of Hills Master Plan	ENG	24,366	0	0	0	0	0	0
Pressure Zone Improvements Total		75,026	638	0	0	0	0	638
EXTENSIONS AND IMPROVEMENTS TOTAL		147,833	3,142	3,988	3,510	3,578	3,668	17,887
FACILITIES, SERVC AND EQUIP								
Area Service Center/Bldg Prog								
Building Facilities Improve	ENG	82,143	0	0	11,819	39,477	29,783	81,079
Minor Facility Improvements	WOD	9,927	1,350	3,590	656	473	500	6,569
Area Service Center/Bldg Prog Total		92,070	1,350	3,590	12,475	39,950	30,283	87,648
Communications								
ERF Purchases for Copiers	FIN	240	0	0	0	0	50	50
Data & Telecom Infrastructure	ISD	3,603	0	0	150	80	100	330
ERF Current DSS/Server/Network	ISD	1,320	2,945	799	895	1,720	2,494	8,852
ERF Current PCs/Desktop/Laptop	ISD	778	0	0	0	140	185	325
ERF Smoothg DSS/Server/Network	ISD	623	0	0	272	0	640	912
ERF Smoothg PCs/Desktop/Laptop	ISD	1,148	0	0	1,822	0	0	1,822
FIS / MMIS Replacement	ISD	16,459	0	0	0	0	0	0
HRIS Replacement	ISD	8,700	875	0	0	0	0	875
Work Mgmt Systems Replacement	ISD	4,750	7,250	0	0	0	0	7,250
Communications Total		37,620	11,070	799	3,139	1,940	3,469	20,416
Security								
Security Improvements	ENG	28,114	0	0	2,229	2,635	5,167	10,031
Security Total		28,114	0	0	2,229	2,635	5,167	10,031
Vehicle/Equipment								
Veh & Hvy Equip Additions, Wtr	MCD	30,249	1,944	1,699	1,000	1,000	1,000	6,643
Vehicle Replacements	MCD	111,689	8,300	6,700	6,098	5,615	5,800	32,513

Capital Improvement Projects	Dept	Prior Approp	FY22-26 APPROPRIATIONS (IN 000's)					5 YR TOTAL
			FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	
Diesel Engine Retrofit	WOD	10,528	2,650	727	774	0	0	4,151
Fueling Facility Upgrades	WOD	16,046	3,000	0	0	0	0	3,000
Vehicle/Equipment Total		168,512	15,894	9,126	7,872	6,615	6,800	46,307
FACILITIES, SERVC AND EQUIP TOTAL		326,316	28,314	13,515	25,715	51,140	45,719	164,402
MAINTAINING INFRASTRUCTURE								
Corrosion								
Aqueduct Cathodic Protection	ENG	4,168	0	497	513	531	548	2,089
Distr Sys Cathodic Protection	ENG	18,644	0	1,839	5,353	4,262	5,709	17,163
Facilities Cathodic Protection	ENG	0	215	77	893	82	951	2,218
Trans Main Cathodic Protection	ENG	4,796	0	0	0	0	988	988
Corrosion Total		27,608	215	2,413	6,759	4,875	8,196	22,458
Electrical Hazard Prevent Pgm								
Arc Flash, Mitigate, Proj. Mgn	WOD	3,136	0	0	150	150	150	450
Electrical Hazard Prevent Pgm Total		3,136	0	0	150	150	150	450
Pipelines/Appurtenances								
Hydrants Installed by DF	ENG	28,118	1,815	1,874	1,935	1,998	2,063	9,685
New Service Installations	ENG	250,578	15,000	15,488	15,991	16,511	17,047	80,037
Meter Replacements	MCD	58,205	4,394	4,524	4,663	4,801	4,947	23,329
Pipeline Appurtenances	MCD	18,290	1,332	1,379	1,427	1,477	1,529	7,144
Pipelines/Appurtenances Total		355,191	22,541	23,265	24,016	24,787	25,586	120,195
Pipelines/Regulators								
Large Diameter Pipelines	ENG	267,881	0	0	0	0	0	0
Pipeline Rebuild	ENG	366,961	60,525	70,232	72,514	83,122	85,823	372,216
Pipeline Relocations	ENG	71,337	0	5,473	5,650	5,834	6,024	22,981
Pipeline System Extensions	ENG	62,634	9,796	10,115	10,443	10,783	11,133	52,270
Pipeline System Improvements	ENG	77,409	0	4,253	4,649	10,142	7,009	26,053
Rate Control Station Rehab	ENG	9,488	0	0	2,175	647	3,625	6,447
Regulator Rehabilitation	ENG	20,108	0	0	0	2,388	1,270	3,658
Pipelines/Regulators Total		875,817	70,321	90,073	95,431	112,916	114,884	483,625
Polybutylene Lateral Replcmt								
Service Lateral Replacements	ENG	240,691	0	14,992	15,479	15,982	16,501	62,954
Polybutylene Lateral Replcmt Total		240,691	0	14,992	15,479	15,982	16,501	62,954
Pumping Plant Rehabilitation								
Maloney PP & WTP Improvements	ENG	49,751	0	0	0	0	0	0
Pumping Plant Rehabilitation	ENG	212,073	0	35,400	57,040	38,600	70,660	201,700

Capital Improvement Projects	Dept	Prior Approp	FY22-26 APPROPRIATIONS (IN 000's)					
			FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	5 YR TOTAL
Small Capital Improvements	WOD	17,039	2,913	3,008	3,105	3,206	3,311	15,543
Pumping Plant Rehabilitation Total		278,863	2,913	38,408	60,145	41,806	73,971	217,243
Reservoir Rehab Program								
Open-Cut Reservoir Program	ENG	241,635	0	81,956	55,921	46,724	36,125	220,726
Reservoir Rehab/Maintenance	ENG	197,877	32,158	30,700	15,055	19,445	39,408	136,766
Facility Paving Project	WOD	3,830	578	915	945	975	1,007	4,420
Reservoir Rehab Program Total		443,342	32,736	113,571	71,921	67,144	76,540	361,912
MAINTAINING INFRASTRUCTURE TOTAL		2,224,648	128,726	282,722	273,901	267,660	315,828	1,268,837
NON-PROGRAM SPECIFIC								
Non-Program Specific								
Contingency Project Water	FIN	37,644	3,068	500	0	0	0	3,568
Non-Program Specific Total		37,644	3,068	500	0	0	0	3,568
NON-PROGRAM SPECIFIC TOTAL		37,644	3,068	500	0	0	0	3,568
REGULATORY COMPLIANCE								
Dam Safety								
Dam Operational Upgrades	ENG	21,273	0	0	0	0	0	0
Dam Seismic Upgrades	ENG	119,612	0	3,000	500	200	200	3,900
Dam Surveillance Improvements	ENG	12,483	0	0	0	0	0	0
Reservoir Tower Modifications	ENG	34,532	2,000	2,000	0	0	0	4,000
Dam Safety Total		187,900	2,000	5,000	500	200	200	7,900
Penn Mine								
Penn Mine Remediation	OSD	18,221	0	0	73	73	80	227
Penn Mine Total		18,221	0	0	73	73	80	227
Remediation								
Upcountry WW Trmt Imprvmts	WOD	32,057	9,600	0	10,350	0	8,000	27,950
Remediation Total		32,057	9,600	0	10,350	0	8,000	27,950
Trench Spoils								
Trench Soils Management	ENG	45,222	9,326	20,909	2,050	16,586	0	48,871
Trench Spoils Total		45,222	9,326	20,909	2,050	16,586	0	48,871
REGULATORY COMPLIANCE TOTAL		283,400	20,926	25,909	12,973	16,859	8,280	84,948
RESOURCE MANAGEMENT								
Recreation Areas								
Pardee/Cam Rec Areas Impr Plan	NRD	10,204	300	260	210	10	10	790
Recreation Areas Total		10,204	300	260	210	10	10	790
Watershed Recreation								

Capital Improvement Projects	Dept	Prior Approp	FY22-26 APPROPRIATIONS (IN 000's)					5 YR TOTAL
			FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	
East Bay Watershed Rec Projs	NRD	14,673	350	350	400	575	325	2,000
F&W Projects and Mok Hatchery	NRD	5,811	0	350	500	450	400	1,700
Mokelumne Watershed Rec HQ	NRD	6,760	0	0	0	0	0	0
Mokelumne Watershed Rec Projs	NRD	6,266	575	350	385	220	235	1,765
Watershed Recreation Total		33,510	925	1,050	1,285	1,245	960	5,465
RESOURCE MANAGEMENT TOTAL		43,714	1,225	1,310	1,495	1,255	970	6,255
WATER QUALITY								
Water Quality Improvement								
Distrib Sys Wtr Quality Imprv	WOD	22,520	2,750	0	3,250	570	50	6,620
Water Quality Improvement Total		22,520	2,750	0	3,250	570	50	6,620
Water Treatment Upgrade								
Treatment Plant Upgrades	ENG	456,479	128,100	0	25,553	36,336	0	189,989
Minor WTP Capital Work	WOD	5,152	630	652	675	699	723	3,379
Water Treatment Upgrade Total		461,631	128,730	652	26,228	37,035	723	193,368
WATER QUALITY TOTAL		484,151	131,480	652	29,478	37,605	773	199,988
WATER SUPPLY								
Aqueduct Program								
Delta Tunnel	ENG	0	4,400	7,275	0	0	0	11,675
Mok Aqueduct No 2 & 3 Relining	ENG	48,796	19,255	0	3,200	0	0	22,455
Mokelumne Aqueducts Recoating	ENG	45,025	0	0	0	0	0	0
Raw Water Infrastructure	ENG	88,688	0	0	0	2,617	33,522	36,139
Raw Wtr Aq O&M Imprvmts	WOD	48,968	1,553	1,224	1,441	1,597	1,522	7,337
Aqueduct Program Total		231,477	25,208	8,499	4,641	4,214	35,044	77,606
Supply Reservoirs								
Enhanced Power Revenue	WOD	11,418	0	0	0	0	0	0
Pardee Ctr Cap Maint & Imprvmt	WOD	2,196	1,208	1,102	373	320	213	3,216
Powerhouse Improvements	WOD	14,412	1,296	1,496	618	607	1,327	5,345
Rec Area Cap Maint & Imprvmt	WOD	4,160	751	1,715	346	1,193	471	4,475
Wtr Supply Monitoring System	WOD	2,081	120	88	103	180	147	638
Supply Reservoirs Total		34,266	3,375	4,401	1,441	2,300	2,158	13,674
Water Conservation								
Water Conservation Project	CUS	74,759	0	2,372	2,402	1,947	2,010	8,731
Water Conservation Total		74,759	0	2,372	2,402	1,947	2,010	8,731
Water Recycling								
East Bayshore	WRD	73,754	0	3,042	8,892	3,545	3,661	19,139

Capital Improvement Projects	Dept	Prior Approp	FY22-26 APPROPRIATIONS (IN 000's)					5 YR TOTAL
			FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	
RARE Water Project	WRD	64,937	224	568	1,169	1,082	455	3,497
SRV Recycled Water Program	WRD	88,392	0	5,872	0	500	278	6,651
Water Recycling WSMP	WRD	17,588	0	0	0	0	5,943	5,943
No Richmond Recy Wtr Fac Impr	WRP	17,624	461	2,411	1,346	589	580	5,386
Water Recycling Total		262,295	685	11,892	11,406	5,716	10,916	40,616
Water Supply Mgmt Program								
Water Loss Control	OSD	13,202	5,308	2,160	5,587	2,000	2,000	17,055
Sup Supply and Regional Plng	WRD	140,407	1,977	8,214	1,988	1,902	36,617	50,698
Water Rights, Licenses & Plans	WRD	0	350	250	700	850	1,000	3,150
Water Supply Mgmt Program Total		153,609	7,635	10,624	8,275	4,752	39,617	70,903
WATER SUPPLY TOTAL		756,406	36,902	37,788	28,165	18,929	89,745	211,529

APPROPRIATIONS SUMMARY (IN 000'S)						
Prior	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	5 YR TOTAL
4,304,112	353,783	366,384	375,237	397,026	464,984	1,957,414

Operating Budget Impact of Capital Investments

The FY22-26 CIP includes various significant nonrecurring capital projects that will affect the operating budget and the services that the District provides. Such projects and their potential impacts include:

Adeline Maintenance Center (AMC) HVAC System and Parking Lot Improvements

Two projects at the AMC Administration Building will replace aging equipment and provide facilities that further the District's 2030 carbon neutral goal. Facilities include energy-efficient LED lights and HVAC systems in the building, and electric vehicle (EV) charging stations and photovoltaic carports in the parking lot. Increased maintenance costs for EV and solar systems are expected to be offset by cost savings resulting from reduced energy use of the new lighting and HVAC systems.

Briones / Lafayette Tower Modifications

The Briones Tower requires upgrades to safely resist seismic loads. The project also includes Lafayette Reservoir Tower modifications which include seismic and gate control upgrades, and modification of the tower to act as a spillway capable of handling the revised Probable Maximum Flood. Both retrofit projects are required by the California Division of Safety of Dams. While these tower modifications will not result in any significant cost savings or revenues, they will increase public safety in the event of an earthquake.

Water Treatment Plant Chemical System Safety Improvements

The Chemical System Safety Improvements Project will replace piping with double-contained piping and improve monitoring and spill containment. The project will replace piping nearing the end of its useful life and reduce leaks. It is anticipated that these improvements will reduce maintenance needs at each of the Water Treatment Plants (Upper San Leandro, Sobrante, Lafayette, and Walnut Creek) related to chemical pipe replacement, chemical system rebuilds, and tank relining costs. Replacement of these systems will reduce maintenance costs by an estimated \$200,000 to \$300,000 across all the water treatment plants.

Fleet Maintenance East

The project includes a new fleet facility with three bays for vehicle maintenance, a new energy-efficient administration building, a tire storage and replacement shop, and three electric vehicle charging stations at the Fleet Maintenance East site in Walnut Creek. The project provides an additional East of Hills fleet facility to minimize travel distances for equipment maintenance. The improvements support the District's efforts to become carbon neutral by 2030.

Happy Valley/Sunnyside Pumping Plants (PP)

Work includes a new 3.2 MGD Happy Valley PP in Orinda, and 3,300 feet of 16-inch pipeline. The Las Aromas PZ has a deficit of 2.9 MGD in pumping capacity. This project will resolve the deficiency and can be expanded to 4.2 MGD to meet future demands. The project also includes a new 1.5 MGD Sunnyside PP in Lafayette to resolve an existing 0.7 MGD pumping capacity deficit and improve hydraulic connectivity in the Valley View PZ. Annual maintenance and electricity costs are estimated to be \$85,000 for each PP.

Orinda Water Treatment Plant Scouring Air Project

The Orinda WTP Scouring Air Project is estimated to save 200 to 300 hours of operator's time annually that is spent manually hosing filters and reduce water usage during back washing. In addition, waste basin repairs will reduce plant leakage and improve discharge compliance.

Orinda Water Treatment Plant Disinfection and Chemical System Safety Improvements

This project will improve disinfection reliability and allow operations to discontinue in-plant chemical tanks for compliance and reduce disinfection by-products. In addition, the project will improve plant safety and chemical systems. Some maintenance costs can be reduced by the replacement of chemical tanks with more compatible materials that do not corrode. The system should also result in a reduction in the use of chlorine. However, the overall operations and maintenance costs will increase by approximately \$180,000 annually for additional cleaning of UV light sleeves, cleaning costs, and energy cost for the UV reactor, starting in FY26.

Raw Water Treatment Facilities Improvement

The Pardee Chemical Project and the Inline WTP Carbonic Acid Injection System Project will improve water chemistry to protect aqueduct lining materials.

The Pardee Chemical Improvements Project includes installation of a new lime storage and slaker facility, a new carbon dioxide (CO₂) system, and a new operations and maintenance building to inject chemicals into the Pardee Tunnel at the Pardee Chemical Plant. The Inline WTP CO₂ Injection System Improvements Project includes installation of a new CO₂ storage, dissolution and injection system at Lafayette, Orinda, and Walnut Creek WTPs.

These projects are anticipated to increase upcountry operations utility costs by \$2.5 million annually starting in FY26 and require an additional 1.5 FTE to operate and maintain the upcountry facility. The improved water chemistry will protect over \$1 billion dollars of raw water infrastructure from corrosion and support future aqueduct relining projects and may reduce pipe breakage in the distribution system.

San Pablo Clearwell Replacement

San Pablo Clearwell, a 5.4 million gallon (MG) open-cut reservoir located in Kensington will be demolished and replaced with two 3.5 MG concrete reservoirs, along with replacement of the rate control station, pipelines, and chlorine contact baffles. The pre-cast concrete roof of the San Pablo Clearwell is structurally unsafe and the lining, outlet tower, valves, and extension stems need replacement. The new facilities will improve safety access and require less maintenance.

San Pablo Reservoir Hypolimnetic Oxygenation System

The San Pablo Reservoir Hypolimnetic Oxygenation System includes installing facilities to add oxygen to the bottom of the reservoir to reduce taste and odor causing compounds and soluble manganese levels. The operation of this system is also expected to improve conditions for fish and other wildlife in the reservoir by increasing oxygen levels, mitigating harmful algae blooms, and reducing mercury levels bio-accumulated in the reservoir. The project includes installing a liquid oxygen storage tank, two vaporizers, an underwater Speece cone assembly with an intake screen, submersible circulating pump, submarine electrical cables, piping, and diffusers to add oxygen to the bottom of the reservoir.

This project's operating cost is estimated to be \$600,000 to \$700,000 in the first three years of operation, starting in FY24, mainly due to liquid oxygen and electrical costs. Operating costs are expected to decrease after the third year of operation by up to \$500,000 per year. After the system operates for three years the reservoir's water quality is expected to improve and can potentially reduce the Sobrante WTP's ozone operation cost by 10 percent.

Seneca Reservoir Demolition

Seneca Reservoir, a 30 MG open-cut reservoir located in Oakland will be demolished and the property offered for sale at an estimated price of \$3.7 million.

Upper San Leandro (USL), Sobrante, and Lafayette WTP Control System Upgrades

This project will replace the antiquated WTP controls systems with modern systems at the USL, Sobrante, and Lafayette WTPs to resolve reliability issues. Improvements will include the addition of local indication and controls to support manual operation, as well as Phase II upgrades at both Sobrante and USL WTPs. The project is anticipated to reduce unexpected plant outages associated with the antiquated controllers.

Upper San Leandro WTP Maintenance and Reliability Project

Improvements to the USL WTP include replacement of the unreliable cable-vac solids collection system; rehabilitation of the reclaim and solids handling systems; installation of a filter-to-waste basin; replacement of the seismically deficient clearwell roof; installation of a fifth flocculation stage; and replacement of failing flocculation baffles. The overall plant improvements should reduce maintenance needs for the facility and reduce the amount of residuals water sent to the sewer, thus reducing sewer capacity charges by up to \$200,000 per year starting in FY24.

Willow Service Center

This project provides a new 1.5 acre service center in west Oakland, including new offices and locker room facilities, a staging area for construction equipment and materials, loading docks, and parking. The site will include space designated for electric vehicle charging stations to be installed as the District converts its service vehicle fleet from gas powered to electric. This new maintenance service center will provide facilities for staff that perform maintenance, repair, and construction of pipelines and appurtenances in Oakland and Berkeley. The new service center will assist crews to keep pace with pipeline maintenance needs in the area of the District with the oldest pipe and largest number of pipe breaks. The energy-efficient building and the EV charging stations support the District's drive for carbon neutrality by 2030.

Financial / Materials Management Information System (FIS / MMIS)

This project will replace the 25-year-old MMIS that is supported by a one-person consulting firm with a new procurement and vendor management system, and the FIS that is over 20 years old and no longer meets business needs. In addition, a new budget module will be implemented. A new purchasing, accounting, inventory and budget system will reduce the risk of system failure, reduce vendor dependence, and greatly improve system integration. Replacement of these systems requires funding additional new positions on a limited-term basis for two to three years to implement the new systems and conduct extensive testing and training. Implementation of the Oracle Enterprise Resource Planning (ERP) Financial, Procurement and Budget modules will provide expanded functionality and self-service functionality to staff.

Human Resource Information System (HRIS)

This project will replace the 20-year-old HRIS to improve systems regarding employee data, retirement, and payroll. Replacement of this system requires funding temporary construction positions to assess needs, select a solution, implement the new solution and conduct extensive testing. The project will be completed in two phases: implementation of a Retirement Management system, followed by the core Human Resources functionality and Payroll system.

East Bayshore Recycled Water Project (EBRWP) Phase 1A

EBRWP provides recycled water to offset the District's potable water demand. To meet the 2.3 MGD offset goal by 2040, recycled water quality must be improved, and new pipelines must be constructed to reach additional customers. Phase 1A treatment facility upgrades and pipeline extensions to distribute recycled water from the treatment plant to new customers will be implemented by FY25. A pilot study is underway to identify the preferred treatment method for full-scale implementation. Annual operating costs for the treatment upgrades are anticipated to range from \$0.5 million to \$1.5 million depending on the treatment technologies selected.

FIVE-YEAR FINANCIAL FORECAST

SUMMARY

The five-year financial forecast presents the estimated impact of operations, debt service requirements and reserve balances on rate projections over the five-year period.

This forecast is built upon:

- Adopted financial policies
- Capital investments in the FY22-FY26 CIP

This forecast identifies a series of rate increases for the Water System based on estimated increases in operating and capital expenditures to maintain service levels, meet mandated program requirements, and pay increased debt service to fund capital expenditures.

On average over the five-year period, revenues are forecast to increase 4.5 percent per year to cover the increases in operating and capital expenses and maintain a minimum of 1.6 times coverage on revenue bond debt service. Forecasted operating expenses are expected to grow by 4.0 percent per year over the five-year period, while debt service grows 4.6 percent per year.

The key factors driving the need for increased Water System revenues are:

- Increasing labor and benefit costs
- Inflation on non-labor products and services
- An increase in funding the capital program from revenue rather than debt

For all five years, the cash reserves exceed the cash reserve targets. Reserves in excess of those needed to meet financial reserve targets are available to pay for a significant portion of the capital program expenses with cash, a positive financial metric.

Capital cash flow spending, including capital support is projected at \$2.0 billion over the five-year period. Major projects to be undertaken during this period include Treatment Plant Upgrades, Pipeline Rebuild, Large Diameter Pipelines, Reservoir Rehabilitation, and Pumping Plant Rehabilitation.

The projected average percentage of capital funded from debt will be 42.2 percent over the five-year period, significantly lower than the financial policy target maximum of 65 percent. In FY22 and FY23, the debt coverage ratio is projected at 2.02 and 2.02, respectively, and for all five years the ratio exceeds the target coverage ratio of 1.60.

OPERATIONS

The following table shows the financial forecast for the Water System operating budget based on projected operations and maintenance expenses and debt service requirements.

Water System Operating Budget Five-Year Financial Forecast (\$ Millions)							
	FY20 Actuals	FY21 Budget	Forecast				
			FY22	FY23	FY24	FY25	FY26
Beginning Balance	-	-	436.0	458.3	451.9	450.7	456.4
Water Charges	567.4	582.5	610.2	640.0	671.4	704.3	738.9
Property Taxes	40.3	35.8	40.0	40.0	40.0	40.0	40.0
Power Sales	6.8	5.0	5.0	5.0	5.0	5.0	5.0
Interest Income	11.6	9.6	1.2	2.5	2.5	3.7	4.9
SCC Revenue	53.3	40.0	25.0	25.7	26.5	27.3	28.1
Reimbursements	12.7	12.6	13.0	13.4	13.8	14.2	14.6
All Other Revenue	<u>18.8</u>	<u>18.4</u>	<u>18.6</u>	<u>18.8</u>	<u>19.0</u>	<u>19.2</u>	<u>19.4</u>
Total Operating Revenues	710.9	703.9	713.0	745.4	778.2	813.7	850.9
Revenue Funded Capital	67.1	197.0	164.1	200.8	207.4	209.8	234.8
Operations	274.4	313.8	314.7	328.7	341.6	354.9	368.8
Debt Service	<u>219.4</u>	<u>217.7</u>	<u>211.9</u>	<u>222.4</u>	<u>230.4</u>	<u>243.2</u>	<u>253.8</u>
Total Expenses	560.9	728.5	690.7	751.8	779.4	807.9	857.4
Ending Balance	-	-	458.3	451.9	450.7	456.4	449.9
Policy Reserves	-	-	187.5	191.0	194.2	197.6	201.0
Capital Projects Reserve	-	-	270.8	260.8	256.4	258.9	248.9

The following table shows the key assumptions used to create the revenue forecast. The debt service coverage ratio is projected to exceed the policy target of 1.60 by over 25 percent every year.

Water System Key Assumptions Five-Year Financial Forecast							
	FY20 Actuals	FY21 Budget	Forecast				
			FY22	FY23	FY24	FY25	FY26
Water Sales Volume (mgd)	147.8	142.9	144.3	145.8	147.3	148.8	150.3
% Rate Increase	6.50%	6.25%	4.00%	4.00%	4.00%	4.00%	4.00%
Average monthly single family residential bill based on 8 ccf/month	\$59.74	\$63.47	\$66.00	\$68.66	\$71.41	\$74.27	\$77.24
Debt Service Coverage Ratio	2.28	1.89	2.02	2.02	2.04	2.03	2.04

Five-Year Projection of Revenue

The key factors driving the need for increased Water System revenues are:

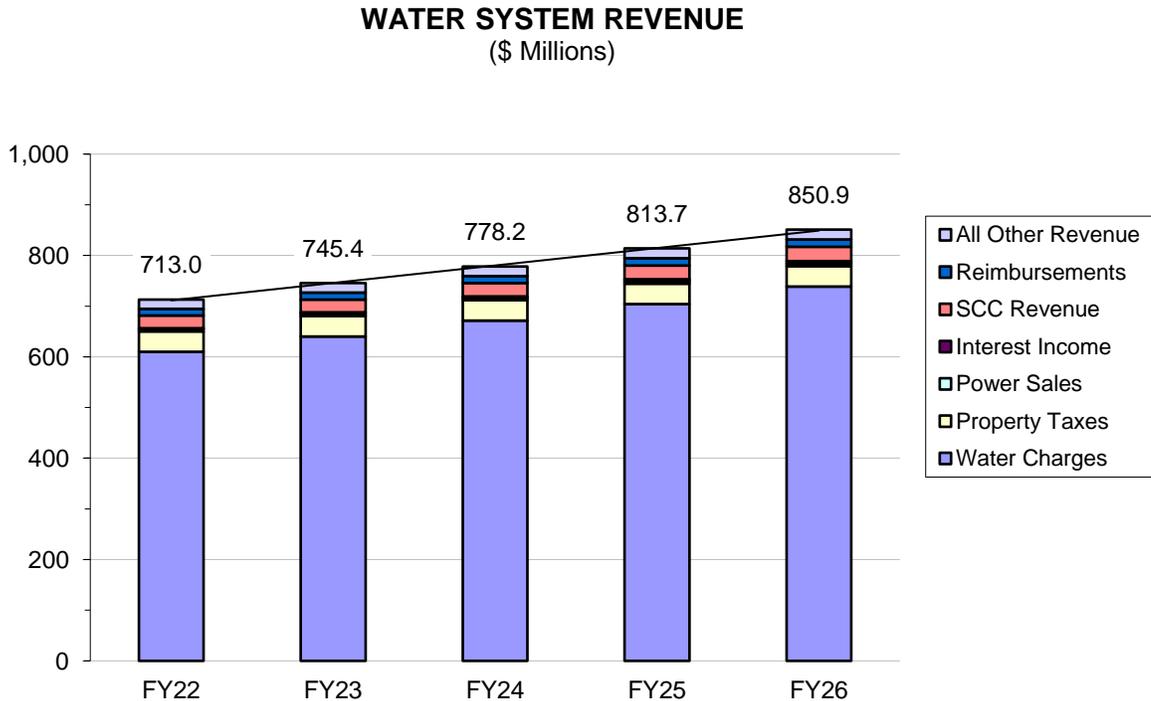
- Increasing labor and benefit costs,
- Inflation on non-labor products and services,
- An increase in funding the capital program from revenue rather than debt.

Water System revenues will be used to pay for an increasing amount of capital expenditures on a pay-as-you-go basis.

Projected annual operating revenues are expected to increase from \$713 million in FY22 to \$850.9 million by FY26, an increase of \$137.9 million or 4.5 percent per year. The increase in revenue over the five-year period is to cover increased costs in operations and maintenance, debt service requirements, and revenue funding for capital projects.

The major components of the increases in operating revenue over the five-year period are revenue from Water Charges which is projected to increase from \$610.2 million in FY22 to \$738.9 million in FY26 based on water rate increases and a reduction from FY21 to FY22 for decreased interest earnings and SCC revenue.

The following chart shows projected Water System operating revenue by category for the next five years.



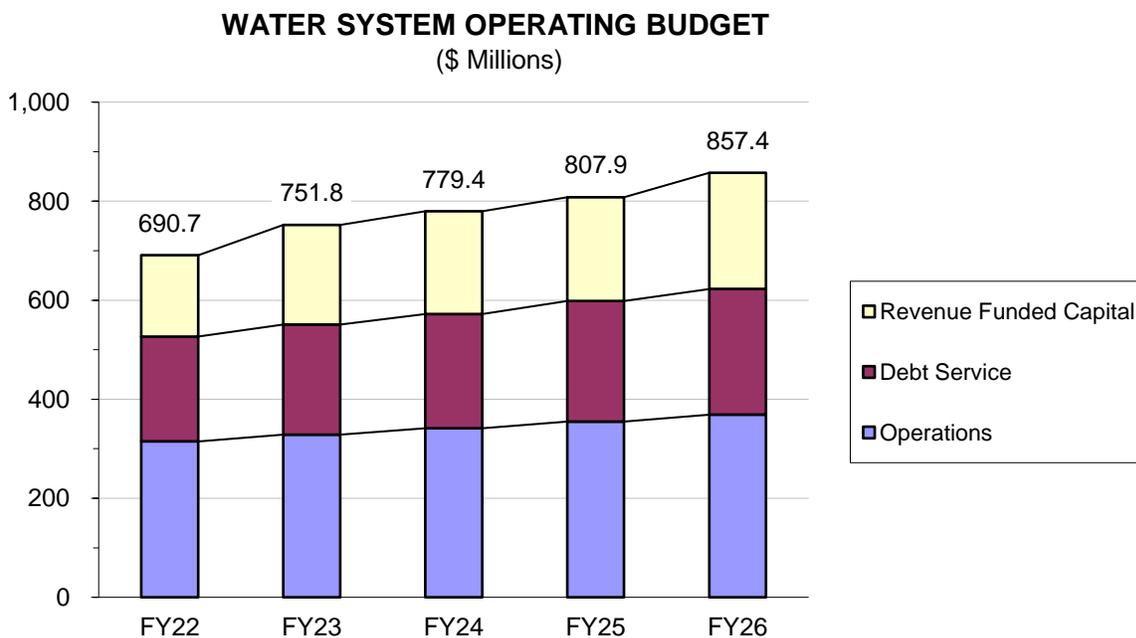
Five-Year Projection of Operating Budget

The Water System operations expenses are projected to increase from \$314.7 million in FY22 to \$368.8 million in FY26, an increase of 4.0 percent per year.

Debt service requirements are expected to increase from \$211.9 million in FY22 to \$253.8 million by FY26, an increase of 4.6 percent per year. The five-year increase results in \$870 million of new debt that will be issued to finance the Water System CIP.

The District uses rate revenue to cash fund a portion of its annual CIP expenses. The amount of revenue funded capital increases over the five-year period from \$164.1 million in FY22 to \$234.8 million in FY26, an increase of 43.1 percent.

This chart summarizes projected Water System budget by category for the next five years.



Five-Year Projection of Reserves

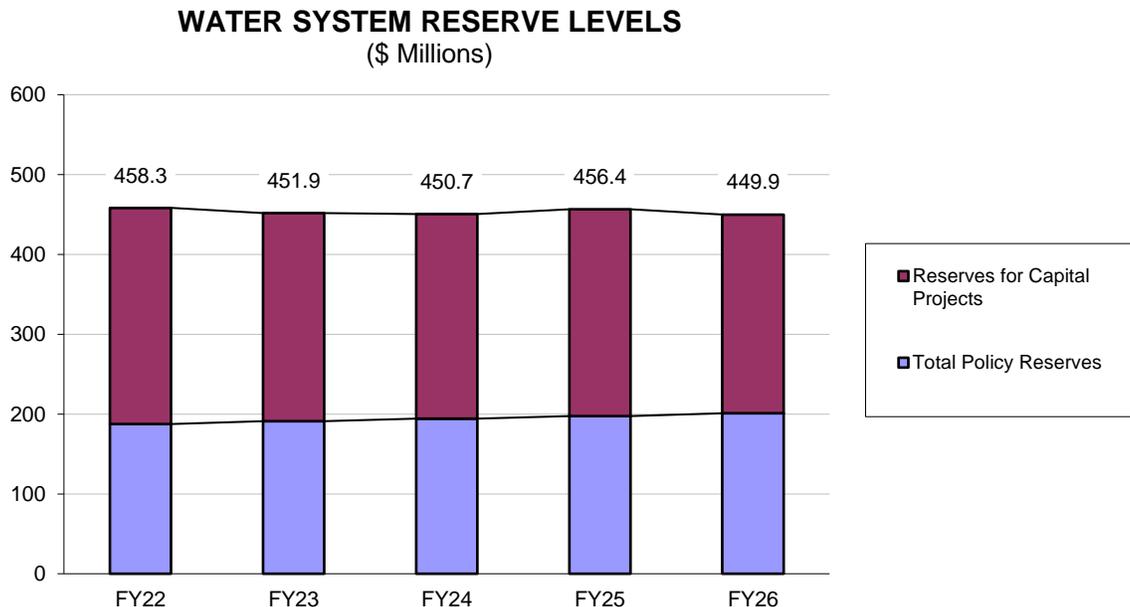
The operating reserves consist of:

- Working capital reserves equal to three months operating and maintenance expenses
- Self-Insured Liability reserve based on the actuarial Self-Insured Retention (SIR) funding recommendation
- Workers' Compensation reserve based on the actuarial SIR funding recommendation
- Rate stabilization reserve of a minimum of 20 percent of projected annual water volume revenues

The table below shows the changes to reserve components over the five-year period. Reserve balances meet or exceed the policy reserve levels for the entire period.

Water System Reserve Components (\$ Millions)					
	FY22	FY23	FY24	FY25	FY26
Projected Operating Budget Reserves	458.3	451.9	450.7	456.4	449.9
Policy Reserves					
Working Capital	78.7	82.2	85.4	88.7	92.2
Self-Insured Liability Reserve	7.8	7.8	7.8	7.8	7.8
Workers' Compensation Reserves	6.1	6.1	6.1	6.1	6.1
Rate Stabilization Reserve	<u>95.0</u>	<u>95.0</u>	<u>95.0</u>	<u>95.0</u>	<u>95.0</u>
Total Policy Reserves	187.5	191.0	194.2	197.6	201.0
Reserves Available for Capital Projects	270.8	260.8	256.4	258.9	248.9

The following chart shows Water System reserve levels projected at the end of each fiscal year.



CAPITAL INVESTMENTS AND FINANCING

The Five-Year CIP outlines Water System capital investment plans, the estimated cost of these investments, and the sources of funds. Appropriations reflect the amount that is authorized and budgeted over a multi-year period for each program. Cash flows are the amounts estimated to be spent on each program in a given year. The five-year program for the Water System includes \$2.2 billion in capital project appropriations and \$2.0 billion in projected cash flow spending, inclusive of capital support expenses.

The focus of the CIP is the five-year period from FY22-26. Capital needs have been estimated for a second five-year period from FY27-31. Given the long-term nature of these capital improvement plans, by necessity they are preliminary estimates only and will be revised as studies are completed, priorities are redefined, and as new needs emerge. Therefore, the budget focuses on the first five years of the CIP.

Funding for the CIP is drawn from the proceeds of revenue bond issues, commercial paper, grants, reimbursements from developers and other agencies, and current reserves and revenues.

For the FY22-26 CIP, an increasing amount of capital expenditures will be funded on a pay-as-you-go basis in accordance with the District's financial policies. Over the five-year period, the percentage of capital funded from debt will average 42.2 percent, under the target maximum of 65 percent contained in the District's debt policy, and debt service will grow by 4.6 percent per year. Water System total outstanding debt will increase \$315.3 million during the period. Total debt outstanding at the end of the five-year period will total \$3.1 billion.

In FY22 and FY23, the debt coverage ratio is projected at 2.02 and 2.02, respectively, and for all five years the ratio exceeds the target coverage ratio of 1.60.



Carisbrook Reservoir and Skyline pumping plant incorporated an on-site 30-kilowatt photovoltaic system to power the facilities

The following table shows the cash flow spending on capital improvements anticipated for the next five years, along with the financial resources anticipated to fund the capital program. Debt over the five-year planning period is below the financial target maximum of 65 percent.

Water System Capital Budget						
Five-Year Financial Forecast (\$ Millions)						
	FY22	FY23	FY24	FY25	FY26	Total
Beginning Balance	0.0	0.0	0.0	0.0	0.0	0.0
Resources						
Revenue Funded Capital	164.1	200.8	207.4	209.8	234.8	1,016.9
New Bond Proceeds	147.0	147.0	147.0	205.8	205.8	852.6
Reimbursements	<u>30.3</u>	<u>29.4</u>	<u>31.2</u>	<u>30.4</u>	<u>31.1</u>	<u>152.4</u>
Total Resources	341.4	377.2	385.6	446.0	471.7	2,021.9
Expenditures						
Capital Cash Flow	290.4	325.2	332.6	391.9	416.5	1,756.6
Capital Support	<u>51.0</u>	<u>52.0</u>	<u>53.0</u>	<u>54.1</u>	<u>55.2</u>	<u>265.3</u>
Total Expenditures	341.4	377.2	385.6	446.0	471.7	2,021.9
Ending Balance	0.0	0.0	0.0	0.0	0.0	0.0
Debt Percentage of Funding	43.1%	39.0%	38.1%	46.1%	43.6%	42.2%

Projected new bond issues, outstanding debt, and debt service are shown in the following table.

Outstanding Debt and Debt Service at End of Fiscal Year (\$ Millions)					
	FY22	FY23	FY24	FY25	FY26
Beginning of Year Outstanding Debt	2,682.8	2,747.9	2,806.8	2,859.5	2,964.3
Debt Retired	84.9	91.1	97.3	105.2	111.1
New Bond Issues and Commercial Paper	<u>150.0</u>	<u>150.0</u>	<u>150.0</u>	<u>210.0</u>	<u>210.0</u>
Total Outstanding Debt	2,747.9	2,806.8	2,859.5	2,964.3	3,063.2
Debt Service, Existing Debt	199.6	201.2	200.8	201.4	199.8
Debt Service, New Debt	8.7	17.3	26.0	38.2	50.3
Debt Servicing Costs	<u>3.6</u>	<u>3.8</u>	<u>3.6</u>	<u>3.7</u>	<u>3.7</u>
Total Debt Service	211.9	222.4	230.4	243.2	253.8



Mokelumne Aqueduct,--Pipe laid in trench and back filled over ends of sections, ready for testing, Construction photographs of Pardee Dam, California, UC Berkeley, Bancroft Library

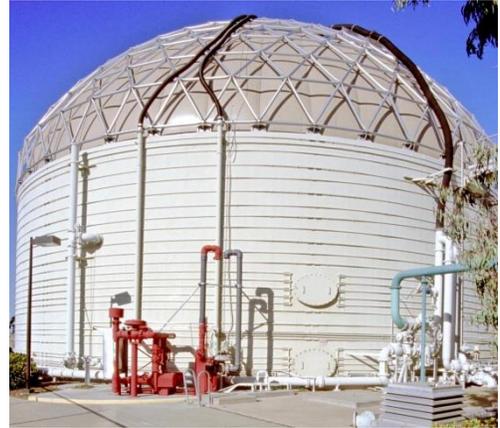


Mokelumne Aqueduct,--Showing pipe line coming down from levee at Middle River crossing and going east across delta, Construction photographs of Pardee Dam, California, UC Berkeley, Bancroft Library

CHAPTER 4: WASTEWATER SYSTEM

This chapter provides a detailed description of the Wastewater System and includes the following topics:

- Fund Summary
- Sources of Funds
- Use of Funds
- Staffed Department Operations
- Debt Service and Financing
- Capital Improvement Program
- Five-Year Financial Forecast



Digester – Oakland, CA

The Wastewater System is an enterprise fund consisting of an operating and a capital budget. The Wastewater System treats wastewater discharged from residences and industries in the communities of Alameda, Albany, Berkeley, Emeryville, Oakland, Piedmont, and the Stege Sanitary District. The Wastewater System receives and pays for administrative, financial, and other support services provided by the Water System.

The following are key projections and assumptions used in the FY22 and FY23 budget.

Wastewater System Fund – Key Assumptions		
	FY22	FY23
% Rate Increase	4.0%	4.0%
Average monthly single family residential bill based on 6 ccf/month	\$23.91	\$24.89



Main Wastewater Treatment Plant – Oakland, CA

FUND SUMMARY

The following fund summary table shows the Wastewater System beginning and ending fund balance, and projected revenue and expenditure budgets for FY22 and FY23.

WASTEWATER SYSTEM DETAILED FUND SUMMARY			
SOURCES & USES (\$ Millions)			
	FY22	FY23	%
	Balance	Balance	Change
Beginning Balance (Projected)	103.7	99.3	-4.2%
Source of Funds - Operating			
Treatment Charges	84.8	88.5	4.3%
Wet Weather Facilities Charge	29.7	30.9	4.0%
Resource Recovery	9.0	8.0	-11.1%
Property Taxes	6.3	6.3	0.0%
Interest Income	0.3	0.5	95.4%
Laboratory Services	4.6	4.8	3.0%
Reimbursements	1.7	1.8	3.0%
Permit Fees	1.7	1.7	0.0%
Capacity Charges	3.0	3.1	3.0%
All Other Revenue	<u>6.7</u>	<u>6.4</u>	-3.8%
Operating Sources	147.7	151.9	2.8%
Less: Revenue Funded Capital	<u>(36.0)</u>	<u>(30.2)</u>	-16.0%
Net Operating Sources	111.7	121.6	8.9%
Source of Funds - Capital			
New Bond Proceeds	9.8	19.6	100.0%
Revenue Funded Capital	<u>36.0</u>	<u>30.2</u>	-16.0%
Net Capital Sources	45.8	49.8	8.8%
Net Sources of Funds	157.5	171.5	8.8%
Use of Funds - Operating			
Labor	48.6	49.2	1.3%
Contract Services	4.9	4.9	-0.7%
Other	34.3	36.8	7.2%
Contingency	1.4	2.7	101.2%
Debt Service	30.7	31.9	3.8%
Less: Capital Support	<u>(3.8)</u>	<u>(3.9)</u>	2.6%
Net Operating Uses	116.1	121.6	4.7%
Use of Funds - Capital			
Project Cash Flows	42.0	45.9	9.3%
Plus: Capital Support	<u>3.8</u>	<u>3.9</u>	2.6%
Net Capital Uses	45.8	49.8	8.8%
Net Uses of Funds	161.9	171.5	5.9%
Total Sources	157.5	171.5	8.8%
Total Uses	161.9	171.5	5.9%
Total Sources less Uses	(4.4)	(0.0)	-99.9%
Ending Balance *	99.3	99.3	0.0%

* Ending Balance includes all policy reserves and reserves for capital projects.

SOURCES OF FUNDS

The Wastewater System has a variety of revenue sources to fund operations, and a portion of the capital expense. The remaining capital expense is funded primarily by new bond proceeds and reimbursements.

The table below shows actuals and budgets for operating revenues and capital funding sources.



New Digester Roof Construction – Oakland, CA

Wastewater System Sources of Funds (\$ Millions)					
	FY19 Actuals	FY20 Actuals	FY21 Budget	FY22 Budget	FY23 Budget
Operating Revenues					
Treatment Charges	76.5	78.2	80.9	84.8	88.5
Wet Weather Facilities Charge	25.1	27.1	28.5	29.7	30.9
Resource Recovery	12.2	12.1	10.0	9.0	8.0
Property Taxes	5.9	6.3	5.6	6.3	6.3
Interest Income	1.6	1.3	2.1	0.3	0.5
Laboratory Services	4.5	4.7	4.5	4.6	4.8
Reimbursements	1.6	1.9	1.5	1.7	1.8
Permit Fees	1.6	1.7	1.6	1.7	1.7
Capacity Charges	13.3	5.7	4.0	3.0	3.1
All Other Revenue	<u>4.7</u>	<u>5.3</u>	<u>5.7</u>	<u>6.7</u>	<u>6.4</u>
Total Operating Revenues	146.9	144.2	144.4	147.7	151.9
Revenue Funded Capital	(49.1)	(41.8)	(46.0)	(36.0)	(30.2)
Capital Funding Sources					
Revenue Funded Capital	49.1	41.8	46.0	36.0	30.2
New Bond Proceeds	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>9.8</u>	<u>19.6</u>
Total Capital Funding Sources	49.1	41.8	46.0	45.8	49.8
Total Wastewater Sources of Funds	146.9	144.2	144.4	157.5	171.5

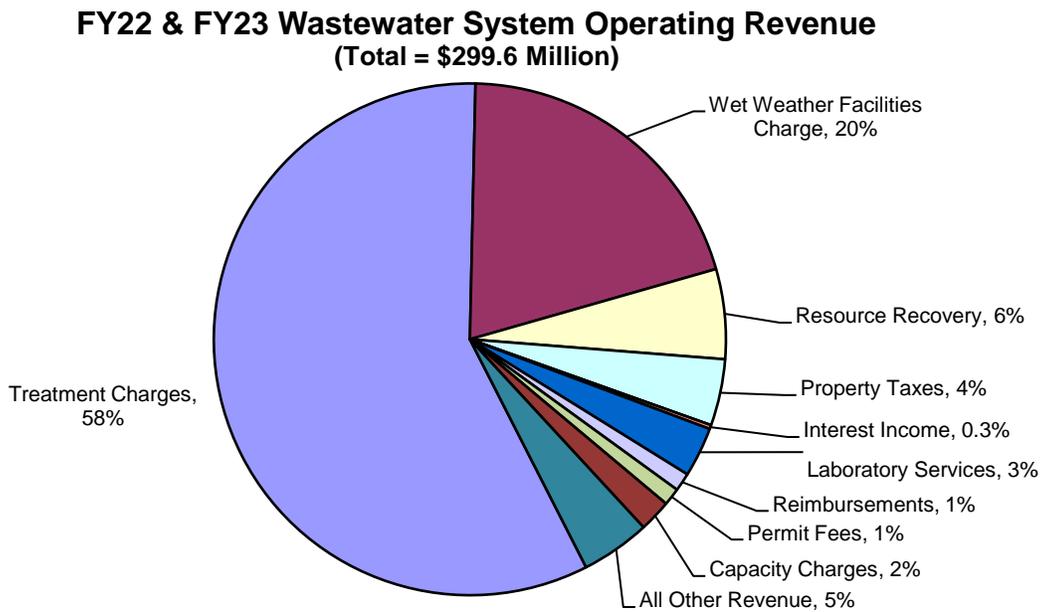
There are no other sources for capital funding sources planned.

Operating Revenue

Wastewater System operating revenues for FY22 are budgeted to increase \$3.3 million or 2.3 percent compared to FY21, for a total of \$147.7 million. The Treatment Charges total \$84.8 million, an increase of \$3.9 million compared to the FY21 budget. Resource Recovery revenue is decreasing \$1.0 million to reflect projections. Wet Weather Facilities Charge revenue in FY22 is projected to increase \$1.2 million from the FY21 budgeted amount. Property Tax revenue is increasing \$0.7 million to reflect projected collections. Interest Income is decreasing \$1.8 million due to lower projected interest rates. Reimbursement income from the Water System is increasing \$0.2 million due to work done by Wastewater staff on the recycled water programs that benefit water system customers. Capacity Charge revenue is decreasing \$1.0 million compared to FY21 due to anticipated decrease in building activity in the service area and an anticipated decrease in capacity charge based on the SCC update.

In FY23, Wastewater System operating revenues are budgeted to increase \$4.1 million, or 2.8 percent for a total of \$151.9 million. This increase is comprised primarily of the additional \$3.7 million from rate increases in the Treatment Charges.

The figure below illustrates the various sources of revenue and the percentage of each source. Wastewater Treatment Charges is the largest source of revenue comprising 58 percent of FY22 and FY23 total operating revenues, followed by the Wet Weather Facilities Charge at 20 percent.



Operating Revenue Descriptions

The following are descriptions of the sources of operating revenue, including information about the projected revenues for FY22 and FY23.

Treatment Charges

The District provides treatment for discharges collected through city-owned sewers and transported through District interceptors and pump stations to the Main Wastewater Treatment Plant (MWWTP). Treatment Charges for all customers are based on the volume and strength of the wastewater discharged plus a service charge and are collected on the water service bill. The revenue generated by the various Treatment Charges is projected to increase in FY22 by \$3.9 million or 4.8 percent to \$84.8 million from the FY21 budgeted revenue. For FY23, the Treatment Charge will be \$88.5 million, an increase of \$3.7 million or 4.3 percent.

Wet Weather Facilities Charge

In June 1987, the Board of Directors established the Wet Weather Facilities Charge to pay for the costs associated with the District wet weather facilities. This charge is assessed on a per parcel basis and, while it is not a tax, the charge is collected on the county property tax bill. The charge is projected to collect approximately \$29.7 million in FY22, a 4.2 percent increase above the FY21 budget. In FY23, the projected revenue is \$30.9 million, a 4.0 percent increase.

Resource Recovery

Excess capacity at the MWWTP is utilized by accepting trucked waste. The Resource Recovery Program is projected to generate \$9.0 million in FY22 and \$8.0 million in FY23 which represents a decrease of \$1.0 million when compared to the prior fiscal year based on anticipated reduced deliveries.

Property Taxes

The District receives a portion of the one percent county levy on properties within District boundaries. For FY22 and FY23, revenues are projected to be \$6.3 million, an increase of 12.5 percent or \$0.7 million above the FY21 budget and uncertainty about COVID-19 recovery to the local economy.

Interest Income

The District places funds not needed for current expenditures in short-term investments, following the same procedures as the Water System. Interest Income in FY22 is projected to be \$0.3 million, a decrease of \$1.8 million from the FY21 budgeted amount due to the decrease in the short-term interest rates. Interest Income in FY23 is projected to be \$0.5 million. Interest earned is assumed to be 0.25 percent in FY22 and 0.5 percent in FY23 reflecting current conditions.

Laboratory Services

The Wastewater laboratory provides testing and analysis services for the Water and Wastewater Systems and several outside agencies. The Water and Wastewater Systems share in the joint costs of operating the lab. Revenues from the Water System and outside agencies are projected to be \$4.6 million for FY22 and \$4.8 million for FY23.

Reimbursements

The Wastewater System is reimbursed from the Water System for work performed by Wastewater staff on the recycled water programs. The estimated revenue from reimbursements is \$1.7 million for FY22 and \$1.8 million for FY23.

Permit Fees

The District collects fees to fund its pollution prevention programs and the discharge permit programs. In FY22 and in FY23, the estimated revenue from these permit fees will be \$1.7 million.

Capacity Charges

Wastewater Capacity Fees (WCF) are collected from customers requesting new wastewater service. Due to the increase in building activity in the service area, the WCF revenue collected has been over \$5.0 million in each of the past four years. In FY21, the District updated the water consumption analysis for capacity charges which results in a reduction in the WCF adopted for FY22. WCF revenue is projected to be \$3.0 million for FY22, which is a \$1.0 million decrease from the amount budgeted for FY21, and \$3.1 million for FY23. The budgeted WCF revenue assumes that the level of building activity slows.

All Other Revenue

Included in this category are lease revenue of District properties, reimbursements from the U.S. Treasury under the Build America Bonds program, revenue from energy sales at the Power Generation Station (PGS), property leases, and private sewer lateral fees. All Other Revenue is expected to increase \$1.0 million to \$6.7 million for FY22 due to increased property lease revenues and then reduces to \$6.4 million in FY23 as energy sales are projected to decrease.



Source Control truck in the 1950s

Capital Funding

The following are descriptions of the sources of capital funding. The Capital Improvement Program (CIP) will be funded with bond proceeds, wastewater revenue, and reserves. It is anticipated that the District will receive \$9.8 million in new revenue bond proceeds in FY22 and \$19.6 million in FY23, combined with revenue funded capital of \$36 million in FY22 and \$30.2 million in FY23.

New Bond Proceeds

The District has the ability to issue long-term bonds to fund its capital program. The proceeds of the bond sales can be used to pay for capital expenses over several years. The repayment of the bonds is generally over 30 years and is paid from wastewater rate revenues.

Commercial Paper Issues

In addition to issuing long-term bonds to fund its capital program, the District has used short-term borrowing in the form of CP to raise revenues for capital expenses. The term of CP can be up to 270 days. The repayment of CP is paid from wastewater rate revenues.

Grants and Loans Proceeds

The District pursues federal and state grants and low-interest loans to fund some of its capital projects when they meet the conditions of the grant and loan programs.

Reimbursements

Some of the capital projects in the Wastewater System are performed at the request of other agencies, and the District is reimbursed for its expenses. An example would be the relocation of a portion of the sewer interceptor at the request of a city or state agency.

Revenue Funded Capital

Annual capital expenses that are not paid from debt funding, grants, loans or reimbursements must be paid from revenues, either from current year revenues or from reserves.

Please refer to the section Debt Service and Financing for additional details on debt funding of capital projects.

USE OF FUNDS

The Wastewater System has three types of expenditures:

Operations – the annual costs of providing all wastewater services;

Debt Service – the repayment of bonds for making capital investments along with other debt-related expenses; and

Capital Cash Flow – the annual costs of the CIP for long-term projects.

The following table shows the breakdown of expenses by the type of expenditure.

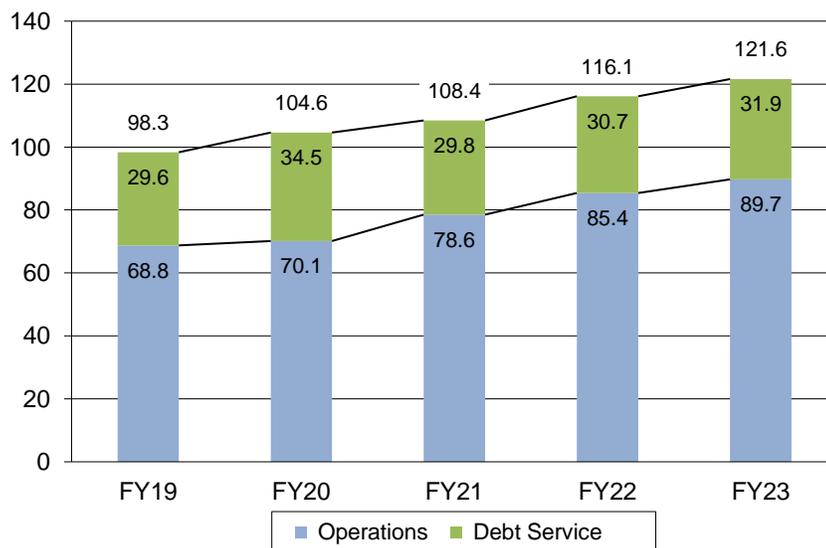
Use of Funds (\$ Millions)					
Expenditure Type	FY19 Actuals	FY20 Actuals	FY21 Budget	FY22 Budget	FY23 Budget
Operations	68.8	70.1	78.6	85.4	89.7
Debt Service	29.6	34.5	29.8	30.7	31.9
Capital Cash Flow	<u>49.1</u>	<u>41.8</u>	<u>46.0</u>	<u>45.8</u>	<u>49.8</u>
Total Expenditures	147.4	146.4	154.4	161.9	171.5

Operating Budget

This section describes the major components of the Wastewater System operations budget. Typical expenditures include, but are not limited to labor, benefits, chemicals, energy, spoils/sludge disposal, parts, materials, and fees and licenses.

In FY22, the operations and debt service budget is increasing \$7.7 million or 7.1 percent over the FY21 budget, and in FY23 will increase \$5.5 million or 4.7 percent as shown below.

FY19-FY23 Operations and Debt Service
(\$ Millions)



Department Operating Budget

The operations portion of the Wastewater System budget is divided into three departments which are staffed, contingency, and capital support. The staffed department includes all employees assigned to work in the Wastewater department. The staffed department budget funds the day-to-day operations of the Wastewater System, and includes funding for labor, benefits, outside contract services and other non-labor expenses such as chemicals, energy, spoils and sludge disposal, parts, materials, fees, and licenses. A detailed description of the staffed department is included later in this chapter.

A small number of departments do not have personnel assigned to them and are referred to as non-staffed departments described as follows:

Contingency – Funds are budgeted each fiscal year to cover projected labor-related expenses such as the employee cost of living adjustment which is based upon each year’s February Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) in the San Francisco-Oakland-Hayward area. The budget funds a cost of living adjustment for each fiscal year. In FY23, contingency increases to account for the combination of the cost of living adjustments paid in the prior year and the current year. The contingency budget also includes funding for unanticipated needs which may arise before the next budget cycle.

Capital Support – Costs that are not directly attributable to specific capital projects, but indirectly support the CIP. Capital support costs in the operations budget are reallocated to the capital budget and will decrease operating expenses by a like amount.

The following table shows the FY22 and FY23 Wastewater System operating budget by department.

Operating Budget by Department (\$ Millions)							
Departments	FY19 Actuals	FY20 Actuals	FY21 Budget	FY22 Budget	% Chg	FY23 Budget	% Chg
Wastewater	<u>72.4</u>	<u>73.9</u>	<u>80.5</u>	<u>87.8</u>	9.1%	<u>90.9</u>	3.5%
Staffed Department	72.4	73.9	80.5	87.8	9.1%	90.9	3.5%
Contingency	0.2	0.2	1.1	1.4	26.8%	2.7	101.2%
Capital Support	<u>(3.9)</u>	<u>(4.0)</u>	<u>(3.0)</u>	<u>(3.8)</u>	26.7%	<u>(3.9)</u>	2.6%
Operations	68.8	70.1	78.6	85.4	8.7%	89.7	5.1%
Debt Service	<u>29.6</u>	<u>34.5</u>	<u>29.8</u>	<u>30.7</u>	2.9%	<u>31.9</u>	3.8%
Total Operating	98.3	104.6	108.4	116.1	7.1%	121.6	4.7%

Department Operations Budget Highlights

The Wastewater System is comprised of one staffed department that performs all aspects of wastewater system operations. This section details the department's labor and non-labor budget, department goals and staffing.

Labor and Benefits

Labor and benefits are allocated between the staffed department and contingency for cost of living adjustments. Cost of living adjustments are not shown in the staffed department's labor and benefits budget since it is based on the CPI-W index and the amount is not known until the index is published annually. Once the index is published, and if funds are needed, contingency would be transferred to the department.

A limited number of additional FTEs have been funded in this biennial budget. A number of complex drivers impact the labor and benefits budget beyond funding additional FTEs. In FY22, total labor and benefits compared to FY21 will increase 0.5 percent. This increase is primarily driven by an increase in overtime and a rise in retirement and health care costs which are offset by decreases in standby pay and overall lower salaries due to the number of new employees with salaries lower than the employees they replaced. In FY23, total labor and benefit costs rise by 1.3 percent compared to FY22 primarily for scheduled step increases and overtime.

Unlike the Water System, the Wastewater System has only one staffed department. Therefore, the department's labor and benefits are explained in greater detail in the budget highlights later in this chapter.

Non-labor

The Wastewater staffed department non-labor costs are increasing by \$6.7 million or 20.7 percent in FY22 and will increase \$2.4 million or 6.2 percent in FY23 compared to the prior fiscal year due to operational cost increases for wastewater treatment. A detailed explanation of the significant changes is shown in the department budget highlights section later in this chapter.

Department Operations by Budget Category

The table below depicts the Wastewater System staffed department operations by expense category. It excludes capital labor which is shown later in this chapter. Operating labor is the largest cost at almost 55 percent of the operations budget.

FY22 & FY23 Department Operations by Categories (\$ Millions)								
Department	FY22				FY23			
	Labor	Contracts	Other	Total	Labor	Contracts	Other	Total
Wastewater	<u>48.6</u>	<u>4.9</u>	<u>34.3</u>	<u>87.8</u>	<u>49.2</u>	<u>4.9</u>	<u>36.8</u>	<u>90.9</u>
Total	48.6	4.9	34.3	87.8	49.2	4.9	36.8	90.9

STAFFED DEPARTMENT OPERATIONS

This section describes the staffed department and includes the following topics:

Overview provides an overall statement about the key responsibilities of the department within the larger mission of the District as a whole.

Description of Services Provided describes the responsibilities of the department, by unit (division) or by function, including services required to meet regulatory or legal requirements.

FY22 & FY23 Goals highlight the highest priority tasks or projects related to the budget, and the District Strategic Plan.

Department Budget Summary is a table that shows the Department's operating budget expenditures by category (Labor and Benefits, Contract Services, Other Costs). It also includes capital labor to detail a more comprehensive view of the departmental budgets.

Budget Highlights shows changes in cost relative to the previous fiscal year and describes reasons for those changes. This section focuses on the significant budget change.

Staffing Summary is a table that shows the Full-Time Equivalency (FTE) for the department by appointment type (full-time, part-time, etc.).

Staffing Changes is a section included only if the department has position changes that require Board approval. It includes a table that enumerates position changes, followed by a brief description of the changes. The change in cost is determined by comparing the annual cost of the salaries and benefits of the top step of the current classification with the new classification at the top salary step.

WASTEWATER DEPARTMENT (WAS)

OVERVIEW

The Wastewater Department operates and maintains District wastewater treatment facilities to comply with environmental and public health requirements. The primary goal of the department is to ensure public health and safety by meeting or surpassing federal, state and local regulations regarding air, biosolids and water quality. The department strives to protect the environment by reducing or eliminating the discharge of pollutants into the air, land and San Francisco Bay and recovering water, energy and nutrients from wastes.

DESCRIPTION OF SERVICES PROVIDED

The department includes the Wastewater Treatment, Wastewater Engineering, Laboratory & Technical Services, and Environmental Services divisions, as well as Infiltration/Inflow Control and Nutrient Management. These groups work together to operate and maintain the wastewater interceptor system, Main Wastewater Treatment Plant (MWWTP), water recycling facilities, and three wet weather facilities. The department plans for future regulatory changes, such as those related to nutrient and biosolids management; manages the Integrated MWWTP Master Plan; plans, designs and manages the construction of capital projects; monitors discharges from all wastewater customers; issues commercial and industrial discharge permits; manages the Regional Private Sewer Lateral Program and implements projects to reduce infiltration and inflow; and tests water and wastewater samples and reports analytical results.

FY22 & FY23 GOALS

The department has a key role in the Water Quality and Environmental Protection, Long-Term Infrastructure Investment, and Long-Term Financial Stability Strategic Plan goals. Key department goals include:

- Implementing projects recommended from the Integrated MWWTP Master Plan to cost-effectively balance long-term infrastructure renewal needs with future regulatory requirements, improving resiliency, and meeting District's sustainability goal;
- Continuing to operate and maintain the District's Wastewater facilities to meet regulatory requirements and protect public health and San Francisco Bay;
- Rehabilitating infrastructure to maximize utilization of existing capital investments and to ensure operational reliability for protecting public health and the environment;
- Reducing environmental impacts to the San Francisco Bay during wet weather events through reducing inflow and infiltration, maintaining, operating, and constructing facilities to improve wet weather flow management;
- Continuing a regional leadership role to ensure a collaborative, science-based approach to address potential nutrient impairment in San Francisco Bay; and
- Optimizing the Resource Recovery Program to recover energy from wastes.

DEPARTMENT BUDGET SUMMARY (WAS)

The department's projected spending is compared to prior years in the table below.

Category (\$ Millions)	FY19	FY20	FY21	FY22		FY23	
	Actuals	Actuals	Budget	Budget	% Chg	Budget	% Chg
Total Labor and Benefits	51.4	52.7	59.3	59.6	0.5%	60.4	1.3%
Less: Capital Labor and Benefits	<u>9.8</u>	<u>10.2</u>	<u>11.3</u>	<u>11.0</u>	-2.5%	<u>11.2</u>	1.2%
Operating Labor and Benefits	41.5	42.5	48.0	48.6	1.2%	49.2	1.3%
Contract Services	4.4	2.7	4.5	4.9	9.1%	4.9	-0.7%
Other Costs	<u>26.5</u>	<u>28.7</u>	<u>28.0</u>	<u>34.3</u>	22.6%	<u>36.8</u>	7.2%
Operating Total	72.4	73.9	80.5	87.8	9.1%	90.9	3.5%

BUDGET HIGHLIGHTS

The department's total operating budget in FY22 is increasing \$7.3 million or 9.1 percent compared to FY21. In FY23, the budget will increase \$3.1 million or 3.5 percent compared to the prior fiscal year. Significant budget changes include:

FY22

Total labor and benefits are increasing \$0.3 million. Of this amount, operating labor and benefits are increasing \$0.6 million primarily due to rise in retirement, health care, and overtime, offset by decreases in standby pay and lower salaries due to vacancies, new employees at lower salary steps than the employees they replaced, and lower actual cost of living increase than budgeted. Capital labor is decreasing \$0.3 million due to lower salaries, shifting some labor to operating, and reduced overtime. Contract services are increasing \$0.4 million primarily to support the Electrical Integrity Program (EIP), turbine, and machine equipment. Other costs are increasing \$6.3 million primarily due to chemicals costs, spoils/sludge disposal, reimbursable costs to the Water System, insurance premiums/fees, and fees/licenses.

FY23

Total labor and benefits costs are increasing \$0.8 million primarily due to scheduled salary step increases, overtime, and standby. Other costs will increase \$2.5 million primarily due to chemical costs, spoils/sludge disposal, reimbursable expense to the Water System, and insurance premiums/fees.

STAFFING SUMMARY

The table below summarizes the staffing changes including transfers among departments. In FY22, two full-time FTE have been added, two limited-term FTE have been deleted, and one full-time FTE Senior Wastewater Control Inspector has been transferred back from the Water System.

Position Type	FY19	FY20	FY21	FY22	FTE Chg	FY23	FTE Chg
Full-Time	284.0	283.0	283.0	286.0	3.0	286.0	0.0
Limited-Term / Temp Construction	5.0	5.0	5.0	3.0	(2.0)	3.0	0.0
Intermittent	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Temporary / Part-Time	0.5	0.5	0.5	0.5	0.0	0.5	0.0
Total FTE	289.5	288.5	288.5	289.5	1.0	289.5	0.0

STAFFING CHANGES

The net change in cost represents the difference between the annual salary at the top step including benefits for the existing highest job classification versus the highest classification for the change.

FY	Action	From Classification(s)	To Classification(s)	Cost Chg	FTE Chg	Project/Program
2022	Add		Manager of Wastewater Technical and Emerging Issues (Classification under development)	337,034	1.0	Top priority wastewater issues
2022	Add		Associate Electrical Engineer	249,056	1.0	Cybersecurity and control systems oversight
2022	Delete	(LT) Information Services Supervisor		(281,629)	(1.0)	LT expired
2022	Delete	LT Special Employment Program Trainee		(84,655)	(1.0)	Special Employment Program
FY22 TOTAL				219,807	0.0	

In FY22, the department is adding two full-time FTEs, which includes a Manager of Wastewater Technical and Emerging Issues to focus on top priority wastewater issues such as biosolids, nutrients, contaminants of emerging concerns (including per- and polyfluoroalkyl substances and microplastics), and other high-level technical emerging issues, and an Electrical Engineer to support cybersecurity and manage and maintain the control system network of wastewater facilities to ensure regulatory compliance. The department is deleting a limited-term Information Services Supervisor since the Laboratory Information Systems Replacement Project will be completed, and a LT Special Employment Program (SEP) Trainee since the SEP Program is no longer operational.

STAFFING

Appointment Types

The majority of the workforce is comprised of full-time civil service or full-time civil service exempt positions. Limited-term positions are intended to augment regular staff to accomplish extra work or other operational programs or activities of a limited duration, with appointments for a maximum of four years. Temporary construction positions are also of a limited and specified duration typically associated with capital projects. Intermittent positions represent the smallest number of appointment types and typically work 32 hours instead of 40 hours per week. Part-time positions are normally restricted to 832 hours per year. Temporary positions are limited to a 6-month duration and are full-time during that duration.

The table below provides the full-time equivalent (FTE) for the Wastewater department and compares the changes from year-to-year. The FTE value varies by appointment type.

- Full-time, limited-term and temporary construction appointment types equal 1.0 FTE;
- Intermittent appointment types equal 0.75 FTE; and
- Part-time and temporary appointment types equal 0.5 FTE.

FY22 & FY23 Department Staffing					
	FY21 Budget	FY22 Budget	FTE Chg	FY23 Budget	FTE Chg
Wastewater System Total	288.5	289.5	1.0	289.5	0.0

In FY22, the Wastewater System has one more FTE than in FY21 due to a position transferred back from the Water System. In FY23, there are no changes in FTE.

Bargaining Unit Changes

Tables below show the net change in bargaining unit status of authorized FTEs represented by different unions, management/confidential, non-represented groups, and civil service exempt positions. The tables reflect Board of Directors authorized additions and deletions in FY22 and FY23 and correspond to the staffing changes table in each department.

FY22 vs. FY21 Net Change in Bargaining Unit Status							
Department	Local 2019	Local 444	Local 21	Local 39	MGR/ CNF	NRP	EXMPT
Wastewater	1		(1)		1	(1)	
Total Net Change	1	0	(1)	0	1	(1)	0

FY23 vs. FY22 Net Change in Bargaining Unit Status							
Department	Local 2019	Local 444	Local 21	Local 39	MGR/ CNF	NRP	EXMPT
Wastewater							
Total Net Change	0	0	0	0	0	0	0

DEBT SERVICE AND FINANCING

This section describes the Wastewater System's current and projected debt obligations, current credit ratings, and adherence to the District's debt financing policies.

Debt is incurred to finance projects or purchase, repair or replace assets which will have useful lives equal to or greater than the related debt. Issuance of revenue supported debt is authorized by the Board of Directors, subject to a referendum process. Individual revenue bond issues are authorized by the Board of Directors.

The annual debt service principal and interest payments are charged to the operating budget. However, debt is only issued to finance capital investment activities.

Outstanding Debt

The Wastewater System's total outstanding debt is projected to be \$357.4 million as of June 30, 2021. This figure incorporates an anticipated partial pay down of Wastewater System commercial paper in FY21. The District's debt issues are summarized below and discussed in detail thereafter.

Outstanding Debt (\$ Millions) As of June 30, 2021				
Issue	Date of Issue	Last Maturity	Amount Issued	Principal Outstanding
LONG-TERM DEBT				
Revenue Bond				
Series 2010B (Build America Bonds)	10/20/2010	6/1/2040	150.0	150.0
Series 2012A	10/10/2012	6/1/2037	20.0	20.0
Series 2014A	8/28/2014	6/1/2031	82.2	50.4
Series 2015A	3/3/2015	6/1/2038	68.4	68.4
Series 2015B	3/3/2015	6/1/2030	2.8	1.8
Series 2017A	6/14/2017	6/1/2045	69.4	57.3
Total Revenue Bonds			392.7	347.9
% of Total Outstanding Debt				97%
Total Long-Term Debt			392.7	347.9
SHORT-TERM DEBT				
Extendable Commercial Paper	Various	Various	N/A	9.5
% of Total Outstanding Debt				3%
TOTAL OUTSTANDING DEBT				357.4

The District plans to issue \$10 million in revenue bonds in FY22 and \$20 million in FY23 to support capital investment activities. The \$10 million and \$20 million bond issues generate \$9.8 million and \$19.6 million in proceeds, respectively, after the assumed cost of issuance.

Debt Service

The Wastewater System's total outstanding debt will cost approximately \$202.6 million in interest payments over the next 24 years, as detailed in the table below. The principal payments below include the anticipated annual pay down of extendable commercial paper (ECP) principal. However, ECP has no final maturity and the actual ECP principal pay down schedule could differ. Interest rates on ECP are assumed to be 0.5 percent in FY22, rising to 3.0 percent by 2032.

Projected Debt Service on Current Outstanding Debt			
(\$ Thousands)			
Fiscal Year	Principal	Interest	Debt Service
2022	12,480	17,424	29,904
2023	13,010	16,892	29,902
2024	13,575	16,285	29,860
2025	14,155	15,667	29,822
2026	14,760	15,015	29,775
2027	15,220	14,338	29,558
2028	15,925	13,610	29,535
2029	16,670	12,847	29,517
2030	17,445	12,055	29,500
2031	17,755	11,221	28,976
2032	18,115	10,355	28,470
2033	19,010	9,459	28,469
2034	19,955	8,513	28,468
2035	20,945	7,522	28,467
2036	21,985	6,483	28,468
2037	23,075	5,392	28,467
2038	24,365	4,247	28,612
2039	26,250	2,991	29,241
2040	27,610	1,632	29,242
2041	940	203	1,143
2042	975	166	1,141
2043	1,015	127	1,142
2044	1,055	86	1,141
2045	1,100	44	1,144
TOTAL	357,390	202,573	559,963

The debt service in the table is less than the budgeted debt service because the latter includes:

- Payments on new debt issues in FY22 and FY23, and
- Costs for remarketing fees, basis spread, and debt service administration.

Debt Ratings

Credit risk is the risk that the issuer of an investment, such as a revenue bond, will not fulfill its payment obligations to the holder of the investment. Credit ratings are assigned to bonds by Nationally Recognized Statistical Credit Rating Organizations based on published methodologies. The ratings reflect the organizations' opinions about the issuer's ability and willingness to meet its financial obligations on time and in full.

The Wastewater System's strong credit ratings provide tangible benefits to ratepayers in the form of reduced debt service cost. A strong credit rating provides better access to capital markets, lower interest rates, better terms on debt, and access to a greater variety of debt products. Prudent financial management policies have contributed to the Wastewater System's strong ratings shown in the table below.

As of January 1, 2021, ratings on the Wastewater System's debt were as follows:

Wastewater System Debt Ratings			
Debt by Type	Standard & Poor's	Moody's Investors Service	Fitch
Fixed Rate Revenue Bonds	AAA	Aa1	AA+
Extendable Commercial Paper	A-1+	P-1	F1+

Definitions of the District's fixed rate and long-term debt ratings are shown below.

Standard & Poor's

An obligation rated 'AAA' has the highest rating assigned by S&P Global Ratings. The obligor's capacity to meet its financial commitments on the obligation is extremely strong.

Moody's Investors Service

Obligations rated 'Aa' are judged to be of high quality and are subject to very low credit risk. The modifier 1 indicates that the obligation ranks in the higher end of its generic rating category.

Fitch

'AA' ratings denote expectations of very low default risk. They indicate very strong capacity for payment of financial commitments. This capacity is not significantly vulnerable to foreseeable events. The modifiers "+" or "-" may be appended to a rating to denote relative status within major rating categories.

Debt Management Policy and Debt Service Coverage

The District is subject to legal debt limits prescribed in the Municipal Utility District (MUD) Act regarding general debt limits, revenue bond limits, and short-term borrowing limits.

The District's general debt indebtedness cannot exceed the ordinary annual income and revenue of the District without a two-thirds approval of the voters. However, revenue bonds are not included in general debt limits.

The District is authorized to issue revenue bonds with the approval of a resolution from the Board of Directors, subject to a 60-day referendum period. The resolution specifies the maximum principal amount of bonds that may be issued pursuant to the authorization. The Board of Directors also approves individual series of revenue bonds issued under the broader authorization.

The MUD Act authorizes the District to issue short-term indebtedness without an election of the voters. The amount of short-term borrowing cannot exceed the lesser of 1) the annual average total revenue of the three preceding years or 2) 25 percent of the District's total outstanding bonds. This provision is substantially the same as the District's internal policy discussed below.

The District has also established its own policy regarding debt management (Policy 4.27: Debt Management – see Appendix). The purpose of the debt policy is to maintain a balance between current funding sources and debt financing over each five-year plan horizon in order to retain the District's financing flexibility and achieve the lowest cost of financing.

The District's debt management policy is to:

- a) maintain an annual revenue bond debt service coverage ratio of at least 1.6 times;
- b) limit debt-funded capital to no more than 65 percent of the total capital program over each five-year planning period; and
- c) limit commercial paper/variable rate debt to 25 percent of outstanding long-term debt.

Debt Service Coverage Ratio

The debt service coverage policy ensures that the District has sufficient annual operating revenues to pay its operating expenses and meet its debt service obligations on its revenue bonds and other parity debt. The revenue bond debt service coverage ratio is defined as the District's net operating revenue (current year's operating revenue less the current year's operating expenses) divided by the current year's debt service on all revenue bonds and other parity debt. Net revenues are reduced by any Rate Stabilization Fund deposits and increased by any withdrawals. For the Wastewater System, Build America Bonds subsidies are treated as an offset to debt service and are excluded from the net operating revenue for the purpose of the ratio calculation. In FY22 and FY23, the projected debt coverage ratios are 2.22 and 2.13, respectively.

Debt-Funded Capital

The percentage of the capital program that is funded by debt over the five-year planning period FY22-26 is projected at 40.3 percent, which is below the financial policy maximum target of 65 percent. The debt percentage funding levels for FY22 and FY23 are shown in the table below.

Projected Debt Percentage of Funding		
(\$ Millions)		
	FY22	FY23
Expenditures		
Capital Cash Flow	42.0	45.9
Capital Support	<u>3.8</u>	<u>3.9</u>
Total Expenditures	45.8	49.8
Project Funding		
New Bond Proceeds	<u>9.8</u>	<u>19.6</u>
Total Resources	9.8	19.6
Debt Percentage of Funding	21.4%	39.3%

Commercial Paper and Variable Rate Debt Ratio

The District has authorized a short-term ECP borrowing program consistent with the MUD Act and the District's debt management policy. Under this program, the District may issue ECP notes at prevailing interest rates for periods of not more than 120 days from the date of issuance with the option by the District to extend the maturity for another 150 days. The program is not supported by any liquidity or revolving credit agreements. The Wastewater System ECP is subordinate to the System's revenue bonds.

As of June 30, 2021, \$9.5 million of Wastewater ECP is projected to be outstanding under the program after an anticipated partial pay down of principal in FY21. Wastewater System ECP will comprise nearly 3 percent of the approximately \$357.4 million in total outstanding debt.

Other than the ECP, the Wastewater System has no additional variable rate debt outstanding.

CAPITAL IMPROVEMENT PROGRAM

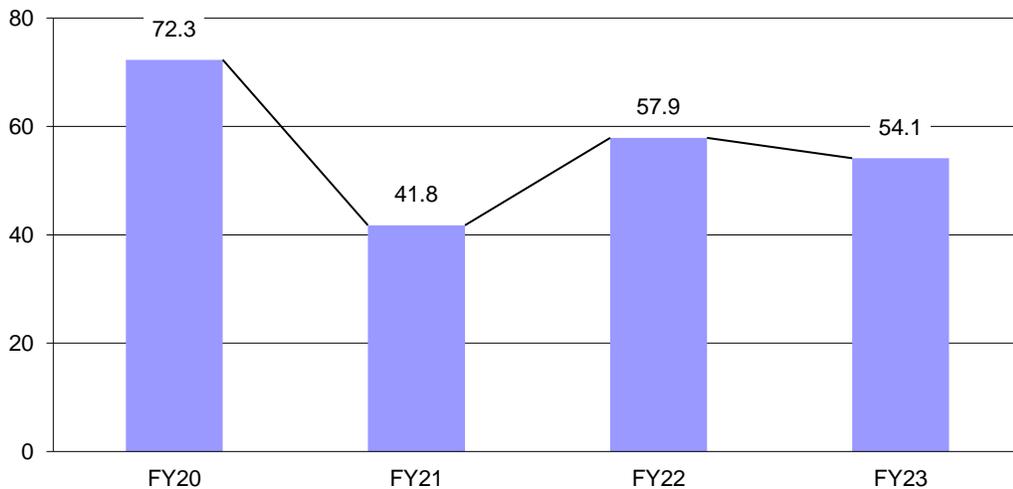
The CIP consists of projects that typically result in the construction of new facilities, or the rehabilitation or upgrade of existing facilities. Project costs include all expenditures required to study, plan, design, construct or upgrade new or existing facilities. Projects can also include large equipment purchases and the creation or replacement of computer systems.

Capital Appropriation

Capital appropriations are the amounts approved by the Board to be spent on projects in the CIP. Since these appropriations are often spent over multiple years, the amounts appropriated for each fiscal year will vary depending upon project scope and timing, and any unspent appropriation a project may already have.

The Wastewater System's FY22 appropriation is increasing by \$16.2 million or 38.7 percent from FY21. In FY23, the appropriation is decreasing by \$3.8 million or 6.6 percent from FY22. The appropriations for FY22 and FY23 and the prior two years are summarized below.

Four-Year Summary Capital Appropriation
(\$ Millions)



The FY22-26 Wastewater System CIP requires \$396.6 million in project appropriations, an increase of \$110.3 million or 39 percent from the FY20-24 CIP. The increase is primarily due to increased appropriation needs in the Maintaining Infrastructure Strategy for improving the infrastructure at the MWWTP.

The Maintaining Infrastructure Strategy is the main focus of the CIP and comprises 88 percent of the total appropriations. The Wastewater System appropriations by strategy are in the following table.

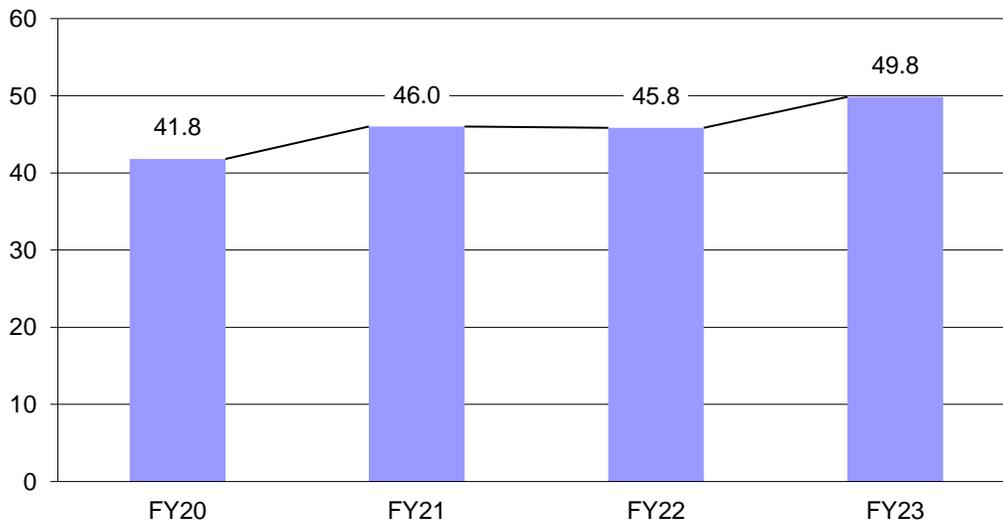
FY20-24 vs. FY22-26 Appropriation				
Capital Improvement Program by Strategy (\$ Thousands)				
Strategy	Appropriation		\$ Chg	% Chg
	FY20-24	FY22-26		
Maintaining Infrastructure	254,538	348,796	94,258	37%
Regulatory Compliance	16,068	27,909	11,841	74%
Non-Program Specific	0	0	0	0%
Strategy Subtotal	270,606	376,705	106,099	39%
Capital Support	15,598	19,874	4,276	27%
Total Wastewater	286,204	396,579	110,375	39%

Capital Cash Flow

Capital cash flows are the amounts projected to be spent each fiscal year on projects in the CIP. Cash flow spending varies each year as projects progress from one phase to another, such as from planning to design and then construction, and as projects are completed and new ones started.

The Wastewater System’s FY22 cash flow is decreasing slightly by \$0.2 million or 0.4 percent from FY21. In FY23, the cash flow is increasing by \$4.0 million or 8.8 percent from FY22. The cash flows for FY22 and FY23 and the prior two years are shown below.

Four-Year Summary Capital Cash Flow
(\$ Millions)



The FY22-26 CIP identifies \$243.2 million in projected cash flow spending, an increase of \$8.8 million or 4 percent compared to the FY20-24 CIP. The increase is attributable to both the Maintaining Infrastructure Strategy for improving the infrastructure at the MWWTP including rehabilitation of concrete basins, power generation and electrical system, first generation digesters, and the administration building and laboratory. Under the Regulatory Compliance Strategy, increases are associated with deferring the Nutrient Management Project to evaluate a range of nutrient reduction alternatives, as part of an integrated master planning effort to proactively address increasingly stringent environmental regulations and aging infrastructures.

The Wastewater System cash flows by strategy are summarized below.

FY20-24 vs. FY22-26 Cash Flows				
Capital Improvement Program by Strategy (\$ Thousands)				
Strategy	Cash Flows		\$ Chg	% Chg
	FY20-24	FY22-26		
Maintaining Infrastructure	205,868	207,852	1,984	1%
Regulatory Compliance	13,003	15,521	2,518	19%
Non-Program Specific	<u>0</u>	<u>0</u>	<u>0</u>	0%
Strategy Subtotal	218,872	223,373	4,501	2%
Capital Support	<u>15,598</u>	<u>19,874</u>	<u>4,276</u>	27%
Total Wastewater	234,470	243,247	8,777	4%

Based on a ten-year capital planning horizon, \$365.0 million of work has been tentatively identified for FY27-31. These estimates will be revised as studies are completed, priorities are redefined, and new needs emerge. Therefore, the focus is on the first five years of the CIP.

Select programs and projects are discussed in more detail in the following pages. In addition, a description of each project including recent accomplishments and future work is provided in a supplemental volume of this budget book for each project that has work planned in FY22-26.

Capital Labor

The capital labor component of the CIP totals over \$11 million per fiscal year. The following table shows the capital labor and benefits budget.

Capital Labor By Department (\$ Thousands)						
	FY20	FY21	FY22		FY23	
	Actuals	Budget	Budget	% Chg	Budget	% Chg
Wastewater	10,174	11,315	11,034	-2.5%	11,162	1.2%
Total Department	10,174	11,315	11,034	-2.5%	11,162	1.2%

The Wastewater Department capital labor budget is decreasing \$0.3 million in FY22 primarily due to lower salaries, shifting some labor to operating, and reduced overtime. In FY23, the capital labor budget will increase by \$0.1 million primarily due to scheduled salary step increases.

Capital Program Highlights

The Wastewater System FY22-26 appropriations are shown below by strategy and program, with select programs and projects discussed in more detail to provide a sense of the work that is projected to take place over the next ten years.

MAINTAINING INFRASTRUCTURE STRATEGY

This strategy furthers the District's objectives to improve the infrastructure at both the Main Wastewater Treatment Plant (MWWTP) and remote facilities to ensure reliable, high quality service. Work under this strategy focuses on rehabilitating the digesters, concrete structures, and treatment process facilities; upgrading the resource recovery receiving station; rehabilitating sections of the sewer interceptors; expanding and improving the PGS; and retrofitting various structures at the MWWTP. The five-year program appropriations are as follows:

Appropriations (\$ Thousands)						
Program	FY22	FY23	FY24	FY25	FY26	Total
Wastewater Infrastructure Program	43,793	35,693	28,170	77,530	163,610	348,796
Total	43,793	35,693	28,170	77,530	163,610	348,796

Wastewater Infrastructure Program

The General Wastewater Project includes work that is vital to wastewater conveyance and treatment but is not limited to a single treatment process. Tasks include work on buildings that serve multiple treatment processes such as the periodic replacement of capital equipment, applying protective coatings plant-wide, replacing hardware and software, and procuring additional vehicles.

Two of the larger tasks in this project are the seismic retrofits of the Maintenance Building and the Operations Center, two buildings that are heavily used and were prioritized in the MWWTP seismic evaluation. Those efforts are scheduled to occur between FY22 and FY26. Other seismic tasks include retrofit of various concrete masonry buildings at the MWWTP, the Field Services Building and the Administration Building.

The Interceptors and Pump Stations Project includes work to rehabilitate gravity interceptors, force mains, and pump stations that convey wastewater from the satellite agencies to the MWWTP, and to improve access to these facilities for maintenance and repairs.

Interceptor rehabilitation includes the underground piping, select manholes and tie-in structures. Pipe rehabilitation will be conducted on the older interceptors that have not been addressed recently. Locations include Second Street and the Embarcadero in Oakland, Buena Vista Avenue and other locations in Alameda, and crossings of the Alameda Channel.

Pump Station rehabilitation includes the equipment and piping, as well as access improvements to several stations. In FY22, the 40-year-old Pump Station M in Alameda will be rehabilitated, and access will be improved for making bypass connections during an emergency. Other work includes construction for the Special Structures Rehabilitation Phase 1, rehabilitation of Pump Station L in Oakland, and access improvements to Force Mains. Work planned in later years includes the Second Street and Embarcadero Interceptors in Oakland, the second phase of the Special Structures Rehabilitation, and Pump Station A in Albany, C in Alameda, and H in Oakland.

The Secondary Treatment Project includes work to rehabilitate and upgrade structures associated with wastewater treatment including the Oxygen Production Plant where liquid oxygen is produced, the Oxygen Reactors where oxygen is mixed with the wastewater, and the Secondary Clarifiers. These facilities need to be rehabilitated in phases to keep the MWWTP operational as the work takes place.

Rehabilitation of the Oxygen Production Plant includes upgrading the 40-year-old control system. Planning and design will take place in FY21-22, and construction in FY23-24.

Rehabilitation of the Oxygen Reactors includes concrete resurfacing of the interior walls and columns, coating of the roof slabs, strengthening the interior support columns, recoating or replacing sections of piping, and refurbishing the aerator gear boxes. Design for the first of four phases was completed in FY21, and construction will be completed in FY22.

Rehabilitation of the Secondary Clarifiers includes concrete work, replacement of the clarifier mechanisms, resurfacing or replacing other mechanical components, and replacing the baffles to improve performance. Three of the twelve clarifiers have been rehabilitated. The design for Phase 2 was completed in FY21 and construction will be completed in FY22.

The Dewatering Project includes work to upgrade the solids dewatering capability which produces beneficial use biosolids from the byproducts of the wastewater treatment process.

Replacement of the Dewatering Building is one of the largest capital projects in the Wastewater Department. In recent years, the dewatering process has required a great deal of maintenance due to aging equipment, limited capacity, and impacts from Resource Recovery trucked wastes. A new Dewatering Building will replace the existing structure and include new feed pumps, dewatering equipment, cake storage hoppers, polymer feed equipment, and odor control facilities. In FY23, the planning phase will begin, followed in FY24 by design, which is expected to take two years. The construction phase is expected to take four years, with completion scheduled for FY29.

The existing Dewatering Building will continue to be used for the secondary solids thickening process and improvements will be made including upgrades to the building's odor control system and seismic retrofits to protect life safety.

The Preliminary Treatment Project includes work to rehabilitate and upgrade assets associated with wastewater receiving, screening, pumping, and trash and grit removal to keep wastewater flowing from the interceptor system into the MWWTP before primary treatment.

Recently, the grit screws were replaced and work was performed at the Aerated Grit Tanks. Partial replacement of de-gritting equipment at the Grit Handling Facility is planned for completion in FY22. Work starting in FY23 includes seismic retrofit of the Influent Pump Station built in 1950 through which all wastewater passes. The retrofits will be coupled with upgrades to the large pumps, electrical system, and other equipment. The work will be carefully sequenced since the Influent Pump Station cannot be taken offline as these improvements are made.

The Utilities and Site Work Project includes work to rehabilitate and improve utility systems at the MWWTP including chemical piping, compressed air, wash-down water, potable water, natural gas, and drains; and site work, including landscaping and paving.

A multi-phase project to improve and replace hypochlorite piping around the plant has begun, with Phase 2 to be completed in FY22, and Phase 3 beginning in FY23. Design for the Process Piping Replacement Project was completed in FY21, and construction will be completed in FY22.

The wash down water pumps and piping will be assessed and improved, including the surge and cathodic protection systems. A new connection to the recycled water system will be included as a back-up supply. Portions of the piping will be assessed starting in FY22 and construction is planned to take place through FY25. Improvements to the Plant Gallery Drains will address ponding in the galleries and make it easier to empty the tanks and basins when maintenance is needed. Phase 1 improvements were recently completed. The design for Phase 2 improvements will begin in FY22.

The Electrical and Controls Project includes work to replace aging equipment and improve the seismic performance and reliability of the electrical power distribution and control systems to help prevent outages and optimize processes to meet regulations.

Four of the large variable frequency drives (VFD) need to be replaced and are associated with the return activated sludge pump drives and the digester hot water recirculation pump drives for the anaerobic digesters. Aging motor control centers will also be replaced for the aerated grit removal process and the oxygen reactors. This work will occur in FY22. The Ovation control system will also be replaced synchronized with the replacement of computers, workstations, servers, network equipment, and related software.

Based on seismic evaluations, two phases of seismic improvements have been identified for the electrical system at the MWWTP. Phase 1 will address immediate needs, such as improved bracing and supports for electrical distribution lines between the main substation and the PGS, and improved unit anchorage for substations. Phase 2 will address reliability needs following completion of an Electrical Master Plan in FY23.

The Power Generation and Biogas Project includes work to rehabilitate the biogas and PGS equipment, flares, piping, and related components to best utilize biogas produced in the digesters to generate renewable electricity and produce heat for the digesters. Maintaining these aging facilities provides a source of renewable electricity and reduces the need to flare biogas.

This project is intended to increase the reliability of the power generation components in both normal operation and during grid power outages to improve overall plant reliability. PGS Reliability Improvements Phase 3 is ongoing with construction planned to begin in FY22, followed by Phase 4 starting in FY24. The design for upgrades to the original flares was completed in FY21, and construction is planned for FY22.

The Primary Treatment Project includes work to rehabilitate and begin seismic retrofit of the Primary Sedimentation Tanks (PST), channels, and galleries to extend the life of concrete assets.

The concrete rehabilitation work to the PST includes replacing three primary influent channel control gates (large rectangular butterfly valves); and rehabilitating and coating concrete roof and walls in the influent channel adjacent to the gates, and in upstream areas that were not addressed in previous phases. The PST will be seismically retrofitted beginning in FY24. Phase 1 will encompass tanks 1 to 10, the adjoining influent channels and gallery and effluent channel. The Blower Building will be relocated; the influent channel and gallery joints retrofitted at various locations; channel, roof slab and tank walls strengthened; and exterior pile foundations added at four expansion joints. Phase 2 will begin in FY26 and address the influent channels, gallery and vortex grit facilities.

The Digesters Project includes work to upgrade the digestion process at the MWWTP to convert sludge from primary and secondary treatment, as well as high strength waste, into biogas and biosolids for beneficial use.

The District has eleven digesters operating at elevated temperatures along with various support equipment including blend tanks, pumps, mixers, heat exchangers, and biogas storage covers that

work together to provide the appropriate conditions to convert sludge into biogas and biosolids. In recent years, the digesters have been upgraded with improved covers and mixers. Under Phase 3 of the upgrades, two digesters are scheduled for new covers and mixing systems with construction having begun in FY21. These digesters will also be seismically retrofitted to prevent catastrophic collapse in the event of an earthquake. Construction will be completed in FY22. Phase 4 of the work to upgrade the remaining three digesters is planned to start in FY28.

The Resource Recovery Project includes work to rehabilitate and upgrade facilities associated with trucked waste which provides additional feedstock to produce biogas, and revenue for the Wastewater Department.

Odor control improvements will be implemented that include a new three-stage treatment system serving the Fats, Oils, and Grease (FOG) and High Strength Waste (HSL) receiving stations and blend tanks. This project also involves safety improvements and improved drainage to prevent odors and plugging of drains. The design for this project was completed in FY21, and construction is planned to start in FY22.

Another task is creating a new de-gritting facility for trucked waste. This project follows the successful pilot testing performed in FY20 and involves construction of a new building and hydrocyclone-classifiers, a local odor control unit, pumps, and associated piping. Temporary improvements will be made in FY22, with the main project starting after FY28.



Anaerobic Digester construction

REGULATORY COMPLIANCE STRATEGY

This strategy furthers the District's objectives to operate and maintain facilities to meet all water discharge, air emission, and land disposal requirements; ensure protection and stewardship of San Francisco Bay; and implement preventative and corrective maintenance programs. Work under this strategy focuses on upgrading the Wet Weather Treatment Facilities to maintain reliable operations; developing strategic nutrient management solutions to address future regulatory requirements; and upgrading the dechlorination facilities to protect the San Francisco Bay. The five-year program appropriations are as follows:

Appropriations (\$ Thousands)						
Program	FY22	FY23	FY24	FY25	FY26	Total
Regulatory Compliance Program	10,314	14,515	700	1,980	400	27,909
Total	10,314	14,515	700	1,980	400	27,909

Regulatory Compliance Program

The Nutrients Project includes work to prepare to meet stricter effluent limits for nitrogen discharged into San Francisco Bay anticipated in the upcoming San Francisco Regional Water Quality Control Board Watershed Permit.

The current nutrient watershed permit will expire in mid-2024, and the next five-year permit is expected to impose a nutrient discharge load cap. To meet this effluent load cap, it is expected that a process to treat high ammonia in the centrate generated in the dewatering process will be required. However, other studies are planned to determine the feasibility of other nutrient reduction improvements that can be made with existing facilities at the MWWTP. These studies will include pilot and full-scale testing to evaluate sidestream nutrient treatment/recovery technologies and explore innovative approaches to nitrogen reduction. Nutrient studies will start in FY22, and the planning phase of the sidestream treatment project will start in FY23.

The Wet Weather Facilities Project includes conducting mandated work related to the Inflow and Infiltration Program and maintaining the Wet Weather Facilities (WWF) for reliable performance during wet weather events.

This project includes ongoing implementation of the regional private sewer lateral ordinance, flow modeling, and reporting, as required by the Consent Decree issued by United States Environmental Protection Agency and Regional Water Quality Control Board. Work also includes studies to identify additional wet weather flow reductions.

Tasks also include addressing the large diameter influent magnetic flow meters at the Oakport WWF in Oakland and the Point Isabel WWF in Richmond. Compliance with increasingly stringent regulations requires accurate flow metering. Many of the meters at these locations are over 30 years old, and their reliability and accuracy have deteriorated. The Parshall flumes at Oakport and Point Isabel WWFs, and the San Antonio Creek WWF in Oakland will be inspected for physical deficiencies, such as damage to liners and concrete and rehabilitated. Design is scheduled to start in FY22 with construction completed in FY24. This project also includes rehabilitation of chemical tanks, wet well liner repair, and concrete restoration at the WWFs which is scheduled to start FY23.

The Effluent Discharge Project includes work to maintain and upgrade infrastructure necessary for disinfection and dechlorination of MWWTP effluent and conveyance to its final discharge in the San Francisco Bay. This infrastructure is critical for meeting permit requirements and for maintaining flow-through capacity at the plant.

As the final stage of liquid-stream treatment at the MWWTP, treated wastewater is dosed with chlorine or sodium hypochlorite and conveyed through a 9,000-foot long land section of the effluent outfall pipe to the Dechlorination Facility. At the Dechlorination Facility, sodium bisulfite is added to react with any remaining chlorine, and water quality samples are collected to ensure a chlorine-free discharge to the San Francisco Bay. The final conveyance is through 7,500-foot long section of subaqueous outfall pipe.

Tasks over the next five years include a hydraulic study and rehabilitation of pumps at the Effluent Pump Station, as well as rehabilitation of the Dechlorination Facility. Seismic improvements will also be made at the Effluent Pump Station and the outfall later in the ten-year Capital Improvement Program.



Water quality sampling near the outfall with the old Bay Bridge in the background



Wastewater Treatment Plant Operator monitors the storm and flows in the control room at Point Isabel Wet Weather Treatment Plant

NON-PROGRAM SPECIFIC STRATEGY

This strategy, when used, furthers the District’s objective to maintain a strong financial position to meet both short and long-term needs. The Contingency Program focuses on making funds available for unanticipated needs, and for projects that are seeking grants to pay for a substantial portion of the project’s cost. The five year program appropriations are as follows:

Appropriations (\$ Thousands)						
Program	FY22	FY23	FY24	FY25	FY26	Total
Contingency Program	0	0	0	0	0	0
Total	0	0	0	0	0	0

Contingency Program

Contingency provides funding for unanticipated needs that may arise before the next budget cycle, such as replacement or repairs to facilities and equipment as a result of failures or safety deficiencies, and new projects or the acceleration of planned projects requiring funding before the next budget cycle. Funds may also be set aside for projects where grants are being sought in the event that the grant application is successful as most grants require the District to fund the project and then apply for reimbursement of allowable costs.

At this time, no additional appropriations are needed as available appropriations are sufficient to meet the needs of the Wastewater Department.



Construction billboard in 1949

Capital Appropriation Summary

This section provides a summary of the five-year appropriation for the Wastewater System projects contained in the CIP, sorted by strategy and program. The Board of Directors approves the overall five-year CIP but adopts just the first two years. The remaining three years are for planning purposes only and are subject to revision.

Department Abbreviations

The abbreviation for the Lead Department responsible for each capital project is as follows:

WAS – Wastewater Department



Outfall construction in 1950

Capital Improvement Projects	Dept	Prior Approp	FY22-26 APPROPRIATIONS (IN 000's)					5 YR TOTAL
			FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	
MAINTAINING INFRASTRUCTURE								
WW Infrastructure Program								
Dewatering	WAS	3,043	0	13,117	0	0	75,310	88,427
Digesters	WAS	36,322	0	0	0	0	0	0
Electricals and Controls	WAS	34,673	0	7,931	250	250	250	8,681
General Wastewater	WAS	82,668	21,733	6,739	8,546	14,940	6,799	58,757
Interceptors and Pump Stations	WAS	55,390	11,794	4,319	4,890	14,446	17,127	52,576
Power Generation and Biogas	WAS	29,852	208	0	5,000	0	0	5,208
Preliminary Treatment	WAS	29,232	1,200	3,387	200	42,230	0	47,017
Primary Treatment	WAS	22,591	2,130	0	5,107	0	50,424	57,661
Resource Recovery	WAS	18,413	1,000	0	0	1,376	0	2,376
Secondary Treatment	WAS	37,756	0	0	0	4,288	10,500	14,788
Utilities and Sitework	WAS	38,799	5,728	200	4,177	0	3,200	13,305
WW Infrastructure Program Total		388,739	43,793	35,693	28,170	77,530	163,610	348,796
MAINTAINING INFRASTRUCTURE TOTAL		388,739	43,793	35,693	28,170	77,530	163,610	348,796
NON-PROGRAM SPECIFIC								
WW Non-Program Specific								
Contingency Project Wastewater	WAS	18,719	0	0	0	0	0	0
WW Non-Program Specific Total		18,719	0	0	0	0	0	0
NON-PROGRAM SPECIFIC TOTAL		18,719	0	0	0	0	0	0
REGULATORY COMPLIANCE								
WW Regulatory Compliance								
Effluent Discharge	WAS	13,313	1,857	0	400	1,580	0	3,837
Nutrients	WAS	2,751	200	13,720	300	400	400	15,020
Wet Weather Facilities	WAS	28,579	8,257	795	0	0	0	9,052
WW Regulatory Compliance Total		44,643	10,314	14,515	700	1,980	400	27,909
REGULATORY COMPLIANCE TOTAL		44,643	10,314	14,515	700	1,980	400	27,909

APPROPRIATIONS SUMMARY (IN 000'S)						
Prior	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	5 YR TOTAL
452,100	54,107	50,208	28,870	79,510	164,010	376,705

Operating Budget Impact of Capital Investments

The FY22-26 CIP includes various significant nonrecurring capital projects that will affect the operating budget and the services that the District provides. Such projects and their potential impacts include:

Digester Upgrades - Phase 3

This project will rehabilitate and make improvements to Digesters 2, 3, and 4. Floating covers on Digester 3 and 4 will be replaced with new fixed covers and the existing cover on Digester 2 will be replaced. These digesters will also be seismically upgraded to restrain the walls at the base. Other work includes piping upgrades, improved mixing, and associated electrical and controls upgrades. Digester coatings will be repaired for Digester 7.

The new fixed covers will increase gas storage for energy production which will increase the amount of biogas available for electricity generation and reduce flaring of unused biogas. This will increase electricity generation and potentially electricity sales while reducing environmental impacts. In addition, operational labor costs are expected to decrease once the improved piping and mixing systems are operational due to the reduced likelihood of equipment failure due to grit slugs, and better access for maintenance.

Main Wastewater Treatment Plant Administrative Building Improvements, Phases 1 and 2

This project includes improvements to the heating, ventilation and air conditioning systems (HVAC), and roofing and fire protection improvements for the Administration Building and Laboratory at the MWWTP. Phase 1 includes replacement of the main chiller for the cooling system. Phase 2 includes roof replacement, HVAC air handler replacement/rehabilitation, water distribution piping replacement, HVAC management system upgrades, and fire protection system upgrades.

Once implemented, these improvements will decrease operating costs due to an anticipated 15 to 20 percent reduction in power demand. Maintenance costs for roof repairs will also be reduced since the roof is at the end of its useful life.

Power Generation Station Reliability Improvements - Phase 3

This project includes piping replacements and improvements to the gas conditioning system to provide redundancy in order to reduce unplanned outages of the PGS. These improvements will reduce downtime for PGS equipment, and therefore increase electricity generation and potentially electricity sales.

MWWTP Oxygen (O₂) Plant Improvements

This project will make improvements to the O₂ plant built in 1973 which is critical for meeting our water quality discharge permit requirements. The project will replace the existing analog control system with a new state-of-the-industry digital system. The project also includes a condition assessment of the Plant No. 1 and No. 2 reversing heat exchangers, control systems, and reactor feed control system. The scope of the design and construction will be defined based on risk of failure and improvements to reliability. Operating costs will be reduced substantially due to the new control system, which will allow finer tuning of oxygen dosing to the oxygen reactors, greatly reducing the production of pure oxygen and thus reducing electricity demand. The project should also reduce the risk of failure due to obsolescence of key infrastructure and increase plant safety and reliability.

MWWTP Lighting Improvements

This project will replace aging, inefficient lighting systems with improved technology that reduces energy use and improves worker safety. Lighting installations at the primary sedimentation tanks, grit tanks, oxygen reactor decks, and secondary clarifier area will be replaced. The lighting proposed for replacement has a projected payback of five years due to savings from reduced energy use.



Secondary Treatment construction in 1975

FIVE-YEAR FINANCIAL FORECAST

SUMMARY

The five-year financial forecast presents the estimated impact of operations, debt service requirements and reserve balances on rate projections over the five-year period.

This forecast is built upon:

- Adopted financial policies
- Capital investments in the FY22-FY26 CIP

This forecast identifies rate increases for the Wastewater System based on estimated increases in operating and capital expenditures to maintain service levels, meet mandated program requirements, and fund increased capital expenditures.

On average over the five-year period, revenues are forecast to increase by 3.3 percent per year to cover the increases in operating and capital expenses and maintain a minimum of 1.6 times coverage on revenue bond debt service. Forecasted operating expenses are expected to grow by 3.8 percent per year over the five-year period. Debt service increases by 3.9 percent per year over the five-year period.

The key factors driving the need for increased Wastewater System revenues are:

- Increasing labor and benefit costs
- Inflation on non-labor products and services
- Increasing capital expenditures

For all five years, the cash reserves exceed the cash reserve targets. Reserves in excess of those needed to meet financial reserve targets are available to pay for a significant portion of the capital program expenses with cash, a positive financial metric.

Capital cash flow spending, including capital support expenses, is projected at \$243.2 million over the five-year period. Major projects to be undertaken during this period include: General Wastewater Improvements, Interceptor and Pump Station Improvements, Secondary Treatment Improvements, Dewatering Building and Equipment, and Preliminary Treatment Improvements.

The projected average percentage of capital funded from debt will be 40.3 percent over the five-year period significantly lower than the financial policy maximum target of 65 percent. In FY22 and FY23, the debt coverage ratio is projected at 2.22 and 2.13, respectively, and for FY22 through FY26, the ratio exceeds the target coverage ratio of 1.60.

OPERATIONS

The following table shows the financial forecast for the Wastewater System operating budget based on projected operations and maintenance expenses and debt service requirements.

Wastewater System Operating Budget Five-Year Financial Forecast (\$ Millions)							
	FY20	FY21	Forecast				
	Actuals	Budget	FY22	FY23	FY24	FY25	FY26
Beginning Balance	-	-	103.7	99.3	99.3	109.0	114.7
Treatment Charges	78.2	80.9	84.8	88.5	92.3	96.3	100.4
Wet Weather Facilities Charge	27.1	28.5	29.7	30.9	32.1	33.4	34.8
Resource Recovery	12.1	10.0	9.0	8.0	7.8	7.6	7.4
Property Taxes	6.3	5.6	6.3	6.3	6.3	6.3	6.3
Interest Income	1.3	2.1	0.3	0.5	0.5	0.8	1.1
Laboratory Services	4.7	4.5	4.6	4.8	4.9	5.1	5.2
Reimbursements	1.9	1.5	1.7	1.8	1.8	1.9	1.9
Permit Fees	1.7	1.6	1.7	1.7	1.7	1.7	1.7
Capacity Charges	5.7	4.0	3.0	3.1	3.2	3.3	3.4
All Other Revenue	<u>5.3</u>	<u>5.7</u>	<u>6.7</u>	<u>6.4</u>	<u>6.2</u>	<u>5.9</u>	<u>5.9</u>
Total Operating Revenues	144.2	144.4	147.7	151.9	156.8	162.2	168.1
Revenue Funded Capital	41.8	46.0	36.0	30.2	21.1	26.3	31.5
Operations	70.1	78.6	85.4	89.7	92.7	95.8	99.2
Debt Service	<u>34.5</u>	<u>29.8</u>	<u>30.7</u>	<u>31.9</u>	<u>33.3</u>	<u>34.4</u>	<u>35.8</u>
Total Expenses	146.4	154.4	152.1	151.9	147.0	156.5	166.6
Ending Balance	-	-	99.3	99.3	109.0	114.7	116.2
Policy Reserves	-	-	47.6	48.7	49.4	50.2	51.0
Capital Projects Reserve	-	-	51.7	50.6	59.6	64.5	65.2

The following table shows the key assumptions used to create the revenue forecast. The debt service coverage ratio is projected to exceed the policy target of 1.60 by at least 30 percent every year.

Wastewater System Key Assumptions Five-Year Financial Forecast							
	FY20	FY21	Forecast				
	Actuals	Budget	FY22	FY23	FY24	FY25	FY26
% Rate Increase	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Average monthly single family residential bill based on 6 ccf/month	\$22.15	\$23.02	\$23.91	\$24.89	\$26.09	\$27.13	\$28.21
Debt Service Coverage Ratio	2.59	2.40	2.22	2.13	2.09	2.09	2.08

Excludes Wet Weather Facilities Charge

Five-Year Projection of Revenue

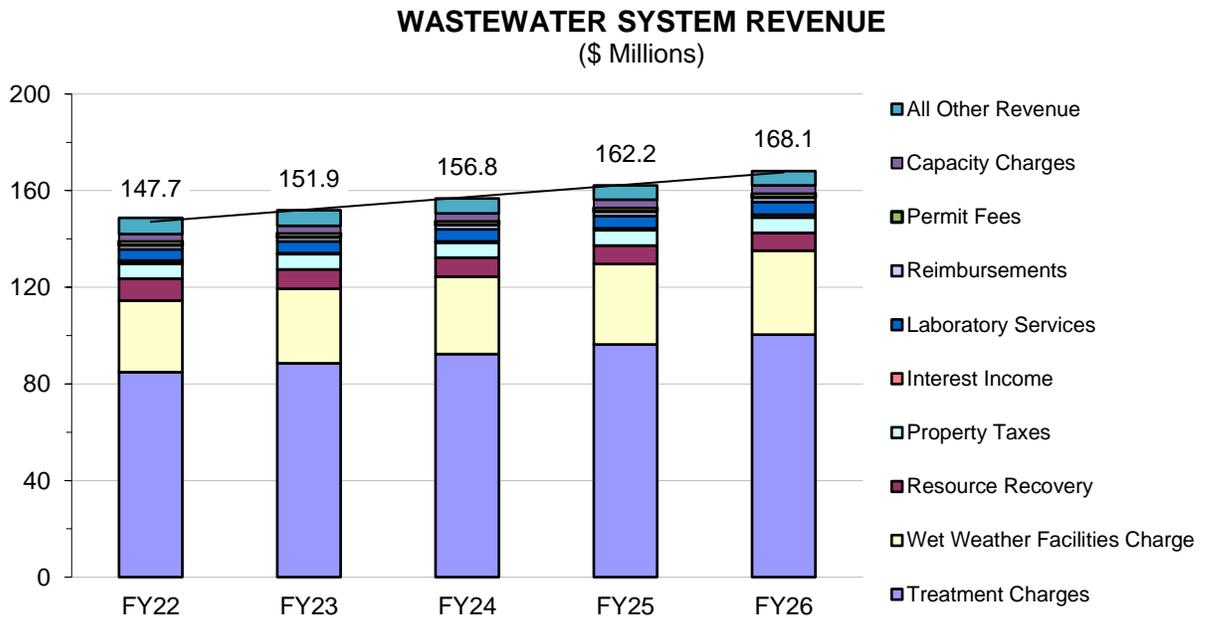
The key factors driving the need for increased Wastewater System revenues are:

- Increasing labor and benefit costs,
- Inflation on non-labor products and services, and
- Increasing capital expenditures.

Projected annual operating revenues are expected to increase from \$147.7 million in FY22 to \$168.1 million by FY26, an increase of \$20.4 million or 3.3 percent per year. The increase in revenue over the five-year period is to cover increased costs in operations and maintenance, debt service requirements, and revenue funding for capital projects.

The major components of the increases in operating revenue over the five-year period are Treatment Charges which are projected to increase from \$84.8 million in FY22 to \$100.4 million in FY26 and increases in revenue from the Wet Weather Facilities Charge from \$29.7 million in FY22 to \$34.8 million in FY26.

The following chart shows projected Wastewater System operating revenue by category for the next five years.



Five-Year Projection of Operating Budget

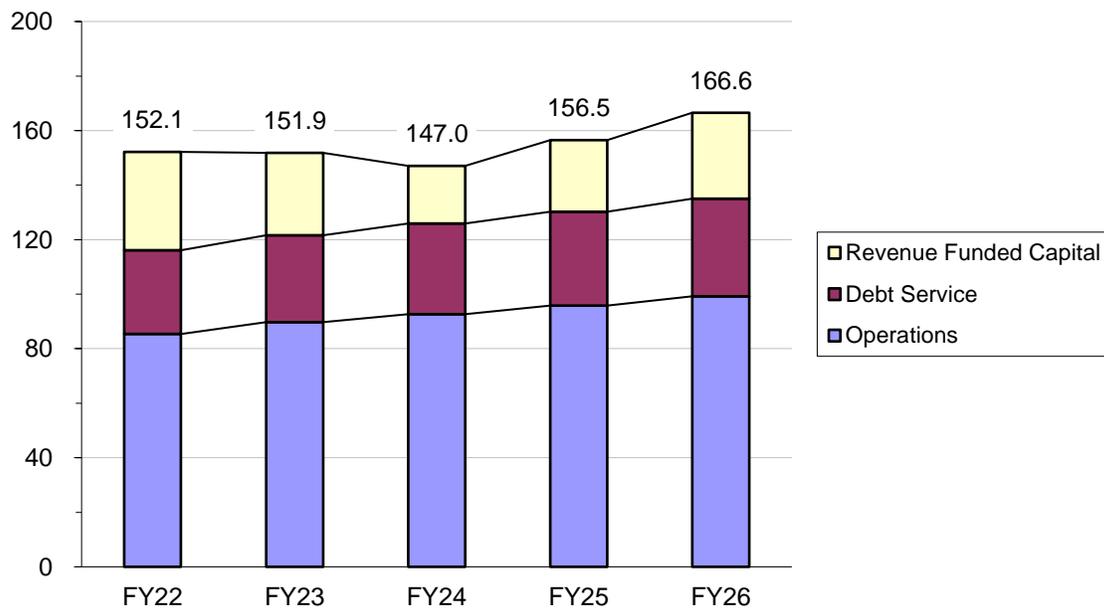
The Wastewater System operations expenses are projected to increase from \$85.4 million in FY22 to \$99.2 million in FY26, an increase of 3.8 percent per year.

Debt service requirements are projected to increase from \$30.7 million in FY22 to \$35.8 million by FY26, an increase of 3.9 percent per year.

The District uses rate revenue to cash fund a portion of the annual capital improvement expenses. The amount of revenue funded capital decreases over the five-year period from \$36.0 million in FY22 to \$31.5 million in FY26, a decrease of 3.3 percent per year.

This chart summarizes projected Wastewater System budget by category for the next five years.

WASTEWATER SYSTEM OPERATING BUDGET
(\$ Millions)



Five-Year Projection of Reserves

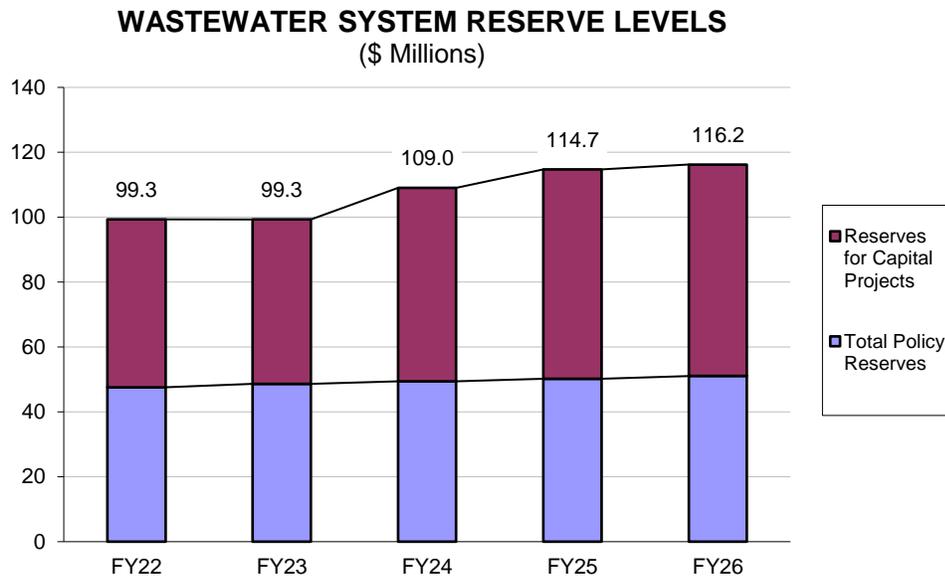
The operating reserves consist of:

- Working capital reserves equal to three months operating and maintenance expenses
- Self-Insured Liability reserve based on the actuarial Self-Insured Retention (SIR) funding recommendation
- Workers' Compensation reserve based on the actuarial SIR funding recommendation
- Rate stabilization reserve of a minimum of 5 percent of operating and maintenance expenses

The table below shows the changes to reserve components over the five-year period. Reserve balances meet or exceed the policy reserve levels for the entire period.

Wastewater System Reserve Components (\$ Millions)					
	Forecast				
	FY22	FY23	FY24	FY25	FY26
Projected Operating Budget Reserves	99.3	99.3	109.0	114.7	116.2
Policy Reserves					
Working Capital	21.3	22.4	23.2	24.0	24.8
Self-Insured Liability Reserve	1.2	1.2	1.2	1.2	1.2
Workers' Compensation Reserves	0.9	0.9	0.9	0.9	0.9
Rate Stabilization Reserve	<u>24.1</u>	<u>24.1</u>	<u>24.1</u>	<u>24.1</u>	<u>24.1</u>
Total Policy Reserves	47.6	48.7	49.4	50.2	51.0
Reserves Available for Capital Projects	51.7	50.6	59.6	64.5	65.2

The following chart shows Wastewater System reserve levels projected at the end of each fiscal year.



CAPITAL INVESTMENTS AND FINANCING

The Five-Year CIP outlines the Wastewater System capital investment plan for the next five-year period, the estimated cost of these investments and the sources of funds. Appropriations reflect the amount that is authorized and budgeted over a multi-year period for each program. Cash flows are the amounts estimated to be spent on each program in a given year. The five-year program for the Wastewater System includes \$396.6 million in capital project appropriations, including capital support expenses, and \$243.2 million in projected cash flow spending.

The focus of the CIP is the five-year period from FY22-26. Capital needs have been estimated for a second five-year period from FY27-31. Given the long-term nature of these capital improvement plans, by necessity they are preliminary estimates only and will be revised as studies are completed, priorities are redefined, and as new needs emerge. Therefore, the budget focuses on the first five years of the CIP.

Funding for these projects is drawn from the proceeds of revenue bond issues, commercial paper, grants, and current reserves and revenues.

For the FY22-26 CIP, an increasing amount of capital expenditures will be funded on a pay-as-you-go basis in accordance with the District's financial policies. Over the five-year period, the percentage of capital funded from debt will average 40.3 percent, less than the target maximum of 65 percent contained in the District's debt policy, and debt service will increase \$5.9 million as additional revenue bonds are issued. Wastewater System total outstanding debt will increase \$27.0 million during the period. Total debt outstanding at the end of the five-year period will total \$384.4 million.

In FY22 and FY23, the debt coverage ratio is projected at 2.22 and 2.13, respectively, and for FY24 through FY26, the ratio exceeds the target coverage ratio of 1.60.



Outfall Transition Structure construction with old Bay Bridge and Treasure Island in background

The following table shows the cash flow spending on capital improvements anticipated for the next five years, along with the financial resources anticipated to fund the capital program. Debt over the five-year planning period is below the financial target maximum of 65 percent.

Wastewater System Capital Budget Five-Year Financial Forecast (\$ Millions)						
	Forecast					
	FY22	FY23	FY24	FY25	FY26	Totals
Beginning Balance	0.0	0.0	0.0	0.0	0.0	0.0
Resources						
Revenue Funded Capital	36.0	30.2	21.1	26.3	31.5	145.2
New Bond Proceeds	<u>9.8</u>	<u>19.6</u>	<u>24.5</u>	<u>19.6</u>	<u>24.5</u>	<u>98.0</u>
Total Resources	45.8	49.8	45.6	45.9	56.0	243.2
Expenditures						
Capital Cash Flow	42.0	45.9	41.6	41.9	51.9	223.4
Capital Support	<u>3.8</u>	<u>3.9</u>	<u>4.0</u>	<u>4.1</u>	<u>4.1</u>	<u>19.9</u>
Total Expenditures	45.8	49.8	45.6	45.9	56.0	243.2
Ending Balance	0.0	0.0	0.0	0.0	0.0	0.0
Debt Percentage of Funding	21.4%	39.3%	53.7%	42.7%	43.7%	40.3%

Projected new bond issues, outstanding debt, and debt service are shown in the following table.

Outstanding Debt and Debt Service at End of Fiscal Year (\$ Millions)					
	Forecast				
	FY22	FY23	FY24	FY25	FY26
Beginning of Year Outstanding Debt	357.4	354.7	361.2	371.6	376.0
Debt Retired	12.7	13.6	14.6	15.6	16.7
New Bond Issues and Commercial Paper	<u>10.0</u>	<u>20.0</u>	<u>25.0</u>	<u>20.0</u>	<u>25.0</u>
Total Outstanding Debt	354.7	361.2	371.6	376.0	384.4
Debt Service, Existing Debt	29.9	29.9	29.9	29.8	29.8
Debt Service, New Debt	0.6	1.7	3.2	4.3	5.8
Debt Servicing Costs	<u>0.2</u>	<u>0.2</u>	<u>0.2</u>	<u>0.2</u>	<u>0.3</u>
Total Debt Service	30.7	31.9	33.3	34.4	35.8



Main Wastewater Treatment Plant in 1951



Main Wastewater Treatment Plant today

STATISTICAL AND SUPPLEMENTAL INFORMATION

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STATISTICAL AND SUPPLEMENTAL INFORMATION

The following provides additional statistical and supplemental information about the District.

Form of Government

The East Bay Municipal Utility District is a California Special District with water provision and wastewater treatment as its primary functions. It has corporate and tax powers but lacks the police powers of general purpose government. More detailed information can be found in the Introduction chapter, including the names and roles of elected and appointed officials. The Board of Directors is the body responsible for approving the biennial budget, and their appointed officials are responsible for developing and implementing the budget.

Geography

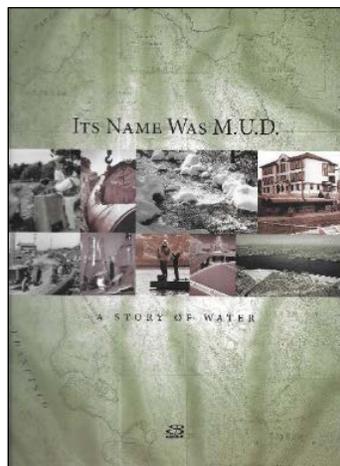
The location of the Water service area and Wastewater service area are shown on a map in the Introduction chapter. EBMUD's service area enjoys a Mediterranean climate and includes four modestly different climate zones (14-17) as defined by the Sunset Western Garden Book. The local climate impacts demand for water usage; the winter months are the coolest and are when almost all precipitation occurs, and the summer months are warm to hot and include almost no rainfall. EBMUD's water supply typically decreases during the summer due to outdoor watering and increases during the winter with rain and snow.

Community Profile

A short historical narrative of the District is provided in the Introduction chapter.

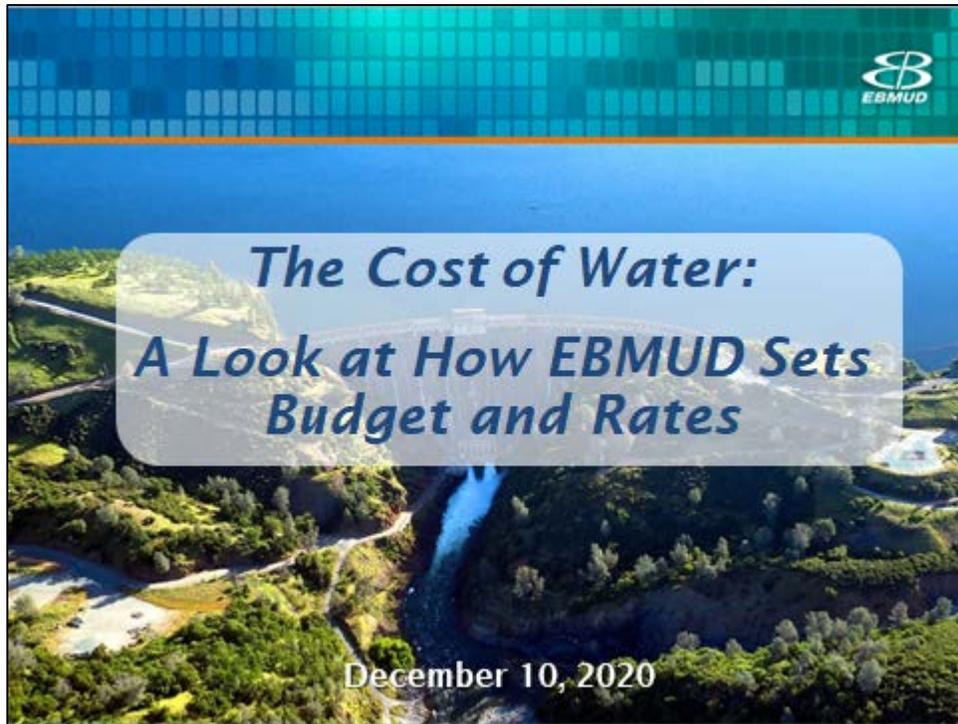
A timeline of the District's history is located at www.ebmud.com/about-us/who-we-are/mission-and-history/.

An additional publication providing specific historical details and photos of the District's legacy can be found in Its Name Was M.U.D. - A Story of Water, which can be purchased online at www.ebmud.com/store/books/its-name-was-mud.



Community Outreach and Engagement

Extensive community outreach activities were held to engage the public and further their understanding of the cost of providing District's services, and rates needed to support the costs. Due to the COVID-19 pandemic, virtual presentations were shared with community groups during the budget development process. Enhancements to the District website and Budget-in-Brief have increased the usability, clarity, and accessibility of financial information. A webinar "The Cost of Water" is available online and below to present how the District determines rates and builds a budget.



[The Cost of Water: A Look at How EBMUD Sets Budget and Rates \(https://youtu.be/zE_yAOa3daE\)](https://youtu.be/zE_yAOa3daE)

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nextdoor.com/agency-detail/ca/oakland/east-bay-municipal-utility-district/

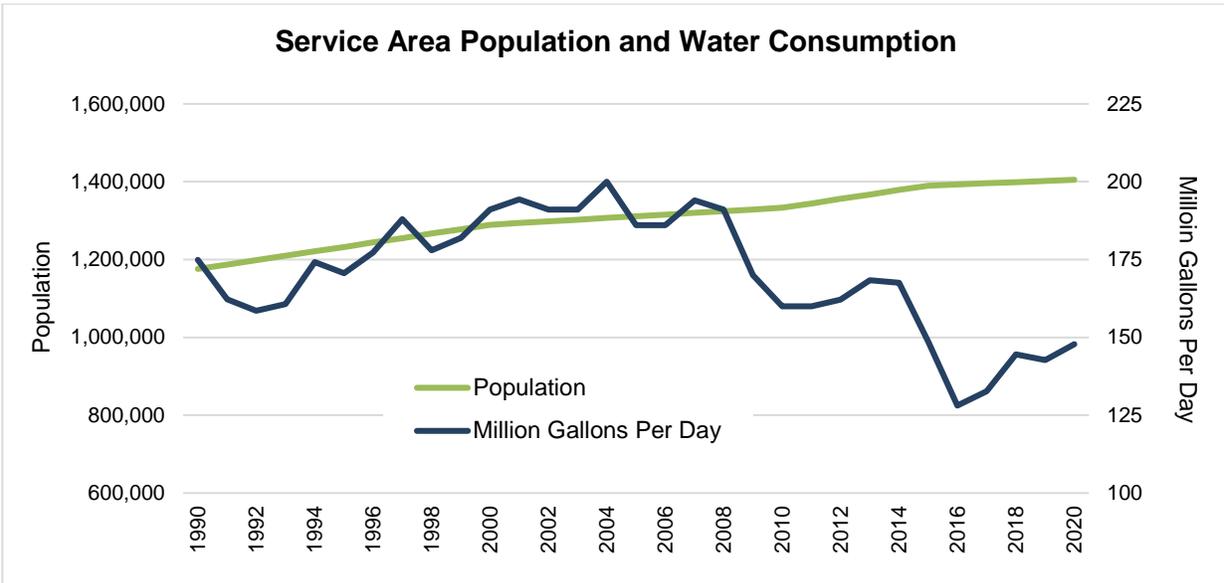


youtube.com/user/OfficialEBMUD

Demographics and Economics

Population and Water Consumption

As provided in the Introduction chapter, for the past 30 years the population trend data shows a slight rise for the region. Despite the population growth, per capita water usage has decreased due to customers' water efficiency as shown in the chart below.



Note: Customized population projections were developed for EBMUD's service area using data from the 2010 U.S. Census Bureau, 2017 Association of Bay Area Governments Projections Data, and Geographic Information System since portions of some cities within the service area are served such as Pleasant Hill, Walnut Creek, Blackhawk, San Ramon, Castro Valley, Norris Canyon, Fairview, and Hayward.

Customer Accounts

The Water System has 385,067 active accounts. Over 90 percent of water system active service connections are residential accounts, which make up approximately 52 percent of total water usage.

Water System Accounts			
Customer Type	Accounts	Consumption (MGD)	% of Usage
Residential	349,650	77.2	52.3%
Commercial	31,701	47.5	32.2%
Industrial	1,188	16.0	10.8%
Other	2,528	7.0	4.7%

The Wastewater System has 176,341 connections.

Wastewater System Accounts	
Customer Type	Accounts
Residential	159,383
Commercial	16,579
Industrial	712
Other	2,667

WaterSmart Business Certification

The WaterSmart Business Certification was established by the Board of Directors to promote water efficiency and showcase businesses that have achieved a high level of water conservation.



The program is open to EBMUD commercial, industrial, and institutional customers, including commercial landscape irrigators. Assessments include an analysis and recommendations for water uses in offices and retail trade, food service and hospitality, cleaning and wash down, cooling, industrial process water use, and landscape irrigation. Certification is awarded to individual sites/facilities that meet water certification criteria. Each individual site that meets criteria is recognized as a WaterSmart site.

EBMUD staff complete a water use assessment, recommend cost-effective water saving measures and provide resources for implementing water-efficiency upgrades, including technical reports and conservation incentives.

California Green Business Network Partnership

Over the next decade, the program will pivot towards a more inclusive model that will leverage the current partnerships with the Alameda and Contra Costa County Green Business Programs to reach a larger segment of commercial, institutional, and industrial customers. Since 2009, more than 190 businesses have been certified varying from office buildings to dry cleaners. These businesses saved more than 100 million gallons annually by increasing their water use efficiency. This new approach will continue to help commercial, institutional, and industrial customers not only to achieve water savings but to contribute towards a greener economy.



2019 WaterSmart Business Certification Recipients

The EBMUD Board of Directors recognized 20 businesses and institutions for outstanding water use efficiency in 2019. Since the beginning of the program in 2010, 190 organizations have been certified as a WaterSmart business and have saved over 100 million gallons per year. Each business worked with EBMUD to assess their water use, implement water saving measures at their facilities, and make ongoing water management a priority. As these businesses learned, water efficiency doesn't have to be complicated or expensive. Making small changes in infrastructure such as installing aerators or reducing watering times for landscape can yield great results. Due to the COVID-19 pandemic, no awards were given in 2020. Shown below are the 2019 award recipients:

- Au Beau Sejour French Preschool, Oakland
- Berkeley Natural Grocery Company, Berkeley
- Berkwood Hedge School, Berkeley
- Blue Heron Catering, Oakland
- Build It Green, Oakland
- Cactus Taqueria, Oakland
- California Rose Catering, Inc., Berkeley
- Cereske Electrical Cable Co., Oakland
- Digital Realty, Oakland
- Escuela Bilingüe Internacional - Alcatraz Campus, Oakland
- Evergreen Printing, Berkeley
- KW Engineering, Inc., Oakland
- Langan Engineering, Oakland
- Melissa Joy Manning, Berkeley
- Oakland Pallet, San Lorenzo
- Orinda Motors, Inc., Orinda
- Pipe Spy Inc., Oakland
- Stopwaste.org, Oakland
- Sustainable Technologies, Alameda
- The Athenian School, Danville

Additional information on WaterSmart Certification can be found at: www.ebmud.com/water/conservation-and-rebates/commercial/watersmart-business-certification-program.

Major Employers

The economy of the Bay Area is recovering as a result of the COVID-19 pandemic, and growth is expected to slowly continue in FY22 and FY23. The following two charts show major employers within the EBMUD service area for each county.

ALAMEDA COUNTY MAJOR EMPLOYERS (JUNE 2020)

Employer Name	Industry
Kaiser Permanente Medical Group Inc.	Health Care
Tesla	Electric Vehicle Manufacturer
Safeway Inc.	Supermarkets & Other Grocery
County of Alameda	Local Government
Sutter Health	Health Care
John Muir Health	Health Care
Chevron Corporation	Energy
PG&E Corporation	Energy
Wells Fargo Bank	Financial Services
Workday	Enterprise Cloud Applications

CONTRA COSTA COUNTY MAJOR EMPLOYERS (JUNE 2020)

Employer Name	Industry
Chevron Corporation	Energy
St. Mary's College	Colleges, Universities & Professional Schools
Bio-Rad Laboratories, Inc.	Research & Development in Biotechnology
Job Connections	Job Training Services
John Muir Medical Center	General Medical & Surgical Hospitals
Kaiser Permanente	General Medical & Surgical Hospitals
La Raza Market	Supermarkets & Other Grocery
Martinez Medical Offices	General Medical & Surgical Hospitals
USS-POSCO Industries	Manufacturing
Target Corporation	Retail

Source: 2020 County of Alameda and County of Contra Costa, Comprehensive Annual Financial Reports

Unemployment

Unemployment increased significantly in 2020 as a result of the COVID-19 pandemic. Some cities were impacted by higher unemployment compared to the State of California. Leisure/hospitality, retail, and transportation sectors were significantly impacted by higher unemployment while the construction sector mostly recovered in late fall of 2020.

UNEMPLOYMENT RATES

Seven Largest Cities in Service Area
Alameda and Contra Costa Counties and California

City / County / State	2016	2017	2018	2019	2020
Alameda	3.6%	3.3%	2.9%	2.6%	8.5%
Berkeley	3.4%	3.7%	2.9%	2.8%	6.7%
Oakland	5.3%	4.8%	3.5%	3.4%	10.5%
Richmond	5.1%	4.6%	3.7%	3.5%	11.2%
San Leandro	4.6%	3.5%	3.2%	3.1%	10.8%
San Ramon	3.0%	1.9%	2.7%	2.5%	6.7%
Walnut Creek	3.0%	3.3%	2.9%	2.6%	6.6%
Alameda County	4.2%	3.6%	3.1%	2.9%	8.8%
Contra Costa County	4.4%	3.8%	3.2%	3.1%	8.9%
California	5.4%	4.8%	4.3%	4.2%	10.1%

Source: California Employment Development Department

www.labormarketinfo.edd.ca.gov

Annual average by year. Data not seasonally adjusted.

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BOARD OF DIRECTORS' RESOLUTIONS

BOARD OF DIRECTORS' RESOLUTIONS

This section includes the Board of Directors' Resolutions for the Fiscal Years 2022 and 2023 Biennial Budget relating to rates, charges, and fees, budgets, and staffing positions.

**Rates, Charges and Fees
Resolution**

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RESOLUTION NO. 35224-21

ADOPTING WATER SYSTEM SCHEDULE OF RATES AND CHARGES AND
WASTEWATER SYSTEM SCHEDULE OF RATES AND CHARGES SUBJECT TO
PROPOSITION 218 FOR FISCAL YEAR 2022 AND FISCAL YEAR 2023; APPROVING AN
EXEMPTION UNDER THE CALIFORNIA ENVIRONMENTAL QUALITY ACT; AND
DIRECTING STAFF TO FILE A NOTICE OF EXEMPTION

Introduced by Director Mellon

; Seconded by Director McIntosh

WHEREAS, the Board of Directors of the East Bay Municipal Utility District (District) is adopting the Fiscal Year 2022 (FY22) and Fiscal Year 2023 (FY23) Operating and Capital Biennial Budget for expenditures necessary and advisable for the proper conduct of the activities of the District, including funding for needed capital projects and the operation of the water and wastewater systems, and to provide an adequate level of financial reserves and debt service coverage; and

WHEREAS, in November 2013, the District retained Raftelis Financial Consultants to perform an independent Cost of Service (COS) study for the water and wastewater systems, including a study of the proposed Drought Surcharges, to ensure that the District's rates and charges are compliant with the requirements of Proposition 218 (article XIII D, section 6 of the California Constitution); and

WHEREAS, in April 2015, Raftelis Financial Consultants completed the District's COS study and identified adjustments to individual water and wastewater rates and charges to conform to Proposition 218 cost of service principles, and substantiated the District's proposed Drought Surcharges as being consistent with Proposition 218; and

WHEREAS, in May 2019, Raftelis Financial Consultants completed a COS study for the District's wastewater system that found the District's charges to be generally consistent with Proposition 218 cost of service principles, and also recommended some adjustments to the wastewater system's rates and charges; and

WHEREAS, in accordance with Section 14401 of the California Public Utilities Code, on May 11, 2021, the General Manager filed with the Board of Directors the Biennial Report and Recommendation of the General Manager Fiscal Years 2022 & 2023 (Biennial Report), recommending revisions to the water and wastewater rates and charges to meet the District's revenue requirements for FY22 and FY23 including: (1) water service charges and flow charges for single-family residential, multi-family residential, commercial, and industrial customers; (2) wastewater treatment service charges and flow charges; (3) Revised Schedule A, Rate Schedule for Water Service; (4) Revised Wastewater System Schedule A (Rates for Treatment Service), and Schedule B (Wet Weather Facilities Charge) to update the respective wastewater charges; and

WHEREAS, the April 2015 COS study has been updated to reflect the proposed and projected FY22 and FY23 expenditures, revenues and water sales, and has been incorporated and reflected in the Biennial Report, and in the recommended revisions to the water system's rates and charges for FY22 and FY23; and

WHEREAS, the May 2019 COS study's recommended adjustments have been incorporated and reflected in the Biennial Report, and in the recommended revisions to the wastewater system's rates and charges for FY22 and FY23; and

WHEREAS, the rate structure for the water service charges has five customer classes: (1) Single-Family Residential, (2) Multi-Family Residential, (3) Non-residential, (4) Nonpotable/Recycled, and (5) Private Fire Service; and has five components: (1) Water Flow Charge, (2) Water Service Charge, (3) Elevation Surcharge, (4) Private Fire Service Charge, and (5) Drought Surcharge when a Stage 2, Stage 3, or Stage 4 water shortage has been declared by the Board of Directors; and

WHEREAS, the District maintains a staged system of Drought Surcharges to recover water shortage-related costs, including, without limitation, reduced revenues due to mandatory conservation, increased rates for purchased water, administrative costs, and penalties or fines for consumption of water over state-mandated limits; and

WHEREAS, the Biennial Report recommended that the District continue to maintain its existing Drought Surcharges for potential future implementation in the event of a Stage 2 or greater drought declaration in FY22 or FY23; and

WHEREAS, prior to implementing any Drought Surcharge in FY22 or FY23, the District will prepare an updated drought budget and adopt exact Drought Surcharges based on an updated COS study, and Drought Surcharges that are imposed will be consistent with the existing staged system and will not exceed the maximum percentages described in Schedule L (Drought Surcharge Rate Schedule for Water Service);

WHEREAS, as evidenced by the COS studies and Biennial Report, the water rates and charges are structured to proportionately allocate and recover the costs of providing water service among the various customer classes; and

WHEREAS, the wastewater rates and charges have three customer classes: (1) Single-Family Residential; (2) Multi-Family Residential; and (3) Non-Residential, which are further classified based on the type of business operated; and

WHEREAS, the rates for the wastewater service fees have five components, the first four of which are collected on the water bill: (1) Treatment Service Charge, (2) Treatment Strength Charge, (3) Treatment Flow Charge, (4) San Francisco Bay Pollution Prevention Fee, and (5) Wet Weather Facilities Charge; and

WHEREAS, because the Wet Weather Facilities Charge (WWFC) is a fixed charge that is based on the size of the property and unrelated to water or wastewater usage at the property, the District collects the WWFC on the property tax rolls of Alameda and Contra Costa Counties, pursuant to its authority under California Health & Safety Code (H&SC) section 5471, et seq., for all parcels that have connections to the local wastewater collection systems within the District's wastewater service area; and

WHEREAS, H&SC section 5473 requires approval by two-thirds of the members of the Board of Directors (i.e., by at least five (5) Board members) for the WWFC to be collected on the property tax roll; and

WHEREAS, for entities that are exempt from property taxes, the WWFC is collected through the District's billing process; and

WHEREAS, in accordance with H&SC section 5471(c), revenues from the WWFC will be used to fund capital expenses for District facilities required to handle peak wet weather flows that are in excess of normal discharges from wastewater customers; and

WHEREAS, together, as evidenced by the COS studies and Biennial Report, the wastewater rates and charges are structured to proportionately allocate and recover the costs of providing wastewater service among the various customer classes; and

WHEREAS, as evidenced by the COS studies and Biennial Report, the revenues derived from the water and wastewater rates and charges will not exceed the funds required to provide water and wastewater services and shall be used exclusively for the water and wastewater systems; and

WHEREAS, the water and wastewater rates and charges will not exceed the proportional cost of the services attributable to each parcel upon which they are imposed; and

WHEREAS, the water and wastewater rates and charges will not be imposed on a parcel unless the water and wastewater services are actually used by, or immediately available to, the owner of the parcel; and

WHEREAS, California Constitution article XIII D, section 6 (Article XIII D) requires that prior to imposing any increase to the water and wastewater service rates and charges, the District shall provide written notice (Notice) by mail of: (1) the proposed increases to such rates and charges to the record owner of each parcel upon which the rates and charges are proposed for imposition and any tenant directly liable for payment of the rates and charges; (2) the amount of the rates and charges proposed to be imposed on each parcel; (3) the basis upon which the rates and charges were calculated; (4) the reason for the rates and charges; and (5) the date, time, and location of a public hearing (Hearing) on the proposed rates and charges; and

WHEREAS, pursuant to Article XIII D such Notice is required to be provided to the affected property owners and any tenant directly liable for the payment of the rates and charges not less than forty-five days (45) prior to the Hearing on the proposed rates and charges; and

WHEREAS, the District did provide such Notice to the affected property owners and tenants of the proposed water and wastewater rates and charges in compliance with Article XIII D; and

WHEREAS, public workshops were conducted on January 26, 2021, and March 23, 2021, and a public hearing, noticed in the manner and for the time required by law, was conducted by the Board of Directors on June 8, 2021, at which times all interested persons were afforded an opportunity to be heard on matters pertaining to revision of the water and wastewater rates and charges; and

WHEREAS, at the Hearing the Board of Directors heard all oral testimony, and considered all written materials and written protests concerning the establishment and imposition of the proposed rate increases for the rates and charges for water and wastewater services, and at the close of the Hearing the District did not receive written protests against the establishment and imposition of the proposed rates and charges for the water and wastewater services from a majority of the record owners of the parcels upon which the rates and charges are proposed for imposition or the tenants directly liable for the payment of the water or wastewater rates and charges; and

WHEREAS, all comments, objections, and protests to the Biennial Report have been given full opportunity to be heard by the Board of Directors, and the Board of Directors has fully considered the Biennial Report; and

WHEREAS, the changes to the rates and charges as described above and as further set forth in this Resolution are subject to and comply with Chapter 11.5 of the Municipal Utility District Act (Public Utilities Code section 14401, et seq.); and

WHEREAS, the Board of Directors now desires to adopt and impose the proposed water and wastewater rates and charges; and

WHEREAS, the District, as the lead agency under the California Environmental Quality Act (CEQA), in consultation with the District's legal counsel, has evaluated the potential environmental impacts of adopting the water and wastewater rates and charges. The Board of Directors determined that adoption of the rates and charges set forth in this Resolution is exempt from CEQA review under Public Resources Code section 21080(b)(8) and CEQA Guidelines section 15273 because the water and wastewater rates and charges are necessary and reasonable to fund the administration, operation, maintenance, and improvements of the water and wastewater systems and will not result in the expansion of the water and wastewater systems. This exemption determination is supported by the COS study, Biennial Report, and the foregoing Recitals. Further, the adoption of the rates and charges set forth in this Resolution is also exempt from the requirements of CEQA as an action with no possibility of causing a significant effect on the environment;

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors hereby finds and determines the following:

1. The foregoing Recitals are true and correct, and by this reference are incorporated herein and made a part hereof.

2. Pursuant to California Constitution article X, section 2, that because of the conditions prevailing in this State, the general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare, and the use of water in excess of year-round indoor water consumption is primarily for uses outside the home and further finds such uses to be more discretionary in character than interior uses.
3. A tiered water rate structure proportionately allocates the costs of providing water service to those who place the greatest demands on District's water system and water supplies, and indirectly provides a conservation incentive to most users throughout the year to efficiently and reasonably use and not wastewater.
4. The rates and charges for water service promote maximum beneficial use of the limited water resources available to the District to meet current and future demands consistent with state and federal policy and water conservation best management practices. The Board of Directors also finds and determines that these rate structures are reasonably calculated to proportionately recover normal District costs and to achieve overall revenue neutrality for the entire rate structure.
5. The District's water system and wastewater system COS studies, completed in April 2015 and May 2019, respectively, and each updated in 2021 to reflect current costs, support the COS to each customer class based on their respective demand characteristics, while being revenue neutral, and making no geographical differentiation except with respect to the Elevation Surcharge, based on the elevation of the property receiving service, as described in the following Section 6.
6. The rates for the water Elevation Surcharge adopted herein are imposed to recover the costs to the District of pumping and delivering water to higher elevations.
7. The rates and charges for water service are reasonable and appropriate, proportionately allocate the cost of providing water service, and will meet the Board of Directors' goal of overall revenue neutrality.

BE IT FURTHER RESOLVED:

8. The WWFC funds the capital expenses of the District's infiltration and inflow (I&I) facilities that are required to handle wet weather flows that enter the wastewater system. The amount of wet weather flows that enter the wastewater system is proportional to the size of the collection system to serve each property, and accordingly, the WWFC will be based on the customer's lot size to reflect the potential amount of I&I entering into the wastewater system from a customer's lot. Three categories of lot size will be used to calculate the WWFC: 0-5,000 square feet ("sq. ft."); 5,001-10,000 sq. ft.; >10,000 sq. ft.

9. The rates and charges for wastewater service are reasonable and appropriate, proportionately allocate the cost of providing wastewater service, and will meet the Board of Directors' goal of overall revenue neutrality.

BE IT FURTHER RESOLVED:

10. At the close of the Hearing held on June 8, 2021, the District did not receive written protests against the establishment and imposition of the proposed rates and charges for the water and wastewater services from a majority of the record owners of parcels upon which the rates and charges are proposed for imposition or tenants directly liable for the payment of the water or wastewater rates and charges.
11. The Board of Directors finds and determines that the water system rates and charges and wastewater system rates and charges recommended in the Biennial Report are designed to recover the estimated cost of providing the services for which the rates are charged.

BE IT FURTHER RESOLVED:

12. All objections and protests to the Biennial Report are hereby overruled and denied and the Biennial Report is hereby accepted and approved.
13. The revised Schedule A of the Water System Schedule of Rates, Charges, and Fees for Customers of the District beginning FY22 contained in Chapter 5(a) of the Biennial Report is attached hereto as Exhibit A, and is hereby adopted, and the rates and charges and provisions therein contained are hereby fixed and established to be effective July 1, 2021; provided however that the revised water system rates and charges set forth in Schedule A shall take effect with billing cycles commencing on or after July 1, 2021 for services rendered on or after July 1, 2021, and will be prorated if a portion of the bill is for services rendered prior to July 1, 2021.
14. The revised Schedule A of the Water System Schedule of Rates, Charges, and Fees for Customers of the District beginning FY23 contained in Chapter 5(b) of the Biennial Report is attached hereto as Exhibit A, and is hereby adopted, and the rates and charges and provisions therein contained are hereby fixed and established to be effective July 1, 2022; provided however that the revised water system service charges and consumption charges set forth in Schedule A shall take effect with billing cycles commencing on or after July 1, 2022 for services rendered on or after July 1, 2022, and will be prorated if a portion of the bill is for services rendered prior to July 1, 2022.
15. The existing Schedule L of the Water System Schedule of Rates, Charges, and Fees for Customers of the District contained in Chapter 5(a) of the Biennial Report is attached hereto as Exhibit A, is not modified by this Resolution and therefore shall continue in full force and effect during FY22 and FY23, and the Drought Surcharges described therein shall remain available to be implemented during such period in the event of a Stage 2 or greater drought, provided that, prior to implementing any Drought Surcharge in FY22 or FY23, the District will prepare an updated drought budget and adopt exact Drought Surcharges based on an updated COS study, and any such Drought Surcharges that are imposed will be consistent with Schedule L and will not exceed the maximum percentages described therein.

16. The revised Schedules A and B of the Wastewater System Schedule of Rates, Charges, and Fees for Customers of the District beginning FY22 contained in Chapter 5(a) of the Biennial Report, attached hereto as Exhibit B, are hereby adopted, and the wastewater treatment charges and Wet Weather Facilities Charges therein contained, are hereby fixed and established to be effective July 1, 2021 for services rendered on or after July 1, 2021; provided however that the revised wastewater treatment charges set forth in wastewater Schedule A shall take effect with billing cycles commencing on or after July 1, 2021, and will be prorated if a portion of the bill is for services rendered prior to July 1, 2021.
17. The revised Schedules A and B of the Wastewater System Schedule of Rates, Charges, and Fees for Customers of the District beginning FY23 contained in Chapter 5(b) of the Biennial Report, attached hereto as Exhibit B, are hereby adopted, and the wastewater treatment charges and Wet Weather Facilities Charges therein contained, are hereby fixed and established to be effective July 1, 2022 for services rendered on or after July 1, 2022; provided however that the revised wastewater treatment charges set forth in wastewater Schedule A shall take effect with billing cycles commencing on or after July 1, 2022, and will be prorated if a portion of the bill is for services rendered prior to July 1, 2022.
18. As set forth more fully above and as evidenced by the COS studies and Biennial Report, the aforesaid actions constitute modification and approval of rates and other charges for the purpose of meeting operating expenses, including employee wage rates and fringe benefits; purchasing or leasing supplies, equipment, or material; meeting financial reserve needs and requirements; or obtaining funds for capital projects necessary to maintain service in the existing service area; and the Board of Directors therefore determines that its aforesaid actions are exempt from the requirements of CEQA. The Board of Directors further determines that these actions are exempt from the requirements of CEQA because there is no possibility that adoption of the rates and charges set forth herein will have a significant effect on the environment. Therefore, the Board of Directors hereby directs the Secretary of the District to file a Notice of Exemption in accordance with applicable statutes and regulations with the County Clerks of Alameda and Contra Costa Counties.

BE IT FURTHER RESOLVED:

19. The appropriate officers of the District are hereby authorized and directed to take such actions as shall be necessary to impose, enforce and collect the rates and charges.
20. The Board of Directors hereby declares that it would have adopted each section irrespective of the fact that any one or more subsections, subdivisions, sentences, clauses, or phrases be declared unconstitutional, invalid, or ineffective, and should any portion of this Resolution be invalidated by order of a court of competent jurisdiction, all other portions of this Resolution shall remain in full force and effect until modified or superseded by action of this Board of Directors.

21. This Resolution shall supersede all other previous District resolutions and ordinances that may conflict with, or be contrary to, this Resolution.

ADOPTED this 8th day of June, 2021 by the following vote:

AYES: Directors Coleman, Katz, Mellon, McIntosh, Patterson, Young and President Linney.

NOES: None.

ABSENT: None.

ABSTAIN: None.



President

ATTEST:



Secretary

APPROVED AS TO FORM AND PROCEDURE:



General Counsel

RESOLUTION NO. 35225-21

ADOPTING REVISED REGULATIONS AND REVISED WATER AND WASTEWATER SYSTEMS SCHEDULES OF RATES, CHARGES, AND FEES NOT SUBJECT TO PROPOSITION 218 FOR FISCAL YEAR 2022 AND FISCAL YEAR 2023, INCLUDING SYSTEM CAPACITY CHARGE, STANDARD PARTICIPATION CHARGE, WASTEWATER CAPACITY FEE, RECREATION USE FEES, PUBLIC RECORDS ACT FEES; APPROVING AN EXEMPTION UNDER THE CALIFORNIA ENVIRONMENTAL QUALITY ACT, AND DIRECTING STAFF TO FILE A NOTICE OF EXEMPTION

Introduced by Director Mellon

; Seconded by Director Patterson

WHEREAS, the Board of Directors is adopting the Fiscal Year 2022 (FY22) and Fiscal Year 2023 (FY23) Operating and Capital Biennial Budget for expenditures necessary and advisable for the proper conduct of the activities of the East Bay Municipal Utility District (District), including funding for needed capital projects and for the operation of the water and wastewater systems and to provide an adequate level of financial reserves and debt service coverage; and

WHEREAS, on May 11, 2021, the General Manager filed with the Board of Directors the Biennial Report and Recommendation of the General Manager Fiscal Years 2022 & 2023 (Biennial Report), recommending revisions to the rates and charges to meet the District's revenue requirements for FY22 and FY23, including: (1) capacity charges for the water and wastewater systems, installation and service charges and fees for single-family residential, multi-family residential (MFR), commercial, and industrial customers; (2) Schedules C, D, E, F, G, H, J, and N of the Water System Schedules of Rates, Charges, and Fees for Customers of the East Bay Municipal Utility District; (3) Schedules C, D, E, F, G, and H of the Wastewater System Schedules of Rates, Charges, and Fees for Customers of the East Bay Municipal Utility District; (4) Sections 1, 3, 7, 13, 15, 17, and 31 of the Regulations Governing Water Service of the East Bay Municipal Utility District (Regulations) to make various modifications more fully-described below; (5) Sections 3B, 3C, 4, 9, 19, 21, 24, 26, 28, 29 and 30 of the Regulations to remove pronouns and replace them with the original noun; (6) Recreation Use Fees for the Camanche Hills Hunting Preserve, Camanche North and South Recreation Areas, Lafayette Recreation Area, and San Pablo Recreation Area; and (7) duplication and computer programming fees related to Public Records Act requests; and

WHEREAS, a Water System Capacity Charge (SCC) Study was prepared for the District in 2021 by Stantec Consulting Services, which reviewed the latest information available to the District including water use trends, projected future water demand, and updates to the value of the District's water system facilities and recommended certain changes to the SCC calculation methodology to incorporate the updated information, and the recommendations and updated methodology and analysis from the SCC Study were used to calculate the proposed FY22 SCC; and

WHEREAS, the changes to rates, charges, and fees as described above and as further set forth in this Resolution are not subject to Proposition 218 (article XIII D, section 6 of the California Constitution), but are subject to the public notice and hearing requirements stated in Chapter 11.5 of the Municipal Utility District Act (Public Utilities Code section 14401, et seq.); and

WHEREAS, public workshops held on November 24, 2020, January 26, 2021, and March 23, 2021, and a public hearing held on June 8, 2021, noticed in the manner and for the time required by law, were conducted by the Board of Directors, at which times all interested persons were afforded an opportunity to be heard on matters pertaining to revision of the rates and charges; and

WHEREAS, all comments, objections, and protests to the Biennial Report have been given full opportunity to be heard by the Board of Directors, and the Board of Directors has fully considered said Biennial Report; and

WHEREAS, other proposed changes to the District's Water and Wastewater Systems Schedules of Rates, Charges, and Fees, which are subject to and comply with the notice and hearing requirements of Proposition 218, are included in a separate rate resolution and a Proposition 218 public hearing was conducted by the Board of Directors on June 8, 2021, to consider the proposed water and wastewater systems rates and charges subject to Proposition 218;

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors hereby finds and determines the following:

1. The foregoing Recitals are true and correct, and by this reference are incorporated herein and made a part hereof.
2. The service charges adopted herein are imposed to recover the cost of special services provided by the East Bay Municipal Utility District to the customer or fee payor and were determined based upon District estimates of the costs of providing the relevant services. The Water Demand Mitigation Fee, the SCC, the Standard Participation Charge (SPC), and the Wastewater Capacity Fee (WCF) are levied only as a condition of extending or initiating service upon the request of a customer. The charges adopted herein are not imposed upon real property or upon a person as an incident of property ownership and were not calculated or developed on the basis of any parcel map, including an assessor's parcel map.
3. The purpose of the SCC and the SPC is to finance facilities necessary to provide service to new development that will be served by the East Bay Municipal Utility District. The SCC and SPC are charges for public facilities in existence at the time the charge is imposed or a charge for new public facilities to be acquired or constructed in the future that are of proportional benefit to the person or property being charged, including supply or capacity contracts for rights or entitlements, real property interests, and entitlements and other rights of the District involving capital expense relating to its use of existing or new public facilities. The SCC methodology that combines the incremental cost and "buy-in" methodologies recovers the cost of many existing District facilities, which provide benefits to new users.

4. The proposed revisions to the SCC, set forth in Schedule J of the Water System Schedule of Rates, Charges, and Fees which is attached as part of Exhibit A hereto, are necessary and appropriate to implement the recommendations of the Water SCC Study prepared for the District in 2021 by Stantec Consulting Services, and to clarify the applicability of the SCC to accessory dwelling units (ADUs) and junior accessory dwelling units (JADUs). The proposed modifications implement updated unit cost calculations and consumption analysis and create two categories of MFR dwelling units (over 500 square feet (sq. ft.) and 500 sq. ft. and under), which in most cases results in a reduced SCC, compared to the existing SCC, for most standard services.
5. The proposed revisions to the SPC and the Water Demand Mitigation Fees, set forth in Schedules H and N, respectively, of the Water System Schedule of Rates, Charges, and Fees which is attached to this Resolution as part of Exhibit A hereto, reflect updated costs based on the findings from the 2021 Water SCC Study, which results in reduced charges.
6. The facts and evidence presented to the Board of Directors establish that there is a reasonable relationship between the need for the identified facilities and the impacts of the types of development for which the SCC and SPC are charged, and there is a reasonable relationship between the use of those fees to finance facilities necessary to provide a supply of water to new development and the type of development for which the fees are charged. The District's methodology appropriately allocates to the SCC and SPC the costs related to augmenting the District's water supplies to satisfy increased demand associated with future development within the District's existing service area.
7. The purpose of the WCF is to recover the costs of providing wastewater treatment capacity for new or expanded system use. The WCF is a charge for public facilities in existence at the time the charge is imposed that is of proportional benefit to the person or property being charged, including supply or capacity contracts for rights or entitlements, real property interests, and entitlements and other rights of the District involving capital expense relating to its use of existing or new public facilities. The WCF is based on a "buy-in" or an equity approach, whereby new users "buy-in" to a wastewater system that has adequate capacity to serve both existing demands and new growth. The WCF reflects the findings and recommendations of the WCF study completed in May 2019 by Raftelis Financial Consultants.
8. The proposed revisions to the WCF, set forth in Schedule G of the Wastewater System Schedule of Rates, Charges, and Fees which is attached as part of Exhibit B hereto, include updates for the construction of additional facilities and construction cost escalations and create two categories of MFR dwelling units (over 500 sq. ft. and 500 sq. ft. and under) to be consistent with the SCC changes recommended by the 2021 Water SCC Study.
9. The facts and evidence presented to the Board of Directors establish that there is a reasonable relationship between the need for the identified facilities and the impacts of the types of development for which the WCF is charged, and there is a reasonable relationship between the use of those fees to finance facilities to new development and the type of development for which the fees are charged.

10. The Water and Wastewater Systems Rates, Charges, and Fees herein described and recommended in the Biennial Report, and the recommended Recreation Use Fees and Public Records Act-related fees, are designed to recover the estimated cost to provide the services for which the fees are charged, as determined by the District based upon evidence regarding such costs.
11. The proposed revisions to Sections 1, 3, 7, 13, 17, and 31 of the Regulations implement the following modifications, respectively: (a) update and simplify definitions of an ADU and JADU; (b) clarify when individual meters are required for each dwelling unit in a MFR and multi-unit commercial structure; (c) allow for providing water for emergency domestic use for those who are unhoused, unsheltered or experiencing homelessness at authorized sites; (d) authorize additional leak adjustments to customer after taking into consideration the circumstances surrounding the leak; (e) add JADUs along with ADUs in the description of how capacity charges are applied; and (f) notify applicants seeking water service for new MFR and multi-unit commercial structures of the District's individual and submetering requirements.
12. The proposed revision to Section 15 of the Regulations, and the proposed adoption of a new Section 15A of the Regulations, will facilitate implementation of a modified approach to enforcing the payment of delinquent accounts for single-family residences as directed by the Board in Resolution 35211-20 adopted December 8, 2020, including the use of flow restrictors under specified circumstances and an expansion of collections through liens and property tax bills.
13. The proposed revisions to Sections 3B, 3C, 4, 9, 19, 21, 24, 26, 28, 29 and 30 of the Regulations would remove pronouns and replace them with the original noun to which the pronoun referred.
14. The water, wastewater, recreation, and Public Records Act rates, charges, and fees are imposed for specific products, services, benefits, and privileges provided, for entrance to and use of property, and/or for rental or lease of property, and those rates, charges, and fees do not exceed the reasonable costs to the District of providing those products, benefits, privileges and services to the payors, or in the case of fees for entrance to and use of property and/or for rental or lease of property, the fees do not exceed the reasonable value of the property interest provided. These rates, charges, and fees were determined by the District based upon evidence regarding such costs.

BE IT FURTHER RESOLVED:

15. All objections and protests to the Biennial Report are hereby overruled and denied and said Biennial Report is hereby accepted and approved.
16. The revised Schedules C, D, E, F, G, H, J, and N of the Water System Schedules of Rates, Charges, and Fees for Customers of the East Bay Municipal Utility District, beginning FY22, and the revised Sections 1, 3, 3B, 3C, 4, 7, 9, 13, 15, 17, 19, 21, 24, 26, 28, 29, 30, and 31 of the Regulations contained in Chapter 5(a) of the Biennial Report, all attached hereto as part of Exhibit A, are hereby adopted and the charges and provisions therein contained are hereby fixed and established to be effective July 1, 2021 for services rendered on or after July 1, 2021.

17. The proposed new Section 15A of the Regulations, attached hereto as part of Exhibit A, is hereby adopted and the charges and provisions therein contained are hereby fixed and established to be effective July 1, 2021 for services rendered on or after July 1, 2021, provided that, consistent with Resolution 35211-20, District staff is hereby directed to defer the implementation of flow restrictors until the state of emergency declared to exist in California by Governor Gavin Newsom on March 4, 2020 with respect to the COVID-19 pandemic has been terminated.
18. The revised Schedules C, D, E, F, G, and H of the Wastewater System Schedules of Rates, Charges, and Fees for Customers of the East Bay Municipal Utility District beginning FY22, contained in Chapter 5(a) of the Biennial Report, and attached hereto as part of Exhibit B, are hereby adopted and the charges and provisions therein contained are hereby fixed and established to be effective July 1, 2021 for services rendered on or after July 1, 2021.
19. The revised Schedules C, D, and F of the Wastewater System Schedules of Rates, Charges, and Fees for Customers of the East Bay Municipal Utility District beginning FY23, contained in Chapter 5(b) of the Biennial Report, and attached hereto as part of Exhibit B, are hereby adopted and the charges and provisions therein contained are hereby fixed and established to be effective July 1, 2022 for services rendered on or after July 1, 2022.
20. The revised Recreation Use Fees beginning Calendar Year 2022, contained in Chapter 5(a) of the Biennial Report, and attached hereto as Exhibit C, are hereby fixed and established to be effective January 1, 2022 for the Calendar Year 2022 charges.
21. The revised duplication and computer programming fees related to Public Records Act requests, contained in Chapter 5(a) of the Biennial Report, and attached hereto as Exhibit D, are hereby fixed and established to be effective July 1, 2021 for services rendered on or after July 1, 2021.
22. The District, as lead agency under the California Environmental Quality Act (CEQA), has evaluated the potential environmental impacts of adopting the fees and charges set forth herein. As the decision-making body for the East Bay Municipal Utility District, the Board of Directors has reviewed and considered the information contained in the administrative record for the adoption of the fees and charges. Based on information in the administrative record, including the Biennial Report, the studies referenced herein, and the District's evidence-based estimates of the costs of providing the relevant services, the Board of Directors finds that the aforesaid actions constitute modification and approval of charges for the purpose of meeting operating expenses, including employee wage rates and fringe benefits; purchasing or leasing supplies, equipment, or material; meeting financial reserve needs and requirements; or obtaining funds for capital projects necessary to maintain service in the District's existing service area, and will not result in the expansion of the water and wastewater systems; and the Board of Directors therefore determines that its aforesaid actions are exempt from the requirements of CEQA under Public Resources Code section 21080(b)(8) and CEQA Guidelines section 15273. The Board of Directors further determines the actions set forth in this Resolution are also exempt from the requirements of CEQA as actions with no possibility of causing a significant effect on the environment. The Board of Directors hereby directs the Secretary

of the District to file a Notice of Exemption in accordance with applicable statutes and regulations with the County Clerks of Alameda, Amador, Calaveras, Contra Costa, and San Joaquin Counties.

BE IT FURTHER RESOLVED:

23. If any section, subsection, clause or phrase in this Resolution or the application thereof to any person or circumstances is for any reason held invalid, the validity of the remainder of this Resolution or the application of such provisions to other persons or circumstances shall not be affected thereby and shall remain in full force and effect until modified or superseded by action of this Board of Directors. The Board of Directors hereby declares that it would have passed this Resolution and each section, subsection, sentence, clause, or phrase thereof, irrespective of the fact that one or more sections, subsections, sentences, clauses or phrases or the application thereof to any person or circumstance be held invalid.

BE IT FURTHER RESOLVED:

24. The appropriate officers of the East Bay Municipal Utility District are hereby authorized and directed to take such actions as shall be necessary to impose, enforce and collect said fees, rates, charges, and regulations.

ADOPTED this 8th day of June, 2021 by the following vote:

AYES: Directors Coleman, Katz, Mellon, McIntosh, Patterson, Young and President Linney.

NOES: None.

ABSENT: None.

ABSTAIN: None.



President

ATTEST:



Secretary

APPROVED AS TO FORM AND PROCEDURE:



General Counsel

**Operating and Capital Budget
Resolution**

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RESOLUTION NO. 35226-21

APPROVING THE BUDGET OF THE EAST BAY MUNICIPAL UTILITY DISTRICT
WATER AND WASTEWATER SYSTEMS FOR FISCAL YEAR 2022 AND
FISCAL YEAR 2023 AND ESTABLISHING THE TERMS AND CONDITIONS
FOR THE PAYMENT OF DEMANDS AGAINST THE DISTRICT

Introduced by Director McIntosh ; Seconded by Director Young

WHEREAS, the General Manager has prepared an estimate of all expenditures necessary and advisable for the proper conduct of the activities of the East Bay Municipal Utility District (District) and submitted the estimate to the Board of Directors in the Proposed Biennial Budget Fiscal Years 2022 and 2023 (Proposed Biennial Budget); and

WHEREAS, the Proposed Biennial Budget reflects proposed regular rate increases. The proposed regular rate increases for the Water System are 4.0% and 4.0% for Fiscal Year 2022 (FY22) and Fiscal Year 2023 (FY23), respectively. The proposed regular rate increases for the Wastewater System are 4.0% and 4.0% for FY22 and FY23, respectively; and

WHEREAS, the FY22 and FY23 Proposed Biennial Budget does not include an appropriation for drought contingency expenditures; and

WHEREAS, Drought Surcharges will continue to remain available as a contingency and will be up to 8.0%, 20.0%, and 25.0% for Drought Stages 2, 3, and 4, respectively, which would apply to each unit of potable water consumed if the Board of Directors declares a Stage 2 or greater drought at an exact rate to be fixed by the Board of Directors, not to exceed the aforementioned percentages. Prior to implementing any Drought Surcharge, the District will update its drought related costs and propose a drought contingency appropriation for consideration by the Board of Directors; and

WHEREAS, workshops were held on January 26, 2021, and March 23, 2021, at which time the Board of Directors and members of the public were provided an opportunity to review and ask questions about the recommended budget prepared by the General Manager; and

WHEREAS, the Board of Directors has considered all the oral and written information presented to it;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the East Bay Municipal Utility District as follows:

1. The budget for FY22 and FY23 presented by the General Manager is hereby approved and adopted as the FY22 and FY23 budget for the East Bay Municipal Utility District. Copies of the budget documents are on file in the Office of the Secretary and are made a part of this Resolution as though set forth in full.
2. For the purposes of complying with Section 11891.5 of the Public Utilities Code, the FY22 and FY23 budget is expressed in major groups of accounts as indicated below. The following amounts are hereby appropriated for expenditure:

WATER SYSTEM:	<u>FY22</u>	<u>FY23</u>
Operating Budget	\$314,683,929	\$328,671,817
Debt Service	211,910,668	222,362,779
Capital Budget	<u>404,784,000</u>	<u>418,386,000</u>
Total Water System	<u>\$931,378,597</u>	<u>\$969,420,596</u>

WASTEWATER SYSTEM		
Operating Budget	\$85,389,894	\$89,736,374
Debt Service	30,710,464	31,868,514
Capital Budget	<u>57,907,000</u>	<u>54,108,000</u>
Total Wastewater System	<u>\$174,007,358</u>	<u>\$175,712,888</u>

3. The General Manager is authorized to approve the payment of demands against the District in FY22, without further Board of Directors' authorization, so long as the demands are incurred for purposes and within the amounts set forth in the projection of the District's operations set forth above with respect to FY22. Projection of the District's operations with respect to FY23 will be resubmitted to the Board of Directors in June 2022 for review and approval, consistent with Public Utilities Code section 11891.5.
4. The General Manager is authorized for FY22 and FY23 to transfer funds between the Capital Budget and the Operating Budget in both the Water and Wastewater Systems budgets as required, but not to exceed a variance of 5.0% and provided that the total budget for each of the two systems remains unchanged.
5. Subject to compliance with Section 12751 of the Public Utilities Code, authority is hereby delegated to incur obligations for the purposes and within the amounts specified for such purposes in the budget hereby approved under such terms and conditions as the General Manager shall establish.
6. In order to provide for completion of work on projects authorized but not completed as of the close of the fiscal year, balances remaining at the close of Fiscal Year 2021 and Fiscal Year 2022, respectively, are hereby appropriated for expenditure in the subsequent fiscal year, in addition to the applicable fiscal year appropriations for capital and operating expenditures.
7. The Director of Finance is hereby authorized and directed to distribute the FY22 and FY23 appropriations to the various accounts of the District in accordance with generally accepted accounting principles and consistent with the purposes and objectives identified in the approved budget. The Director of Finance is further authorized to apply surplus revenues above the targeted reserve levels identified in the approved budget to retire currently outstanding bonds where it is cost-effective to do so, fund capital expenditures in FY22 and FY23, or set aside revenues in a restricted fund to fund capital expenditures. Directors and department head managers are authorized to transfer unexpended funds to other approved operations or capital projects, provided that the total Capital Budget and Operating Budget for the Water and Wastewater Systems remain unchanged, except for the 5.0% variance authorized for the General Manager in this Resolution. An annual report of the transferred capital unexpended funds will be submitted by the Budget Office to the General Manager.

8. Any monies received during FY22 and FY23 as a consequence of a grant approved for acceptance by the Board of Directors are hereby appropriated for the purposes for which the grant has been approved. Such appropriation includes authorization for the General Manager to expend such monies and for the Director of Finance to make payments therefore in accordance with the terms and conditions and for the purposes of the grant.

9. The Board of Directors hereby declares the District's intent to reimburse itself with the proceeds of one or more issues of tax-exempt bonds, commercial paper notes or other indebtedness (Obligations) for a portion of the costs of the District's capital improvement program for its Water and Wastewater Systems, as set forth above in the District's Capital Budget for FY22 and FY23. The maximum principal amount of the Obligations expected to be issued to finance the costs of such capital improvement program, as set forth in the District's Capital Budget is \$404.8 million in FY22 and \$418.4 million in FY23 in the Water System, and \$58.0 million for FY22 and \$54.2 million in FY23 for the Wastewater System. The District reasonably expects on the date hereof that it will reimburse certain expenditures paid pursuant to the District's Capital Budget with the proceeds of the Obligations.

ADOPTED this 8th day of June, 2021 by the following vote:

AYES: Directors Coleman, Katz, Mellon, McIntosh, Patterson, Young and President Linney.

NOES: None.

ABSENT: None.

ABSTAIN: None.



 President

ATTEST:



 Secretary

APPROVED AS TO FORM AND PROCEDURE:



 General Counsel

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**Staffing
Resolution**

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RESOLUTION NO. 35227-21

AUTHORIZING THE NUMBER AND CHARACTER OF POSITIONS
AND AUTHORIZING THE GENERAL MANAGER TO TAKE
ACTION IN CONNECTION THEREWITH

Introduced by Director Patterson ; Seconded by Director Coleman

WHEREAS, the Board of Directors of the East Bay Municipal Utility District (District) is charged with the responsibility to determine and create the number and character of positions required to carry on the functions of the District; and

WHEREAS, the General Manager has filed a report with the Board of Directors recommending that 2,156.75 full-time equivalent (FTE) positions be authorized to carry on the functions of the District in Fiscal Year 2022 and 2,155.75 FTE positions be authorized to carry on the functions of the District in Fiscal Year 2023;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the East Bay Municipal Utility District as follows:

1. That 2,156.75 FTE positions be and hereby are authorized for Fiscal Year 2022 and 2,155.75 FTE positions be and hereby are authorized for Fiscal Year 2023, and that said positions are hereby converted, reallocated, created, deleted, and/or flexibly staffed in accordance with Exhibits A, B1, B2 and C, which are attached hereto and incorporated herein by this reference, and that the character of the positions (Full-Time Civil Service, Full-Time Civil Service Exempt, Limited Term, Temporary Construction, Temporary, Intermittent, and Part-Time) so authorized shall be as set forth in said Exhibits.
2. That the necessary amounts for salaries and benefits for the positions authorized in Section 1 of this Resolution for Fiscal Year 2022 and Fiscal Year 2023, which include the classification plan changes set forth in Exhibit C, are hereby authorized and appropriated, and that the salary schedules and monthly salary or wage rates for the positions authorized in this Resolution are approved.
3. That the Board of Directors hereby authorizes the General Manager to determine the specific classification and organizational placement within the District for each of the authorized positions and authorizes the General Manager to reallocate, flexibly staff, reassign and/or transfer said existing positions and personnel within the District, provided that: (1) the total number of positions that are represented remains unchanged for each fiscal year; (2) the character of the positions as enumerated above and as set forth in Exhibits A, B1, B2 and C is not changed provided, however, that the General Manager is authorized to flexibly staff regular full-time civil service positions with intermittent civil service positions consistent with procedures adopted by the General Manager for that purpose; (3) the total approved salaries and benefits for Fiscal Year 2022 and Fiscal Year

2023 are not exceeded; (4) this authority is exercised in accordance with applicable District rules, regulations, policies and procedures, including those adopted to implement the District's civil service system set forth at Section 12051, *et seq.* of the Municipal Utility District Act and any applicable provisions of relevant Memoranda of Understanding between the District and AFSCME Local 444, AFSCME Local 2019, IFPTE Local 21, and Stationary Engineers Local 39; and (5) the General Manager posts notice of such proposed changes in a conspicuous place at the District, and also notifies the Board of Directors, AFSCME Local 444, AFSCME Local 2019, IFPTE Local 21, and Stationary Engineers Local 39 of such proposed changes at least seven (7) calendar days prior to making any such change.

4. That the continuing operational need for any and all Limited Term and Temporary Construction positions included in the budget for Fiscal Year 2022 and Fiscal Year 2023 be evaluated and reported on by departments as part of their budget request for Fiscal Year 2022 and Fiscal Year 2023. Departments are responsible for ensuring that Limited Term and Temporary Construction positions are terminated at the end of their assigned project and are not reassigned without obtaining approval from the General Manager and the Board of Directors.
5. That all other resolutions or motions or parts thereof in conflict with this Resolution are revoked, provided that the authority of the General Manager or the General Manager's designee to create special replacement positions (Section 4, Resolution No. 30950-84; Section 3, Resolution No. 31904-87, and Section 4, Resolution No. 32084-88 as amended by Resolution No. 33425-04) and to transfer functions and positions (Section 5, Resolution No. 30950-84) and to approve special replacement positions/classifications for Limited Term and Temporary Construction positions (Section 3, Resolution No. 31303-85) and to temporarily replace full-time employees who are absent or are on approved leave as a result of participation in the District's drug and alcohol testing program, not to exceed a maximum of six (6) months and in accordance with applicable District Civil Service Rules (Section 8, Resolution No. 32926-95) and to designate the classification, organizational assignment, duration, and appointments for up to ten (10) Workforce Transition (WT) positions to mitigate near term retirements (Resolution 33676-08) in accordance with applicable District Civil Service Rules shall remain in full force and effect.

BE IT FURTHER RESOLVED by the Board of Directors of the East Bay Municipal Utility District that, in accordance with Exhibit C, attached hereto and incorporated herein:

6. The following classification shall be added: Manager of Wastewater Technical and Emerging Issues
7. The following classifications shall be deleted: Telephone/Radio Operator and Senior Telephone/Radio Operator.

BE IT FURTHER RESOLVED that this Resolution shall become effective July 1, 2021.

ADOPTED this 8th day of June, 2021 by the following vote:

AYES: Directors Coleman, Katz, Mellon, McIntosh, Patterson, Young and President Linney.

NOES: None.

ABSENT: None.

ABSTAIN: None.



President

ATTEST:



Secretary

APPROVED AS TO FORM AND PROCEDURE:



General Counsel

EXHIBIT "A"
SUMMARY OF STAFF CHANGES
 (July 1, 2021)

Group/Department	FY21	FY22	FY23	FY23 Net Change
	Amended Staff Years ⁽¹⁾	Recommended Staff Years ⁽²⁾	Recommended Staff Years ⁽²⁾	
ADMINISTRATION	<u>1</u>	<u>1</u>	<u>1</u>	<u>0</u>
CUSTOMER AND COMMUNITY SERVICES	<u>152.5</u>	<u>154</u>	<u>154</u>	<u>0</u>
ENGINEERING AND CONSTRUCTION	<u>286.5</u>	<u>287.5</u>	<u>287.5</u>	<u>0</u>
FINANCE	<u>196.5</u>	<u>197.5</u>	<u>197.5</u>	<u>0</u>
Finance	102.5	103.5	103.5	0
Information Systems	94	94	94	0
HUMAN RESOURCES	<u>61.5</u>	<u>62.5</u>	<u>61.5</u>	<u>-1</u>
OFFICE OF THE GENERAL COUNSEL	<u>17</u>	<u>17</u>	<u>17</u>	<u>0</u>
OFFICE OF THE GENERAL MANAGER	<u>27.5</u>	<u>28.5</u>	<u>28.5</u>	<u>0</u>
MAINTENANCE AND CONSTRUCTION	<u>617.5</u>	<u>613.5</u>	<u>613.5</u>	<u>0</u>
OPERATIONS & MAINTENANCE SUPPORT	<u>53</u>	<u>54</u>	<u>54</u>	<u>0</u>
WATER OPERATIONS	<u>341.25</u>	<u>340.75</u>	<u>340.75</u>	<u>0</u>
WATER AND NATURAL RESOURCES	<u>105</u>	<u>104</u>	<u>104</u>	<u>0</u>
Water Resources	38.5	38.5	38.5	0
Natural Resources	66.5	65.5	65.5	0
WATER RECYCLING PROGRAM	<u>8</u>	<u>8</u>	<u>8</u>	<u>0</u>
WATER SYSTEM TOTAL	1867.25	1868.25	1867.25	-1
WASTEWATER	<u>288.5</u>	<u>288.5</u>	<u>288.5</u>	<u>0</u>
DISTRICT-WIDE TOTAL IN FTEs ⁽³⁾	2155.75	2156.75	2155.75	-1

Notes ⁽¹⁾, ⁽²⁾, ⁽³⁾ - See page 2

EXHIBIT "A"
SUMMARY OF STAFF CHANGES
 (July 1, 2021)

TOTAL POSITIONS AUTHORIZED BY TYPE OF STATUS	FY22 Positions	FY22 Net Change	FY23 Positions	FY23 Net Change
Full-Time	2064	6	2064	0
Temporary	45	-3	45	0
Part-Time	17	1	17	0
Intermittent	5	0	5	0
Temporary Construction and Limited-Term	58	-4	57	-1
DISTRICT-WIDE TOTAL IN POSITIONS⁽³⁾	2189	0	2188	-1

Notes to Exhibit A:

- (1) Amended staffing applies mid-year Board actions, changes to the FY21 position Resolution under the General Manager's authority, position transfers, and administrative corrections effective May 26, 2021.
- (2) Regular Full-Time, Temporary Construction, and Limited Term Positions = 1.0 staff year
 Part-Time and Temporary = .5 staff year
 Intermittent = .75 staff year
- (3) The District-wide full-time equivalent (FTE) total takes into account that temporary, part-time and intermittent positions are valued at less than 1.0 staff years each. The District-wide position total does not make that distinction.

EXHIBIT "B1"
FY22
POSITION ADDITIONS/DELETIONS/CONVERSIONS/REALLOCATIONS/FLEX STAFFING
(July 1, 2021)

240

Customer Service

ORG	FTE Change	From	To	Monthly Salary Range	Representation Change						Explanation	
					2019	444	21	39	MC	NR/ Exempt		
325	1.0		1.0 LT New Business Representative I	58	1.0							Process Applicant Work for development projects resulting from strong building activity
331	-1.0	1.0 Customer Services Manager		80					-1.0			Position is no longer needed
332	0.5	1.0 Temp Customer Services Representative I/II	1.0 LT Customer Services Representative I/II/III	55	X							Customer Support Program
332	0.5	1.0 Temp Senior Customer Services Representative	1.0 LT Customer Services Representative III / LT Senior Customer Services Representative	59	X							Customer Support Program
332	0.5	1.0 Temp Senior Customer Services Representative	1.0 LT Senior Customer Services Representative	59	X							Customer Support Program

Engineering

ORG	FTE Change	From	To	Monthly Salary Range	Representation Change						Explanation	
					2019	444	21	39	MC	NR/ Exempt		
532	1.0		1.0 Engineering Designer I/II	67	1.0							Pipeline Rebuild; Applicant Pipelines
532	0.0	1.0 LT Engineering Designer I/II / LT Drafter I/II/III	1.0 Engineering Designer I/II / Drafter I/II/III	67	X							Pipeline Rebuild; Applicant Pipelines

EXHIBIT "B1"
FY22
POSITION ADDITIONS/DELETIONS/CONVERSIONS/REALLOCATIONS/FLEX STAFFING
(July 1, 2021)

Finance

ORG	FTE Change	From	To	Monthly Salary Range	Representation Change						Explanation
					2019	444	21	39	MC	NR/ Exempt	
200	0.0	1.0 Administrative Clerk	1.0 Reg/LT Information Systems Support Analyst II	70	X						Complete implementation of the FIS/MMIS Replacement Project
220	0.0	1.0 Printing Technician	1.0 TC Accounting & Financial Systems Analyst / Printing Technician II	73	X						HRIS Replacement Project
220	0.0	1.0 Reg/LT Senior Accounting & Financial Systems Analyst / Management Analyst I/II	1.0 Reg/TC Senior Accounting & Financial Systems Analyst / Management Analyst I/II	77		X					Complete implementation of the FIS/MMIS Replacement Project
220	0.0	1.0 LT Sr. Accounting and Financial Systems Analyst / Management Analyst I/II	1.0 TC Sr. Accounting and Financial Systems Analyst / Management Analyst I/II	77		X					Complete implementation of the FIS/MMIS Replacement Project
230	0.0	1.0 Reg/LT Administrative Clerk / LT Information Systems Specialist I/II/III	1.0 Reg/TC Administrative Clerk / TC Information Systems Specialist I/II/III	57	X						Complete implementation of the FIS/MMIS Replacement Project
230	0.0	1.0 Reg/LT Stores Supervisor / Reg/LT Material Storage Supervisor	1.0 Reg/TC Stores Supervisor / Reg/TC Material Storage Supervisor	76			X				Complete implementation of the FIS/MMIS Replacement Project

Human Resources

ORG	FTE Change	From	To	Monthly Salary Range	Representation Change						Explanation
					2019	444	21	39	MC	NR/ Exempt	
360	-0.5	1.0 LT Special Employment Program Trainee	1.0 P/T Ranger Naturalist I	52	1.0						Create a bridge for qualified Ranger/Naturalist candidates
361	-0.5	1.0 LT Special Employment Program Trainee	1.0 P/T Ranger Naturalist I	52	1.0						Create a bridge for qualified Ranger/Naturalist candidates
365	1.0		1.0 Human Resources Technician	59					1.0		Provide additional confidential support to HRIS

EXHIBIT "B1"
FY22
POSITION ADDITIONS/DELETIONS/CONVERSIONS/REALLOCATIONS/FLEX STAFFING
(July 1, 2021)

242

Office of General Manager

		Representation Change									
ORG	FTE Change	From	To	Monthly Salary Range	2019	444	21	39	MC	NR/ Exempt	Explanation
100	1.0		1.0 Special Assistant III/IV	90						1.0	Provide leadership over the Diversity, Equity and Development Division

Maintenance and Construction

		Representation Change									
ORG	FTE Change	From	To	Monthly Salary Range	2019	444	21	39	MC	NR/ Exempt	Explanation
753	0.0	6.0 LT Meter Reader/ Mechanic	6.0 LT Meter Reader/ Mechanic	54		X					Reauthorize six LTs for meter reading and maintenance. Positions scheduled to revert to temporary status are reauthorized as limited term to record water consumption for billing accuracy
757	-2.0	2.0 LT Special Employment Program Trainee		11						-2.0	The Special Employment Program is no longer operational

Operations & Maintenance Support

		Representation Change									
ORG	FTE Change	From	To	Monthly Salary Range	2019	444	21	39	MC	NR/ Exempt	Explanation
790	1.0		1.0 Assistant Engineer / Associate Civil/Electrical/Mechanical Engineer	76	1.0						Develop, plan, and implement the trench soils master plan projects

EXHIBIT "B1"
FY22
POSITION ADDITIONS/DELETIONS/CONVERSIONS/REALLOCATIONS/FLEX STAFFING
(July 1, 2021)

Water Operations

ORG	FTE Change	From	To	Monthly Salary Range	Representation Change					Explanation	
					2019	444	21	39	MC		NR/ Exempt
734	1.0		1.0 Assistant Engineer	72	1.0						Engineering support for regulatory compliance
734	-1.0	1.0 LT Associate Civil/Electrical/Mechanical Engineer		76	-1.0						LT Expired
762	-0.5	1.0 PT Housekeeper		44	-1.0						Workload efficiencies

Natural Resources

ORG	FTE Change	From	To	Monthly Salary Range	Representation Change					Explanation	
					2019	444	21	39	MC		NR/ Exempt
480	-1.0	1.0 Manager of Natural Resources		93							Position is no longer necessary

Wastewater

ORG	FTE Change	From	To	Monthly Salary Range	Representation Change					Explanation		
					2019	444	21	39	MC		NR/ Exempt	
900	1.0		1.0 Manager of Wastewater Technical and Emerging Issues	84				1.0			Position will focus on wastewater priorities and high-level technical emerging issues	
902	-1.0	1.0 LT Information Services Supervisor		81			-1.0				LT expired	
911	-1.0	1.0 LT Special Employment Program Trainee		11						-1.0	The Special Employment Program is no longer operational	
915	1.0		1.0 Associate Electrical Engineer	76	1.0						Cybersecurity and control systems network oversight to ensure regulatory compliance	
Total FY22 Representation Change					5.0	0.0	-1.0	0.0	1.0	1.0	-5.0	

EXHIBIT "B1"
FY22
POSITION ADDITIONS/DELETIONS/CONVERSIONS/REALLOCATIONS/FLEX STAFFING
(July 1, 2021)

Notes to Exhibit B1:

1. "X" in the "Representation Change" column indicates no change

EXHIBIT "B2"
FY23
POSITION ADDITIONS/DELETIONS/CONVERSIONS/REALLOCATIONS/FLEX STAFFING
(July 1, 2021)

Human Resources

ORG	FTE Change	From	To	Monthly Salary Range	Representation Change						Explanation
					2019	444	21	39	MC	NR/ Exempt	
365	-1.0	1.0 LT Human Resources Technician		59					-1.0		LT expired
Total FY23 Representation Change					0.0	0.0	0.0	0.0	-1.0	0.0	0.0

EXHIBIT "C"
FY22
CLASSIFICATION PLAN CHANGES
(July 1, 2021)

CLASSIFICATION ADDITIONS

Class Code	Class Title	Monthly Salary Range	Rep. Unit	Explanation
TBD	Manager of Wastewater Technical and Emerging Issues	R84 (\$11,905 - \$17,197)	MGR	Position will focus on wastewater priorities and high-level technical emerging issues

CLASSIFICATION DELETIONS

Class Code	Class Title	Monthly Salary Range	Rep. Unit	Explanation
5482	Telephone/Radio Operator	R49 (\$5,368 - \$6,525)	2019	Classification is obsolete and no longer needed
5480	Senior Telephone/Radio Operator	R53 (\$5,926 - \$7,203)	2019	Classification is obsolete and no longer needed

FINANCIAL POLICIES

BOARD OF DIRECTORS' FINANCIAL POLICIES

This section includes five policies adopted by the District's Board of Directors to govern fiscal matters. The policies are listed below and reproduced on the following pages.

Policy 4.02	Cash Reserves	Adopted July 2020
Policy 4.04	Financial Planning and Budgetary Control	Adopted September 2020
Policy 4.07	Investment Policy	Adopted April 2021
Policy 4.13	Establishing Water and Wastewater Rates	Adopted April 2016
Policy 4.27	Debt Management	Adopted July 2020



Policy 4.02

EFFECTIVE 28 JUL 20

SUPERSEDES 25 OCT 16

CASH RESERVES

IT IS THE POLICY OF EAST BAY MUNICIPAL UTILITY DISTRICT TO:

Maintain operating and self-insurance reserves necessary to provide ongoing working capital by striving to meet the financial goals outlined below.

Financial Goals

- Maintain operating reserves at a level sufficient to meet working capital and unanticipated needs, specifically:
 - Maintain Working Capital Reserve of at least 3.0 times monthly net operating and maintenance expenses.
 - Maintain Self-Insured Liability Program Reserve 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.
 - Maintain Workers' Compensation Program Reserve 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.
 - Maintain Rate Stabilization Reserve for the Water System at a minimum of 20 percent of projected annual water volume revenues and for the Wastewater System at a minimum of 5 percent of operating and maintenance expenses.
-

Authority

Motion No. 058-94, April 12, 1994
As amended by Resolution No. 33211-00, June 27, 2000
As amended by Resolution No. 33429-04, June 8, 2004
As amended by Resolution No. 33481-05, June 14, 2005
As amended by Resolution No. 33485-05, July 12, 2005
As amended by Resolution No. 34052-15, September 22, 2015
As amended by Resolution No. 35008-16, October 25, 2016
As amended by Resolution No. 35034-17, April 25, 2017
As amended by Resolution No. 35192-20, July 28, 2020

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Policy 4.04

EFFECTIVE 22 SEP 20

SUPERSEDES 26 JUN 18

FINANCIAL PLANNING AND BUDGETARY CONTROL

IT IS THE POLICY OF THE EAST BAY MUNICIPAL UTILITY DISTRICT TO:

Establish a financial plan and biennial budget for the Water System and the Wastewater System, to include:

- Financial Planning**
- Prepare financial forecasts for a minimum of five years using reasonable assumptions and historical data to anticipate changes in revenues and expenses in order to plan for long term financial stability.
 - Develop programs which set levels of operating, capital, and debt service expenditures including staffing that may be necessary during the biennial budget period.
 - Establish a budget that supports financial stability which is based on fair and reasonable water and wastewater rates.
-

- Financial Monitoring**
- Monitor the budget to ensure that the total amount expended and committed does not exceed the total revenue and receipts available during the fiscal year.
 - Provide periodic status reports on expenditures, revenues, and investments.
-

Transfers

The General Manager is authorized to transfer up to five percent of the fiscal year adopted budget between the capital and operating budgets provided that the total adopted budget remains unchanged. Budget transfers between the Water and Wastewater Systems are prohibited.

Authority

Resolution 27058, August 27, 1974
 As amended by Resolution 32874-94, August 9, 1994
 As amended by Resolution 33177-99, November 23, 1999
 As amended by Resolution 33577-07, January 9, 2007
 As amended by Resolution 33710-09, April 28, 2009
 As amended by Resolution 35099-18, June 26, 2018
 As amended by Resolution 35203-20, September 22, 2020

References

Policy 4.02	Cash Reserves and Debt Management
Policy 7.03	Emergency Preparedness/Business Continuity
Procedure 417	Financial Planning and Budgetary Control

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Policy 4.07

EFFECTIVE 27 APR 21

SUPERSEDES 28 APR 20

INVESTMENT POLICY

IT IS THE POLICY OF THE EAST BAY MUNICIPAL UTILITY DISTRICT TO:

Invest District funds and funds managed by the District on behalf of its Joint Powers Authorities (JPAs) in compliance with investment criteria for safety, liquidity, yield, and diversification as set forth herein. Investments shall be in securities with a range of maturities to provide adequate security and liquidity to pay demands when due while providing a risk-adjusted market rate of return on investments that takes into consideration the cash flow needs of the District and its JPAs.

Authority Section 53600 et. seq. of the California Government Code (Government Code) and Chapter 6, Article 7 of the Municipal Utility District Act (M.U.D. Act) govern the investment of idle monies of the District. Section 53635 of the Government Code defines how investments are to be handled for Joint Powers Authorities.

Delegation of Authority The authority and responsibility to invest idle monies of the District is delegated to the Director of Finance as the Treasurer. The Director of Finance may designate individual staff to carry out his/her responsibilities under this policy.

No Bond Proceeds The investment of bond proceeds is specifically defined in individual bond indenture documents and is not included in this policy. This exemption also applies to funds held at the Trustee in Principal, Interest, Debt Service Reserve, or other accounts for the purpose of servicing the bonds.

Ethics and Conflicts of Interest Officers and employees involved in the investment process shall:

- refrain from personal business activity that could conflict with proper execution of the District's investment program, or which could impair their ability to make impartial investment decisions on behalf of the District,
- disclose any material financial interest in financial institutions that conduct business with the District,
- disclose material personal financial/investments that are related to or could reasonably be affected by the performance of the District's investments,
- refrain from undertaking any personal investment transactions with the same individual with whom business is conducted on behalf of the District's investments, and
- comply with the District's Conflict of Interest Code, Procedure 418 - Gifts, Personal Loans and Personal Benefit Interests, Procedure 601 - Conflict of Interest Disqualification Procedure, and District Procedure 447 - Vendor Interactions and Procurement Integrity

Investment Criteria and Objectives Criteria for selecting investments shall:

- adhere to the prudent investor standard, described in Section 53600.3 of the Government Code as follows: "when investing, reinvesting, purchasing, acquiring, exchanging, selling, or managing public funds, a trustee shall act with care, skill, prudence, and diligence under the circumstances then prevailing, including, but not limited to, the general economic conditions and the anticipated needs of the agency, that a prudent person acting in a like capacity and familiarity with those matters would use in the conduct of funds of a like

character and with like aims, to safeguard the principal and maintain the liquidity needs of the agency,” **and**

- conform with the Government Code and the M.U.D. Act, **and**
- have the following objectives, in order of priority:
 1. *Safety* - The District's ability to recover principal and interest. Investments shall be made that will seek to ensure the preservation of principal and interest and to minimize risk to the greatest extent possible. It is the primary duty of the Treasurer to protect, preserve and maintain cash and investments on behalf of the District.
 2. *Liquidity* - The District's ability to have cash available when needed to support expenditure cycles and budgetary objectives.
 3. *Yield* – The District's ability to provide a risk-adjusted market rate of return on the District's investments while conforming to the safety and liquidity criteria above.
 4. *Diversification* – The District's ability to maintain an investment portfolio that includes a range of security types. In order to accomplish this, each Investment Option shall have defined limits on maximum share of the portfolio, single issuer and single issue holdings; and maturity, rating and other restrictions where applicable.

Maturity

The weighted average maturity of the portfolio shall not exceed 900 days.

Rating Agencies and Rating Requirements

As outlined below, some Investment Options have rating requirements. In that context, Rating Agencies is defined as:

- Standard & Poor's Financial Services (S&P),
- Moody's Investors Service (Moody's), and
- Fitch Ratings (Fitch), only.

Ratings requirements:

- are provided using the S&P scale and should be read as “or equivalent” to other Rating Agencies scales. Rating Agencies scales are included for reference in Exhibit 1,
- apply at the time of purchase only, with subsequent downgrades below requirement levels prompting a case-by-case evaluation of the investment, and
- only apply to the Rating Agencies rating the security.

Investment Options

The District is able to purchase investments in the instruments listed in this section as allowed and defined under Section 53600 et. seq. of the Government Code, Chapter 6, Article 7 of the M.U.D. Act, Board Resolutions, and via this policy. As used in this section, the term “Portfolio” refers to all investable funds covered by this policy.

1. United States Treasury Obligations

- Maximum Share of Portfolio: Unlimited
- Maximum Issuer Limit: n/a
- Maximum Issue Limit: n/a
- Maximum Maturity: Not to exceed five (5) years from the settlement date
- Minimum Rating: n/a
- Other Restrictions: none

2. United States Government Agencies Obligations

Under this subsection, only obligations issued by the following agencies are permitted:

- o Federal Agricultural Mortgage Corporation (FAMC)
- o Federal Farm Credit Bank (FFCB)
- o Federal Home Loan Bank (FHLB)
- o Federal Home Loan Mortgage Corporation (FHLMC)
- o Federal National Mortgage Association (FNMA)
- Maximum Share of Portfolio: Unlimited
- Maximum Issuer Limit: 40% of the Portfolio
- Maximum Issue Limit: n/a
- Maximum Maturity: Not to exceed five (5) years from the settlement date
- Minimum Rating: n/a
- Other Restrictions: none

3. State of California, Local Agency Investment Fund (LAIF)

- Maximum Share of Portfolio: as determined by the State Treasurer and in accordance with Section 16429.1 of the Government Code
- Maximum Issuer Limit: n/a
- Maximum Issue Limit: n/a
- Maximum Maturity: n/a
- Minimum Rating: n/a
- Other Restrictions: none

4. Local Government Investment Pools

Under this subsection, only obligations of the following agencies are permitted:

- o California Asset Management Program (CAMP)
- o Investment Trust of California (CalTRUST)
- Maximum Share of Portfolio: 40% of the Portfolio
- Maximum Issuer Limit: 20% of the Portfolio
- Maximum Issue Limit: n/a
- Maximum Maturity: n/a
- Minimum Rating: Ratings of AAAM by at least one Rating Agency
- Other Restrictions: none

5. Money Market Mutual Funds

Under this subsection, only Money Market Mutual Funds with stable, non-floating NAV (Net Asset Value, the value of assets divided by number of shares) are permitted:

- Maximum Share of Portfolio: 20% of the Portfolio
- Maximum Fund Limit: 5% of Money Market Mutual Fund's assets
- Maximum Issue Limit: n/a
- Maximum Maturity: n/a
- Minimum Rating: AAAM by at least two Rating Agencies
- Other Restrictions: none

The District will request from each Money Market Mutual Fund, prior to investing and on an annual basis after investing, documents which provide details on the operations of the fund. These documents, along with the other criteria above, including the rating restriction, will be used to determine the suitability to receive Portfolio funds.

6. Certificates of Time Deposit

Under this subsection, only investments in selected depositories, using one or more private sector entity, in compliance with and as authorized under Government Code Section 53601.8 are permitted.

- Maximum Share of Portfolio: 20% of the Portfolio when added together with Negotiable Certificates of Deposit
- Maximum Issuer Limit: applicable maximum FDIC deposit insurance coverage limit
- Maximum Issue Limit: n/a
- Maximum Maturity: Not to exceed one (1) year from the settlement date
- Minimum Rating: AA- by at least one Rating Agency
- Other Restrictions:
 - o Investment in local branches within the District, whenever possible.

7. Negotiable Certificates of Deposit

- Maximum Share of Portfolio: 20% of the Portfolio when added together with Certificates of Time Deposits
- Maximum Issuer Limit: applicable maximum FDIC deposit insurance coverage limit
- Maximum Issue Limit: 10% of issue
- Maximum Maturity: Not to exceed five (5) years from the settlement date
- Minimum Rating: AA- by all Rating Agencies
- Other Restrictions:
 - o Issued by banks with total deposits of one billion dollars (\$1,000,000,000) or more.

8. Commercial Paper

- Maximum Share of Portfolio: 20% of the Portfolio
- Maximum Issuer Limit: 5% of the portfolio
- Maximum Issue Limit: n/a
- Maximum Maturity: Not to exceed 270 days from the settlement date
- Minimum Rating: A-1+ from at least one Rating Agency
- Other Restrictions:
 - o Issued by an entity that is, at the time of purchase:
 - organized and operating in the United States as a general corporation, with total assets exceeding \$500,000,000 and debt (other than commercial paper) rated A or better by at least one Rating Agency ; or
 - is organized within the United States as a special purpose corporation, trust, or limited liability company, with program wide credit enhancements including, but not limited to, overcollateralization, letters of credit, or a surety bond, **and** has commercial paper that is rated A-1+ by at least one Rating Agency.

9. Medium Term Corporate Notes

- Maximum Share of Portfolio: 20% of the Portfolio
- Maximum Issuer Limit: 5% of the Portfolio
- Maximum Issue Limit: 5% of original issue amount
- Maximum Maturity: Not to exceed 5 years from the settlement date
- Minimum Rating: AA- from at least one Rating Agency, and not lower than A by any Rating Agency
- Other Restrictions:
 - o Issued by corporations organized and operating within the United States or by depository institutions licensed by the United States or any state and operating within the United States.

10. Repurchase Agreements

- Maximum Share of Portfolio: 20% of the Portfolio
- Maximum Issuer Limit: n/a
- Maximum Issue Limit: n/a
- Maximum Maturity: Not to exceed 270 days from the settlement date
- Minimum Rating: n/a
- Other Restrictions:
 - o Collateral may only be in any securities authorized in items 1, or 2
 - o A Master Repurchase Agreement must be on file with the District
 - o Security must be marked to market on a daily basis and delivered to the District's custodial bank at a market value of at least 102%

Funds on deposit at the District's commercial bank may be invested in overnight repurchase agreements through a sweep program.

11. Municipal Obligations

Under this subsection, only registered obligations of the following agencies are permitted:

- The State of California
- Any local agency within the State of California
- Municipal Bonds:
 - Maximum Share of Portfolio: 20% of the Portfolio when added together with Municipal Notes
 - Maximum Issuer Limit: 5% of the Portfolio
 - Maximum Issue Limit: 10% of original issue amount
 - Maximum Maturity: Not to exceed five (5) years or with a put provision within five (5) years of settlement date
 - Minimum Rating: AA- or equivalent by at least one Rating Agency, and not lower than A by any Rating Agency
 - Other Restrictions: none
- Municipal Notes:
 - Maximum Share of Portfolio: 20% of the Portfolio together with Municipal Bonds
 - Maximum Issuer Limit: 5% of the Portfolio
 - Maximum Issue limit: 10% of original issue amount
 - Maximum Maturity: n/a
 - Minimum Rating: Notes maturing within 365 days must have a rating of SP-1+ from at least one Rating Agency
 - Other Restrictions: none

Zero or Negative Market Rates

As authorized under Section 53601.6 and at the discretion of the Director of Finance or its designees, investments can be made “in securities issued by, or backed by, the United States government that could result in zero- or negative-interest accrual if held to maturity, in the event of, and for the duration of, a period of negative market interest rates.” Those investment may also then be held until their maturity dates.

Investment Placement

Investment placement shall be determined by, but not limited to, continual evaluation and projection of market conditions, interest rate trends, cash flow needs, economic data, yield curves, and interest rate forecasts. Additionally, for investments purchased or sold in the secondary market, best efforts will be made to obtain at least three quotations from Purchasing Entities (as defined below) or to obtain timely and verifiable third-party market pricing data for the investment in question. The combination of these factors shall determine where, in what denomination, and for what maturity investments are made.

Selling Securities Prior To Maturity

When selling securities prior to maturity, principal losses are only allowable either:

- if the sale of securities is necessary to meet payment obligations,
- to comply with this policy, while considering the impact of the sale(s), or
- if the proposed sale is to be made in conjunction with a purchase and the proposed sale in combination with the subsequent purchase can enhance the Portfolio's yield.

Collateral

Securities placed with agents of depository shall at all times be maintained as specified in District Resolution 33232-01 in one or more trust companies, State or national banks located within California, the Federal Reserve Bank, or with any state or national bank located in any city designated as a federal reserve city by the Board of Governors of the Federal Reserve System, and to take from any such banks or trust companies receipts for securities so deposited. Requests for Collateral substitution and releases are subject to the Treasurer's written approval.

Portfolio Performance

The Portfolio will seek to attain a risk-adjusted market rate of return that takes into consideration the cash flow needs of the District. As a result, portfolio performance will be measured using common market indicators. Those may include, but are not limited to: the Federal funds rate, short-term government obligations rates, and other market rates that reflect the mix of securities in the Portfolio.

Purchasing Entities

Investments will be purchased from either:

- Primary Dealers as designated by the Federal Reserve Bank of New York,
- National or California State Chartered Banks,
- Federal or California Chartered Savings Institution,
- Broker-Dealers registered with the State of California, **or**
- Issuers of securities eligible for purchase by the District.

In addition, these institutions must:

- be registered by the Securities and Exchange Commission (SEC),
- be members in good standing of the Financial Industry Regulatory Authority (FINRA), **and**
- provide audited financial statements to the District annually.

The District shall maintain a current eligible list of established dealers, brokers, banks and savings and loan associations with which securities trading and placement of funds are authorized.

Additionally, to be placed on the eligible list, individuals need to certify in writing that they have read, understood, and agree to comply with this policy, where applicable, by completing and filing with the District the 'Certification of Compliance with Investment Policy' included in this policy as Exhibit 2.

Eligibility may be revoked at any time, in the District's sole discretion, for any reason, including but not limited to, failure to meet the above requirements.

**Trade
Confirmations and
Settlements**

The District shall comply with the following:

1. To protect against potential losses by collapse of individual securities dealers, and to enhance access to securities, interest payments and maturity proceeds, all Securities purchased from dealers and brokers shall be held in safekeeping by the District's custodial bank, a national bank, a State chartered bank or trust company, established for this purpose as someone other than the selling party of the security. Securities purchased will be covered by a trust or safekeeping receipt in a manner that establishes the District's ownership. All transactions require delivery of the security prior to payment for the security (delivery vs. payment).
 2. To ensure a high degree of internal control, all trade confirmations shall be received directly and reviewed for conformity to the original transaction by an individual other than the person originating the transaction. Any discrepancies will be brought to the attention of the Treasurer.
-

**Review And
Reporting
Requirements**

On a monthly basis, in accordance with Section 53607 of the Government Code, the Treasurer shall prepare and submit a report listing investment transactions to the General Manager and the Board of Directors.

On a quarterly basis, in accordance with Section 53646 of the Government Code, the Treasurer may prepare and submit a report to the General Manager and the Board of Directors. If rendered, the report shall include the type of investment, issuer, date of maturity, par and dollar amount invested on all securities, investments and moneys held by the District, and provide an investment summary by security type, percent of the portfolio, investment yield and the remaining period of investment to maturity.

On an annual basis, in accordance with Section 53646 of the Government Code, an investment policy may be presented to the Board for consideration at a public meeting. In conjunction with the investment policy consideration, the Board shall also annually review the delegation of its authority for the management of investments to the Treasurer.

**Performance
Review And
Internal Control**

Office of Internal Audit

The Office of Internal Audit will periodically audit the investment portfolio to evaluate the effectiveness of the District's investment program as well as its compliance with the Investment Policy. These audits will supplement the annual review by the District's external auditors.

Finance Department

The Treasurer has established and maintains an internal control structure designed to ensure that funds covered under this policy are protected from loss, theft, fraud, or misuse.

The Treasurer will review the investment portfolio monthly for compliance with the Investment Policy and make recommendations for changes and improvements where warranted.

Authority

Resolution No. 33019-96 on December 10, 1996
Amended by Resolution No. 33134-99 on January 26, 1999
Amended by Resolution No. 33232-01 on January 9, 2001
Amended by Resolution 33287-02 on January 22, 2002
Amended by Resolution 33350-03 on February 25, 2003
Amended by Resolution 33390-04 on January 27, 2004
Amended by Resolution 33464-05 on February 22, 2005
Amended by Resolution 33516-06 on January 24, 2006
Amended by Resolution 33585-07 on March 13, 2007
Approved by Resolution 33658-08, February 26, 2008
Approved by Resolution 33702-09, February 24, 2009
Approved by Resolution 33752-10, January 26, 2010
Approved by Resolution 33792-10, November 23, 2010
Approved by Resolution 33871-12, April 24, 2012
Approved by Resolution 33920-13, March 26, 2013
Reaffirmed by Motion 056-14, March 25, 2014
Approved by Resolution 34027-15, April 28, 2015
Approved by Resolution 34079-16, April 26, 2016
Approved by Resolution 35033-17, April 25, 2017
Approved by Resolution 35083-18, April 24, 2018
Approved by Resolution 35137-19, April 23, 2019
Approved by Resolution 35174-20, April 28, 2020
Approved by Resolution 35220-21, April 27, 2021

References

EBMUD Conflict of Interest Code
Procedure 418 – Gifts, Personal Loans and Personal Benefit Interests
Procedure 447 – Vendor Interactions and Procurement Integrity
Procedure 601 – Conflict of Interest Disqualification Procedure

**EXHIBIT 1
RATING AGENCIES' SCALES**

For purposes of Investment Policy 4.07 the term "Rating Agencies" is defined as: Standard & Poor's Financial Services (S&P), Moody's Investors Service (Moody's), and Fitch Ratings (Fitch).

Ratings requirements are provided using the S&P scale and should be read as "or equivalent" to other Rating Agencies scales. The equivalencies are provided in the tables below.

EXAMPLE

Investment Option 6, Certificates of Time Deposits, shows:

"Minimum Rating: AA- by at least one Rating Agency"

This requirement should be read as:

"Minimum Rating: AA- *or equivalent* by at least one Rating Agency."

To determine the equivalent rating in the table below, find the AA- rating under the S&P column and read across the row to find the Moody's equivalent rating of Aa3 and the Fitch equivalent rating of AA-. Accordingly, a Certificate of Time Deposit is equivalent as an investment if it is rated AA- by S&P, Aa3 by Moody's, or AA- by Fitch.

INVESTMENT-GRADE RATING SCALES

LONG-TERM DEBT		
S&P	MOODY'S	FITCH
AAA	Aaa	AAA
AA+	Aa1	AA+
AA	Aa2	AA
AA-	Aa3	AA-
<hr/>		
A+	A1	A+
A	A2	A
A-	A3	A-
BBB+	Baa1	BBB+
BBB	Baa2	BBB
BBB-	Baa3	BBB-

← Minimum rating required for district investments

SHORT-TERM DEBT		
S&P	MOODY'S	FITCH
A-1+	P-1	F1+
<hr/>		
A-1	-	F1
A-2	P-2	F2
A-3	P-3	F3

← Minimum rating required for district investments

FUNDS		
S&P	MOODY'S	FITCH
AAAm	Aaa-mf	AAAf
<hr/>		
AAm	Aa-mf	AAf
Am	A-mf	Af
BBBm	Baa-mf	BBBf

← Minimum rating required for district investments

EXHIBIT 2
East Bay Municipal Utility District
Certification of Compliance with Investment Policy

The East Bay Municipal Utility District (the District), under Policy 4.07 (the Investment Policy), requires that securities trading and placement of funds be conducted only with eligible Purchasing Entities. The Investment Policy also specifies that the District must obtain written certification that eligible Purchasing Entities have read, understood, and agree to comply with the Investment Policy, where applicable. This certification is necessary to be included on an approved list of Purchasing Entities that are eligible to conduct investment transactions with the District. The District has no obligation to enter into securities trading and/or placement of funds transactions with any or all Purchasing Entities on the list. The District retains the sole and exclusive discretion to determine with which of the Purchasing Entities, if any, to engage in individual investment transactions. Eligibility may be revoked at any time, at the District's sole discretion, for any reason, including but not limited to, failure to meet the requirements of the policy and this exhibit.

Please complete the sections below, sign and return this completed form if you wish to be considered for inclusion on the approved list of Purchasing Entities eligible to conduct investment transactions with the District.
Please send completed form:

via mail, to:
Damien Charléty
East Bay Municipal Utility District
375 11th Street, MS809
Oakland, CA 94607

and

electronically, to:
damien.charlety@ebmud.com

A. Entity Name _____

- B.** My entity is a: (choose all that apply, **at least one must be checked for eligibility**)
- Primary Dealer as designated by the Federal Reserve Bank of New York
 - National or California State Chartered Bank
 - Federal or California Chartered Savings Institution
 - Broker-Dealer registered with the State of California

AND

I certify that my entity is: (**both must be checked for eligibility**)

- registered by the Securities and Exchange Commission (SEC)
- a member in good standing of the Financial Industry Regulatory Authority (FINRA)

C. My entity is an:
 issuer of securities eligible for purchase by the District

D. My entity:
 participates in the District's Contract Equity Program

E. I have provided:
 Audited Financial Statements

I certify that I have read, understood, and agree to comply where applicable with the District's Investment Policy.

Print Name _____

Sign Name _____

Title _____

Date _____

EXHIBIT 3
East Bay Municipal Utility District
Investment Policy Quick Reference Table

The following is a summary of Investment Options and a few of their requirements. Full details on each Investment Option can be found in the main body of the Investment Policy on pages 2 through 5.

Investment Option	Maximum Share of Portfolio	Minimum Rating at purchase	Maximum Maturity at settlement	Additional Limitations
United States Treasury Obligations	100%	n/a	5 years	see page 2, Item 1
United States Government Agencies Obligations	100%	n/a	5 years	see page 3, Item 2
State of California, Local Agency Investment Fund	per Government Code	n/a	n/a	see page 3, Item 3
Local Government Investment Pools	40%	AAAm	n/a	see page 3, Item 4
Money Market Mutual Funds	20%	AAAm	n/a	see page 3, Item 5
Certificates of Time Deposit	20%	AA-	1 year	see page 3-4, Item 6
Negotiable Certificates of Deposit		AA-	5 years	see page 4, Item 7
Commercial Paper	20%	A-1+	270 days	see page 4, Item 9
Medium Term Corporate Notes	20%	AA-	5 years	see page 4, Item 9
Repurchase Agreements	20%	n/a	270 days	see page 5, Item 10
Municipal Obligations	20%	AA-	5 years	see page 5, Item 11

EXHIBIT 4
Glossary of Investment Terms Used in the Policy

This Glossary is for informational purposes only and is not intended to modify any of the terms of this Investment Policy, the Government Code, or the M.U.D. Act.

AVERAGE MATURITY	A calculation that expresses the average maturity of an investment portfolio using each investment's maturity weighted by the size of that investment in the portfolio.
BROKER	A broker brings buyers and sellers together and is compensated for his/her service.
CERTIFICATE OF DEPOSIT (CD)	A time deposit with a specific maturity evidenced by a Certificate. Large-denomination CDs are typically negotiable.
COLLATERAL	Securities, evidence of deposit or other property, which a borrower pledges to secure repayment of a loan. Also refers to securities pledged by a bank to secure deposits of public monies.
COMMERCIAL PAPER (CP)	Short-term unsecured promissory notes.
CUSTODIAN	A bank or other financial institution that keeps custody of stock certificates and other assets.
DEALER	A dealer, as opposed to a broker, acts as a principal in all transactions, buying and selling for his own account.
DELIVERY VS. PAYMENT (DVP)	Delivery of securities with a simultaneous exchange of money for the securities.
DIVERSIFICATION	An investment principle designed to spread the risk in a portfolio by dividing investments among different sectors, industries and companies.
GOVERNMENT SECURITIES	Obligations of the U.S. Government and its agencies and instrumentalities.
INTEREST	The amount earned while owning a debt security, generally calculated as a percentage of the principal amount.
LIQUIDITY	The speed and ease with which an investment can be converted to cash.
MATURITY	The date upon which the principal or stated value of an investment becomes due and payable.
MEDIUM TERM NOTES (MTN)	Debt securities issued by a corporation or depository institution with a remaining maturity ranging from nine months to five years.
MONEY MARKET MUTUAL FUNDS	An investment company that pools money from investors and invest in a variety of short-term money market instruments.
NET ASSET VALUE (NAV)	A per-share valuation of a mutual fund based on total assets minus total liabilities.
PRIMARY DEALER	A group of government securities dealers who submit daily reports of market activity and positions and monthly financial statements to the Federal Reserve Bank of New York and are subject to its informal oversight.
PRINCIPAL	The face value or par value of an investment.
RATE OF RETURN	The yield obtainable on a security based on its purchase price or its current market price. This may be the amortized yield to maturity on a bond the current income return.
RISK (INVESTMENT RISK)	The probability that an actual investment return outcome will differ from an expected return outcome.
RISK-ADJUSTED RETURN	The return on investment relative to the amount of risk taken over a given period of time (e.g. if two or more investments have the same return over a given time period, the one that has the lowest risk will have the better risk-adjusted return).

REPURCHASE AGREEMENT	The purchase of securities, on a temporary basis, with the seller's simultaneous agreement to repurchase the securities back at a later date at a specified price that includes interest for the buyer's holding period.
SAFEKEEPING	Storage and protection of a customer's financial assets, valuables, or documents, provided as a service by an institution serving as Agent or Custodian and, where control is delegated by the customer.
SECONDARY MARKET	A market made for the purchase and sale of outstanding issues following the initial distribution.
SETTLEMENT DATE	The date when the security is delivery in exchange for the corresponding payment.
TREASURY BILLS	A non-interest bearing discount security issued by the U.S. Treasury to finance the national debt. Most bills are issued to mature in three months, six months, or one year.
TREASURY BONDS	Long-term coupon-bearing U.S. Treasury securities issued as direct obligations of the U.S. Government and having initial maturities of more than 10 years from date of issue.
TREASURY NOTES	Medium-term coupon-bearing U.S. Treasury securities issued as direct obligations of the U.S. Government and having initial maturities from two to 10 years from date of issue.
U. S. GOVERNMENT AGENCY SECURITIES	Debt securities issued by U.S. Government sponsored enterprises and federally related institutions.
U.S. TREASURY SECURITIES	Securities issued by the U.S. Treasury and backed by the full faith and credit of the United States.
YIELD	The annual rate of return on a debt investment expressed as a percentage.



Policy 4.13

EFFECTIVE 26 APR 16

SUPERSEDES 24 APR 12

ESTABLISHING WATER AND WASTEWATER RATES

IT IS THE POLICY OF EAST BAY MUNICIPAL UTILITY DISTRICT TO:

Establish water and wastewater rates that recover costs included in the District's operating and capital budgets, meet the District's policy goals and comply with applicable law, including Proposition 218 and the Municipal Utility District Act ("MUD" Act). Rates should also enhance the District's ability to provide safe, reliable, and sufficient water supply and wastewater treatment services to its customers over the long term. The District will provide a customer assistance program, that is in compliance with state law, to help low income customers obtain water and wastewater at a reasonable price.

Rate Methodology The District's water and wastewater rates are developed and structured in conformance with all applicable laws including the MUD Act and Proposition 218 (California Constitution article XIII D, section 6) and consistent with best management practice.

To ensure compliance with these requirements, a cost-of-service study of the District's water and wastewater service fees and charges is to be completed at least every ten years.

Water Rate Design To the extent authorized by law, the District's water rates will be designed to encourage conservation, water use efficiency and resource management, and enhance reliability and supply. The District's water rates will be designed to recover the operating and capital costs of the water facilities in order to ensure reliable delivery of water.

Wastewater Rate Design To the extent authorized by law, the district's wastewater rates will be designed to encourage conservation and resource management. The District's wastewater rates will be designed to recover the operating and capital costs of the wastewater facilities to ensure reliable treatment services and to protect public health and the environment.

Public Involvement in Rate Setting In accordance with MUD Act Section 14401, prior to the Board's consideration of new or revised water and wastewater rates, a staff report presenting rate recommendations will be filed with the Board of Directors and made available to the public. Within 40 days of the filing of the report, EBMUD will conduct a public hearing on the report and its rate recommendations.

Authority Resolution No. 32985-96, May 14, 1996
Amended by Motion 143-96, June 25, 1996
Amended by Resolution 33550-06, July 25, 2006
Amended by Resolution 33763-10, April 27, 2010
Amended by Resolution No. 33871-12, April 24, 2012
Amended by Resolution No. 34080-16, April 26, 2016

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Policy 4.27

EFFECTIVE 28 JUL 20

SUPERSEDES NEW

DEBT MANAGEMENT

IT IS THE POLICY OF EAST BAY MUNICIPAL UTILITY DISTRICT TO:

Manage debt issuance and administration in a manner that is prudent, financially sustainable, in the best interest of ratepayers, and generally consistent with industry best practices.

Purpose This policy describes and specifies the District's actions related to debt obligations. It is meant to outline what constitutes appropriate management of the District's debt portfolio. The District's Board of Directors (Board) may approve bonds that deviate from this policy. Failure of the District to comply with any provision of this policy will not affect the authorization, validity, or enforceability of any bonds or other forms of indebtedness that are otherwise issued in accordance with applicable law.

Purpose of Debt The general purpose of long-term debt is to spread the cost of capital assets over a longer time period than simply paying as costs are incurred. This allows the impact on rates to be spread over time and aligns the cost of assets to the estimated life of those assets. It is the policy of the District to issue debt to finance previous or anticipated capital expenditures. District staff will identify the specific purpose of the debt issue into a debt obligation. The types of debt described in this policy will not be used to finance operating expenditures. The primary reasons for this are, firstly, to spread out the impact on rates of particularly large capital expenditures; and secondly, to more closely align the payment of asset costs to the estimated life of the assets.

Legal Authority The District has the legal authority to enter into debt obligations. This authority is given to the District by various state and federal codes (tax law for tax-exemption) as well as the Municipal Utility District Act ("MUD Act"), certain provisions of which are referenced below.

1. Revenue Bond Authorization

Under the MUD Act (Article 6a of Chapter 6), the District has authority to issue bonds payable from revenues of the water or wastewater system in accordance with the Revenue Bond Law of 1941 (Bond Law) found in the California Government Code, with specified exceptions from the provisions of the Bond Law.

The Board must authorize the District to sell long-term revenue bonds through a formal resolution, specifying, among other things: the maximum principal amount of bonds proposed to be issued; the maximum term of the bonds; and the maximum interest rate to be payable on the bonds. The authorized bonds may be issued from time to time in series. The resolution adopted by the Board authorizing the issuance of revenue bonds is subject to the right of referendum. Staff will request this preliminary bonding authority from the Board periodically to ensure the amount authorized at any given time is sufficient to cover any expected bond sales.

In addition, staff will present and ask the Board to approve its expected debt financing plan annually at the beginning of each fiscal year.

2. Short-Term Borrowing Authorization

The MUD Act (Chapter 7.5) also authorizes the issuance of short-term bonds, notes and other forms of indebtedness (including through or with bank credit) with maturities not exceeding seven years. Short-term indebtedness must be authorized by resolution of the Board, which resolution is subject to a right of referendum. Under the MUD Act, the maximum amount of all such short-term indebtedness (including amounts drawn under available bank lines of credit), shall not at any one time exceed the lesser of either (1) the annual average of the total revenue for the three preceding years or (2) 25% of the District's total outstanding bonds issued pursuant to Chapter 6, Chapter 7 and Chapter 8 of the MUD Act. Successive issues of short-term indebtedness may be authorized from time to time.

3. Other Forms of Borrowing

From time to time, the District may incur other forms of indebtedness as authorized by the MUD Act, including loans and other arrangements with the State (Section 12802) or federal government (Section 12844), general obligation bonds (Chapter 7), assessment bonds (Section 12921 and 13010) and emergency financing (Chapter 7.1), subject to the limitations contained in the MUD Act.

Types of Debt

The District has the ability to enter into various types of debt obligations. Debt obligations can be short-term or long-term in nature, as well as tax-exempt or taxable. Brief descriptions of these financing instruments are provided below.

Long-Term Debt

Long-term debt generally encompasses debt issued to finance capital expenditures with the objective of structuring repayment to match the expected life of the asset financed. It can be used as a tool for maintaining rate stabilization as repayment is spread over the useful life of the project. Long-term bonds can be fixed or variable rate with serial or term maturities. Revenue bonds are historically the primary form of long-term debt obligation entered into by the District. The District has also issued General Obligation Bonds based on voter approved bond measures.

The repayment of long-term revenue bonds is secured by a lien on revenues of the District. In essence, it is the net revenues that are pledged to pay debt service. Net revenues are defined generally by the District's bond indentures as all System revenues less all operation and maintenance costs. The District may issue revenue bonds that are secured by liens on net revenues that are either senior or subordinate in relation to each other.

General obligation bonds are another type of long-term bonds available to the District. The issuance of general obligation bonds requires a two-thirds vote of the electorate. These bonds have been used less frequently by the District. General obligation bonds are payable by a dedicated property tax, and do not have a claim on the District's other operating revenues.

The District may also enter into long-term loans with state or federal agencies. These loans typically have fixed interest rates. Government loan programs can offer favorable interest rates, and should be considered as alternatives to market rate debt when available.

Short-Term Debt

Historically, short-term notes and commercial paper have been the most commonly issued by the District. Short-term debt, like long-term debt, can be issued by the District at various lien levels but is most typically secured by net revenues on a subordinate basis to the District's long-term bonds.

One common reason to issue short-term debt is to secure funding for a capital project or group of capital projects during the construction period. Once the construction period is complete, the short-term debt may be refinanced, or "taken out," with long-term debt that matures over a period of time more closely matching the lifespan of the assets that were built.

Direct bank loans are another type of short-term debt obligation the District may enter into over time, and could be issued with either fixed or variable rates and generally over a term extending from one to seven years.

Debt-Related Instruments

The District may enter into other debt-related arrangements that include interest rate swaps, letters of credit, and standby bond purchase agreements. Policy 4.23 (Interest Rate Swap Policy) sets forth the District's policy on swaps.

Because variable rate debt generally requires remarketing agents to periodically remarket the debt to investors, bank credit or liquidity facilities in the form of a letter of credit or standby bond purchase agreements or similar arrangements are required to provide credit and/or liquidity support. Such bank facilities are generally for terms that are shorter than the debt that they support, and therefore need to be renewed periodically throughout the life of the related debt. These renewals will be brought to the Board for approval in advance of expiration.

Types of Bond Issuance

The District may issue taxable or tax-exempt bonds. Tax-exempt bonds are usually the preferred type of bonds given that they typically provide the lowest interest cost. Tax-exempt issuance must adhere to all applicable federal tax laws.

Types of bond issuance include:

1. New Money

"New money" bonds are issued to provide the District with funding for capital expenditures. New money bonds may fund upcoming capital expenditures or reimburse the District for capital expenditures already incurred. Significant restrictions exist around public purpose versus private activity use of bond proceeds. Taxable bonds can be used for projects and structures where IRS tax-exempt regulations cannot be met, such as those with private benefit.

2. Refunding

Refunding bonds may be issued to refinance existing bonds to achieve debt service savings. Staff works with the District's financial advisor to assess potential savings and determine whether refunding bond issuance is warranted.

3. Restructuring

From time to time, the District may issue refunding bonds to restructure the type of debt outstanding, the "shape" of future debt service payments, or to take advantage of market opportunities.

Sale Method

The District may choose to issue bonds using either a competitive or negotiated sale process. The District may also sell bonds by means of a private placement or direct sale with a financial institution or other accredited investor when this method is demonstrated to result in cost savings or provide other advantages relative to a traditional public offering. Staff will work with the District's financial advisor to determine the most appropriate method of sale for each issuance.

Structure and Term

The repayment schedule of a bond issue can vary greatly from one sale to another. The same is true for other debt instruments. The District will consider which structures are most cost effective for ratepayers, the new debt's impact on the District's overall debt service schedule, future debt capacity, and other factors when deciding how to structure new debt. In addition to debt amortization terms, structuring options may include procuring credit enhancement, the establishment of reserves, the use of capitalized interest, and appropriate call options.

Goals and Objectives

Long-term financial stability is the primary underlying objective the District will consider when making decisions related to debt.

When it deems debt as the most appropriate source of funding, the District must seek to keep the cost of the debt, including the cost of issuance, as low as can be reasonably achieved. Given that interest costs can have a major impact on the District's budget and rates, efforts should be made to achieve low interest rates on new debt and to achieve interest rate savings when practicable. Short term variable rates will usually offer the lowest interest rates but do expose the District to long term interest rates risk to the extent those rates are left unhedged. Achieving the lowest interest rates must be carefully balanced against long-term financial stability.

Credit ratings have a significant impact on the interest rates at which the District borrows. Therefore, efforts should be made to maintain strong credit ratings through strong financial decision-making. In addition, marketing efforts should be undertaken when practical to ensure the District's name and credit are in good standing with municipal bond investors.

1. CIP and Budget

The District's capital and operating budgets are key to estimating the timing of and need for future borrowing. While debt will generally only fund capital expenditures, and not operating costs, the amount of debt issued can still have an indirect effect on operating performance due to its impact on cash reserves and water/wastewater rates. Staff will analyze the budget projections throughout each fiscal year, including expected cash reserves and required rate increases. This information will provide the basis for decisions regarding how much, if any, debt to issue in each year.

In addition, staff will monitor the capital improvement program to identify upcoming projects that may be appropriate candidates for state or federal loans.

2. Ratio Targets

When deciding on the amount of current and future debt to issue, staff must pay particularly close attention to certain financial ratios. The most important of these is the debt service coverage ratio, which is generally expressed as annual net revenues divided by annual debt service.

The District has a legal covenant to maintain the debt service coverage ratio at a minimum of 1.1. Under no circumstances should the District allow its debt service coverage ratio to fall below 1.1 as calculated under its bond indentures and other debt documents. State and federal loans also have coverage requirements that may differ from what is required by bond documents.

The District's long-term goal may evolve over time to target a debt service coverage ratio that allows for full cash funding of a base level of capital spending. In the meantime, it is the District's policy to maintain debt service coverage (as calculated under its bond indenture) at or above 1.6.

Another ratio that helps measure the District's financial health is the ratio of debt-funded capital to overall capital spending. This can be measured in any given fiscal year as well as over a rolling period of years. The ideal percentage of debt-funded capital will fluctuate over time. However, the District will strive to maintain this ratio below 65% in each five year planning period.

While variable rate debt typically has a lower cost of borrowing than fixed rate debt, it carries the risk of increasing interest rates and market volatility. Given the added risk that variable rate debt adds to the District's budgetary performance, the amount of variable rate debt outstanding in either the Water or Wastewater Systems will not exceed 25% of the total amount of long-term debt outstanding in either system.

Bond Sale Process The process of selling bonds takes the careful coordination of a number of participants including the District's staff, its financial advisors and bond counsel, third-party bond trustee or paying agent, verification agent, underwriters, broker-dealer, rebate consultant, bank liquidity and credit provider, and/or rating agencies.

1. Preparation

The District relies on its bi-annual budget as the basis for financial estimates that underlie how much, if any, new debt should be issued in any given year. In addition, staff monitors the municipal bond market to identify opportunities to save costs by issuing refunding bonds. In either case, once it is determined that debt issuance is appropriate staff begins the process by coordinating dates and milestones with the District's financial advisors and bond counsel.

While there are many different tasks to perform during the preparation, one of the most critical and involved is the preparation of the Official Statement and its accompanying Appendix A. These disclosure documents are distributed to potential investors in and purchasers of the District's bonds and provide information needed to make an informed investment decision. These documents are subject to federal securities laws and are required to be accurate and current, and not contain material misstatements or omissions. Policy 4.26 (Municipal Securities Disclosure Policy) sets forth the District's disclosure policies.

2. Board Authorization

Before the District can issue new bonds, the Board must authorize the sale. Staff will generally ask for the Board's authorization to approve documents and proceed in the financing transaction once the structure and major aspects of the sale are determined.

3. Execution

Once the Board has approved a particular bond issuance, staff is authorized to execute the transaction within the authorized parameters. Depending upon the method of sale chosen (negotiated or competitive), staff will work with its financial advisor along with any underwriters that may be involved to finalize the bond sale.

4. Handling of Bond Proceeds

Proceeds of debt should be held either by a third-party trustee or by the District. A third-party trustee will disburse bond proceeds to the District upon submission of one or more written requisitions signed by an authorized District officer. If the funds are held directly by the District, they must be held and accounted for in a separate fund or account, the expenditure of which will be carefully documented by the District and subject to established internal controls consistent with the District's applicable policies and procedures. These procedures will include, in connection with each requisition or expenditure of proceeds held by the District, a written record of the particular capital project or program or other expense to which the funds drawn were applied or allocated.

For bond proceeds that are meant to reimburse the District for previous expenditures, District staff will certify that the reimbursing proceeds comply with all tax requirements and other regulations. To support this certification, staff will analyze capital expenditures and ensure that all requirements are met before the bond issuance takes place and maintain a written record of such analysis and the amount reimbursed to each particular capital project or program or other expense to which such reimbursed proceeds are to be allocated.

For bond proceeds meant to provide funding for ongoing or upcoming capital expenditures, District staff will ensure proceeds are spent according their intended purpose as well as all regulations. Staff will analyze the use of proceeds on an annual basis or more frequently, if necessary, until the proceeds are completely spent and will perform monitoring and record-keeping in accordance with any applicable post-issuance compliance procedures and guidelines of the District.

For bond proceeds meant to refund existing bonds, such funds will generally be held by a third party trustee or fiscal agent to be applied in connection with written directions generally prepared by or in consultation with bond counsel to ensure funds are used according to legal requirements. The District will maintain records of the directions to, and will perform timely review of fund statements and other records received from, the third party agents.

**Post Issuance
Administration**

The District will comply with all requirements pertaining to initial bond disclosure, continuing disclosure, tax-exemption, post-issuance compliance, and investment of bond proceeds. This includes any continuing disclosure undertakings under SEC Rule 15c2-12; tax covenants and related federal tax compliance requirements such as arbitrage restrictions and rebate requirements; and all California State reporting requirements.

1. Financial Disclosure

The District must comply with all ongoing deliverable obligations and financial disclosure requirements, as specified in any and all bond and debt-related documents. Policy 4.26 (Municipal Securities Disclosure Policy) sets forth the District's disclosure policies. Staff has developed and will maintain an updated schedule of the requirements, and ensure there is redundancy in the internal processes to ensure compliance with all timelines and prevent any missed deadlines. The District will post required documents to the MSRB's EMMA website and deliver periodic deliverables on or before the dates by which it is required to do so by its bond documents. The District, at its discretion, may also post documents to EMMA that it believes are relevant to bondholders, but that are not required to be posted. The Treasury Division is responsible for ensuring all District actions related to financial disclosure are completed as required.

2. Tax Compliance

The District will comply with federal arbitrage and rebate regulations related to its bonds and other debt instruments. These responsibilities include monitoring the investment and expenditure of bond proceeds, maintaining a system of record-keeping and reporting and contracting for the services of outside arbitrage consultants as necessary. The District has established and implemented post-issuance procedures to guide its compliance with these requirements. The Treasury Division is responsible for ensuring all District actions related to tax compliance are completed as required.

Authority

Resolution 35192-20, July 28, 2020

References

Policy 4.23 – Interest Rate Swap Policy
Policy 4.26 – Municipal Securities Disclosure

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**STRATEGIC PLAN, KEY PERFORMANCE INDICATORS
PUBLICATION, AND ANNUAL KEY PERFORMANCE
INDICATORS REPORT**

STRATEGIC PLAN, KEY PERFORMANCE INDICATORS PUBLICATION, AND ANNUAL KEY PERFORMANCE INDICATORS REPORT

Strategic Plan

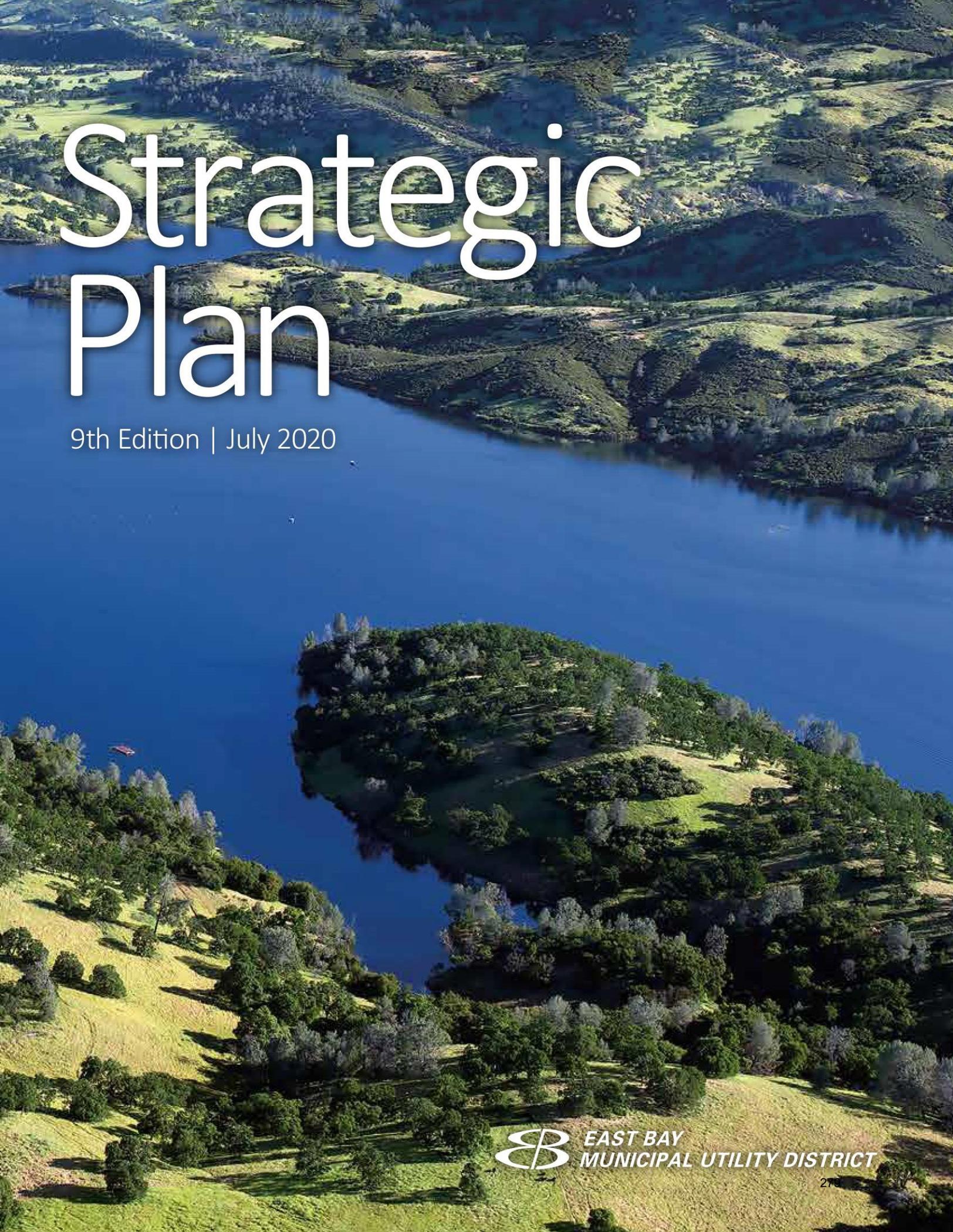
The Strategic Plan (Plan) was adopted by the Board of Directors in June 2020 and guides the development of the FY22 and FY23 biennial budget. The Plan outlines the goals, strategies, and objectives the District will pursue to achieve its mission to provide reliable and high-quality services, manage the precious natural resources, and preserve and protect the environment for future generations. The Key Performance Indicators (KPI) publication is a separate document that contains a set of criteria to assess whether the Plan's goals are met.

Key Performance Indicators Publication

The KPI publication focuses on the KPI targets for FY21 and FY22 to measure the progress made to achieve the Plan goals. Examples of KPI targets include water quality regulations met, miles of distribution pipelines replaced, water and wastewater rates comparison, unplanned water service interruptions, and exams resulting in hiring lists. The KPIs and targets are evaluated and revised as part of the Plan update process.

Annual Key Performance Indicators Report

The Annual Key Performance Indicators Report is a summary of performance results that is reported to the Board of Directors. Staff can evaluate its progress in meeting KPI targets based on performance measures in the KPI publication. The District met or was on track to meet the targets for 94 percent of its FY20 KPIs in spite of the COVID-19 shelter-in-place orders issued on March 19, 2020. The most recent KPI report is available for FY20.



Strategic Plan

9th Edition | July 2020

Photo on cover is the Pardee Reservoir.

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July 1, 2020

The East Bay Municipal Utility District has been operating for nearly a century. In the 1920s, early regional leaders envisioned a bustling East Bay community and established a water source in the Sierra Nevada to meet that increasing demand. We are the beneficiaries of that vision. But the challenges of today are different than they were decades ago. Foresight and planning are essential to deliver water and wastewater services 24 hours a day.



This plan was developed under the leadership of Alex Coate (retired June 2020)

This Strategic Plan is a roadmap that will guide EBMUD in ensuring to our ability to provide high-quality drinking water to 1.4 million customers and critical wastewater treatment to 685,000 customers. These efforts protect public health and the environment, and help our East Bay economy thrive.

The results of our comprehensive planning efforts were on display during the 2019 wildfire season, when our customers received continuous water and wastewater services despite unprecedented pre-emptive power shutoffs. EBMUD began preparing for power shutoffs more than a year before, as we depend on round-the-clock power to pump, treat and distribute water to customers and firefighters.



This plan will be implemented by Clifford Chan (appointed General Manager June 2020)

On a larger scale, EBMUD undertook a multi-decade partnership to build the Freeport facility on the Sacramento River to provide a supplemental water supply during dry years. During the historic 2014 – 2016 drought, this facility allowed EBMUD to provide all the water needed to serve our diverse customer base.

Over the next five years, EBMUD will plan for and respond to a broad range of water and wastewater issues such as water supply reliability, water quality improvements, sustainable management of groundwater resources, aging infrastructure, wildfire preparedness, healthy forest management, climate change and emerging contaminants in San Francisco Bay. Managing such dynamic issues requires forward-thinking leadership, sound planning, and financial stability.

From creating a new water source 90 miles away in the Sierra Nevada nearly 100 years ago, to adapting to the impacts of a rapidly changing climate, EBMUD stands ready to meet the challenges of today and tomorrow.



ALEXANDER R. COATE
Retired General Manager



CLIFFORD C. CHAN
General Manager

District Overview

The East Bay Municipal Utility District (EBMUD) supplies water and provides wastewater treatment for parts of Alameda and Contra Costa counties in California. EBMUD is a California special district formed under the Municipal Utility District Act with a seven-member publicly elected Board of Directors.



Pardee Reservoir

Residents voted in 1923 to organize the East Bay Municipal Utility District in response to an uncertain local water supply and periodic water shortages. Pardee Dam was completed in 1929 which was the highest in the world at the time. The first water deliveries were made using the Mokelumne aqueduct that same year. The water traveled 90 miles from the Sierra Mountains to the East Bay to serve a population of 460,000.

Today, the EBMUD water service area now includes 20 cities and 15 unincorporated East Bay communities, and serves 1.4 million customers. It is a 332-square mile area, which is larger than New York City, extending from Crockett in the north to San Lorenzo in the south, and eastward from San Francisco Bay through the Oakland-Berkeley hills to Walnut Creek and south through the San Ramon Valley.



Main Wastewater Treatment Plant

In 1944, voters in six of the East Bay cities served by EBMUD elected to create a wastewater treatment facility to treat waste and raw sewage that was being released directly into San Francisco Bay. Wastewater treatment began in 1951 at the plant constructed in Oakland near the entrance of the San Francisco-Oakland Bay Bridge. The wastewater service area is 88-square miles along the east shore of the bay extending from Richmond in the north to Oakland in the south. In addition to treating wastewater, laboratory services operate 365 days a year to

continually monitor water quality for drinking water and treated water from the wastewater plant that is discharged to the San Francisco Bay.

Sustainability and resilience are essential principles that guide our actions in meeting the needs of our customers. Sustainability incorporates environmental, social, and economic objectives into our decision-making and work practices to meet the needs of today without compromising the ability to meet the needs of future generations. Resilience enables the District to recover from and adapt to unforeseen events.

The Board of Directors is committed to developing policy through an open, public process, guided by the District's Mission Statement. Policies are then implemented under the direction of the General Manager who is appointed by and reports directly to the Board of Directors. Day to day operations are managed by the senior management team and carried out by approximately 2,000 dedicated employees.

Strategic Plan Overview

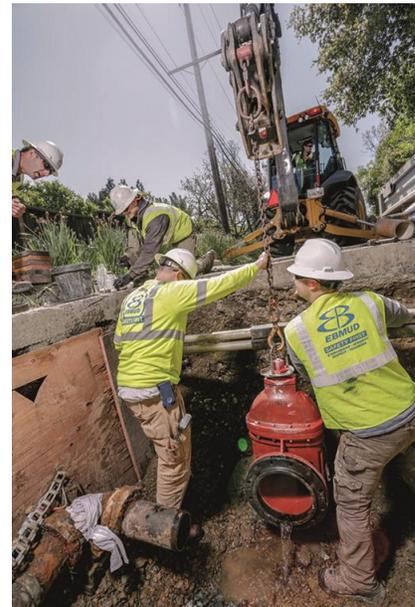
The Strategic Plan incorporates the District’s mission and principles, and identifies its goals, strategies, objectives and key performance indicators. The Plan guides staff in setting priorities and allocating resources.

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 practices. Our principles are:

- 💧 Exercise responsible financial management
- 💧 Ensure fair and reasonable rates and charges
- 💧 Provide responsive and high quality customer service
- 💧 Promote ethical behavior in the conduct of District business
- 💧 Ensure fair and open public processes
- 💧 Provide a safe and healthy work environment
- 💧 Protect the environment and preserve natural resources
- 💧 Minimize waste and conserve energy
- 💧 Promote diversity and equality in personnel matters and contracting
- 💧 Promote environmental, economic, and social sustainability

Our **Goals** define in broad terms the high-level achievements the District will pursue; they explain ‘what’ not ‘how’, and tell where we are going rather than how we will get there. Our **Strategies** define the actions that are necessary to achieve each goal, and may take several years to implement. Our **Objectives** reflect what we need to accomplish in the near term. Our **Key Performance Indicators** (KPIs) measure how well we are doing in achieving our goals.



Pipeline Renewal

Planning and Implementation

The purpose of the strategic planning process is to define the actions that need to be taken in the next three to five years to achieve the District’s mission now and well into the future. The process is designed to assess the environment in which we operate and respond to both near and long-term challenges. The General Manager and the senior management team lead the implementation of the Strategic Plan.

Development of the Strategic Plan is the responsibility of the senior management team who work together in cross functional teams. They assess and build consensus on initiatives and challenges, using input from the Board of Directors and various sources such as **facility master plans** which optimize capital investments, **long-range action plans**, **new initiatives**, and **employee and customer feedback** to update the goals, strategies, objectives and key performance indicators.

Strategic Plan Process



Once the Strategic Plan is adopted by the Board of Directors, development of specific actions to implement the Strategic Plan can begin. The Strategic Plan provides staff with an overall high-level direction to achieve future success; it does not describe all of the specific actions to be taken. By developing actions that are linked to the Strategic Plan we can ensure that we focus our resources on the highest priorities that will best serve our customers.

The Strategic Plan guides the development of the **biennial budget** and the **five-year capital improvement program** to ensure that necessary resources are provided to implement the plan’s strategies and objectives.

Individual **employee performance plans** are prepared annually to establish and communicate responsibilities and performance expectations to achieve the priorities contained in the plan.

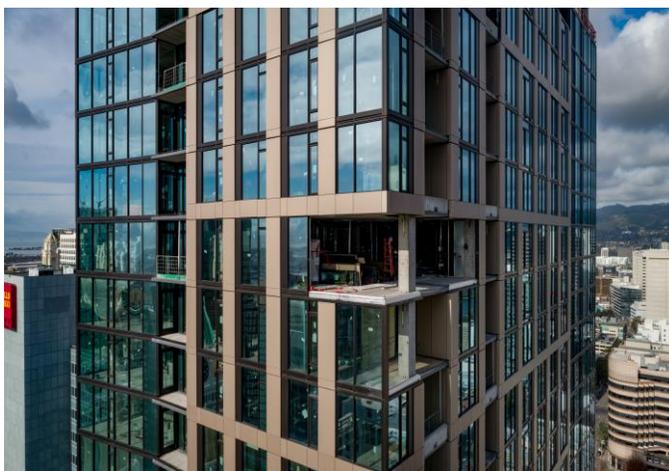


Heavy Equipment Operator

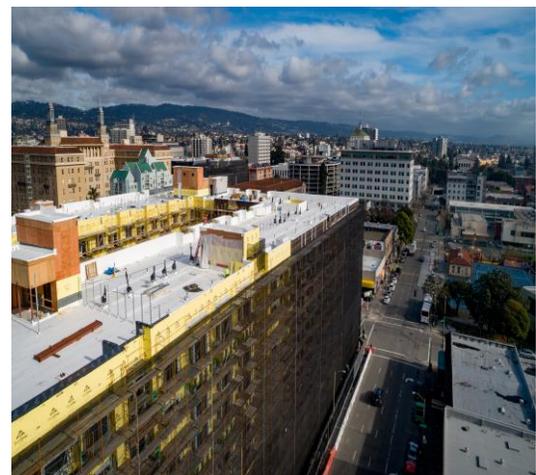
The Strategic Plan is comprised of two documents. This document contains our goals, strategies and objectives to define the actions to take to ensure both long-term achievements and near-term accomplishments. Guidance from the Board of Directors is incorporated into the plan through committee meetings and workshops.

The plan also includes a comprehensive set of KPIs that reflect the various strategies and objectives contained within the six Strategic Plan goals. The **KPI results** are measured annually against established targets to evaluate progress towards meeting our goals. The KPI report and results are presented to the Board’s Finance Committee in October.

A critical component of the strategic planning process is continuous improvement, an ongoing effort to **assess and evaluate** performance. The objective is to update the Strategic Plan based on these assessments and evaluations, including KPI results to develop and prioritize strategies for addressing issues that may impact District operations and our customers.



Mixed use complex with 634 dwelling units in Oakland



Mixed use complex with 333 dwelling units in Oakland

Our Values

With extensive input from employees of all levels and disciplines, the District developed the following four values that were adopted by EBMUD in support of our mission:



STEWARDSHIP

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



INTEGRITY

"I act with integrity."



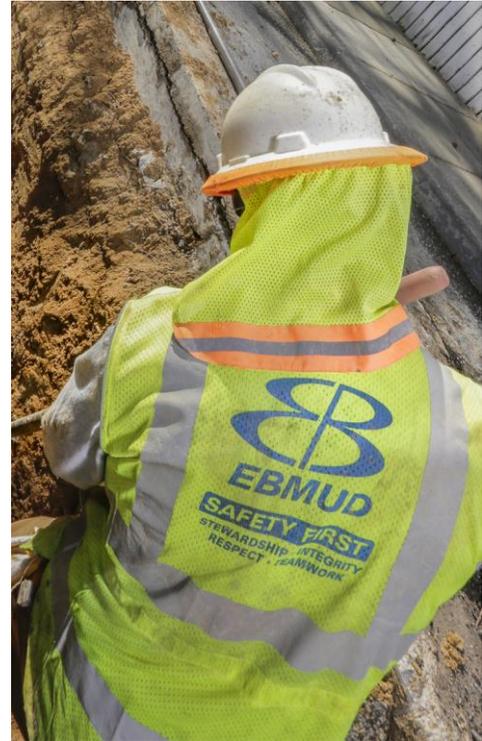
RESPECT

"I treat others with respect."



TEAMWORK

"We are EBMUD and we are one team."



Visible reminder of our values

These values and their related behaviors guide EBMUD staff as they pursue the goals identified in this Strategic Plan. Our ongoing values efforts are focused on:

- Communication of our strategy and mission to employees and customers,
- Continuous improvement of our systems and processes, and
- Cultivation and maintenance of a diverse, engaged, and high performing culture.

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 for future generations.



Our Goals

Long-Term Water Supply:

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

Water Quality and Environmental Protection:

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

Long-Term Infrastructure Investment:

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.

Long-Term Financial Stability:

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

Customer and Community Services:

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

Workforce Planning and Development:

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

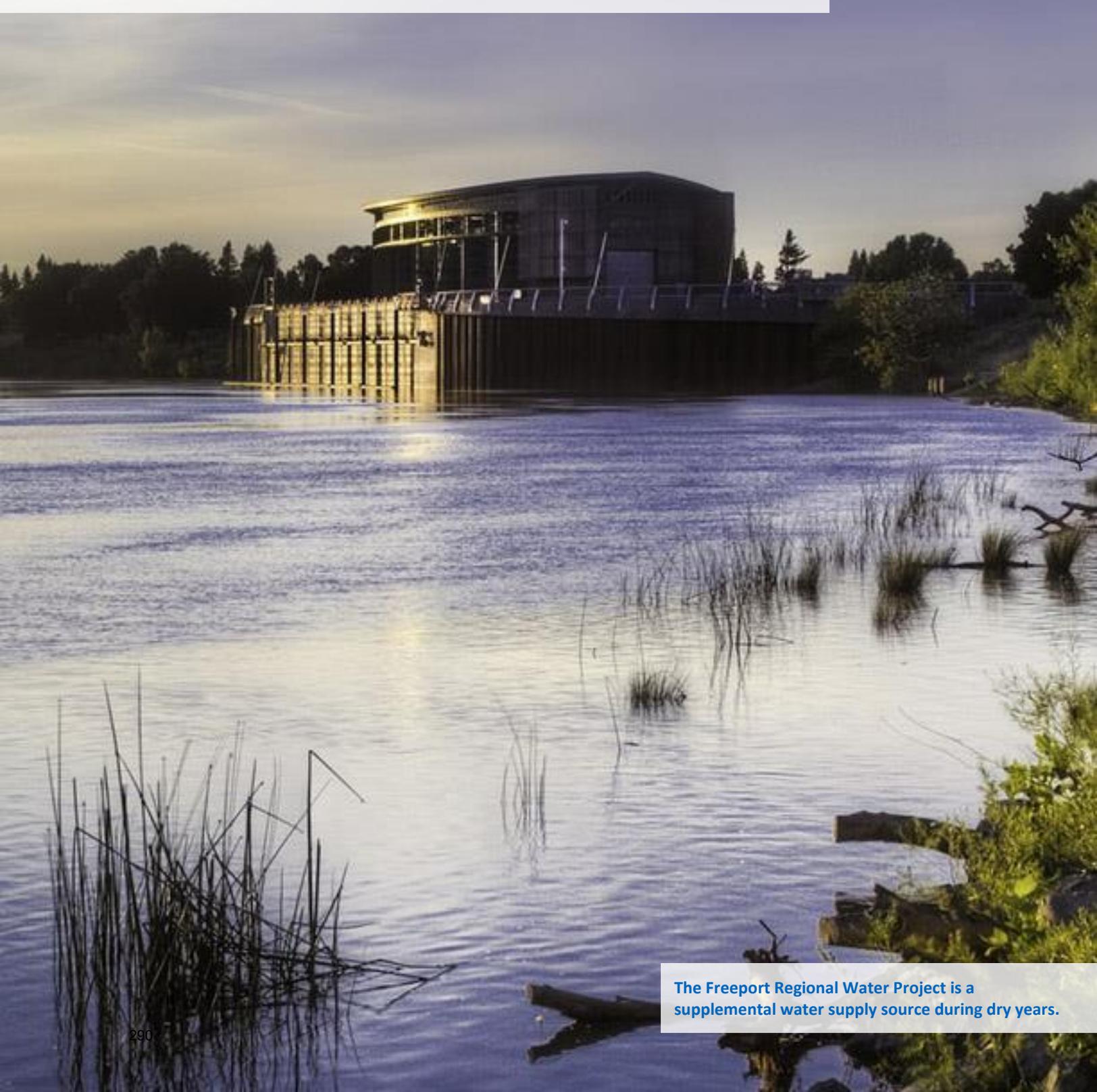


Lake Merritt in Oakland shown in the distance

Long-Term Water Supply

“We have created a resilient water supply by developing new water sources and protecting our existing supplies. We will continue to diversify our supplies to meet future needs while acknowledging the challenges that accompany them.”

Michael Tognolini, Director of Water and Natural Resources



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.

Objectives:

- 💧 Protect water rights and Central Valley Project contract entitlements to maximize benefits to District customers.
- 💧 Prioritize water transfers, groundwater storage, off-stream storage, and other water supply opportunities to cost-effectively improve reliability while providing the best available water quality.
- 💧 Use the Urban Water Management Plan to assess supply and demand conditions, analyze future needs, anticipate obstacles, and prescribe approaches to meeting future requirements consistent with District policy.
- 💧 Integrate the District's long-term water supply strategies and infrastructure planning efforts with regional partnerships.
- 💧 Plan for a sustainable local groundwater basin for the East Bay.

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.

Objectives:

- 💧 Implement and update the conservation strategies identified in the District's Water Conservation Master Plan (WCMP) to meet long-term water use reduction goals.
- 💧 Use the Water Shortage Contingency Plan to implement drought response actions to meet short-term water use reduction goals.
- 💧 Implement comprehensive water management, conservation incentives, education and outreach programs and workshops to engage customers and stakeholders with information and tools to effectively manage water use and promote water use efficiency.
- 💧 Implement supply-side conservation and water loss control measures through leak detection, pipeline repair and replacement, and information management to reduce demand, improve system reliability and comply with state regulations.
- 💧 Pursue and implement regulatory and legislative initiatives that promote water conservation through efficiency standards and codes, including plan check reviews as a condition for new water services.
- 💧 Identify, encourage and create partnerships to research and test new efficiency technologies, including water-energy nexus applications and measurement methodologies.

Long-Term Water Supply

Strategy 3

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

Objectives:

- 💧 Maximize use of recycled water projects while protecting public health.
- 💧 Invest in innovative technology and monitor research to improve cost-effectiveness.
- 💧 Identify, evaluate and implement new opportunities for recycled water, including potential for potable reuse.
- 💧 Continue education and outreach programs to support customers and the District's programs.
- 💧 Monitor regulatory and legislative initiatives that promote recycled water use and the District's programs.

Strategy 4

Consider the impacts of climate change and take appropriate action to understand and balance mitigation and adaptation responses to those impacts through sustainable activities.

Objectives:

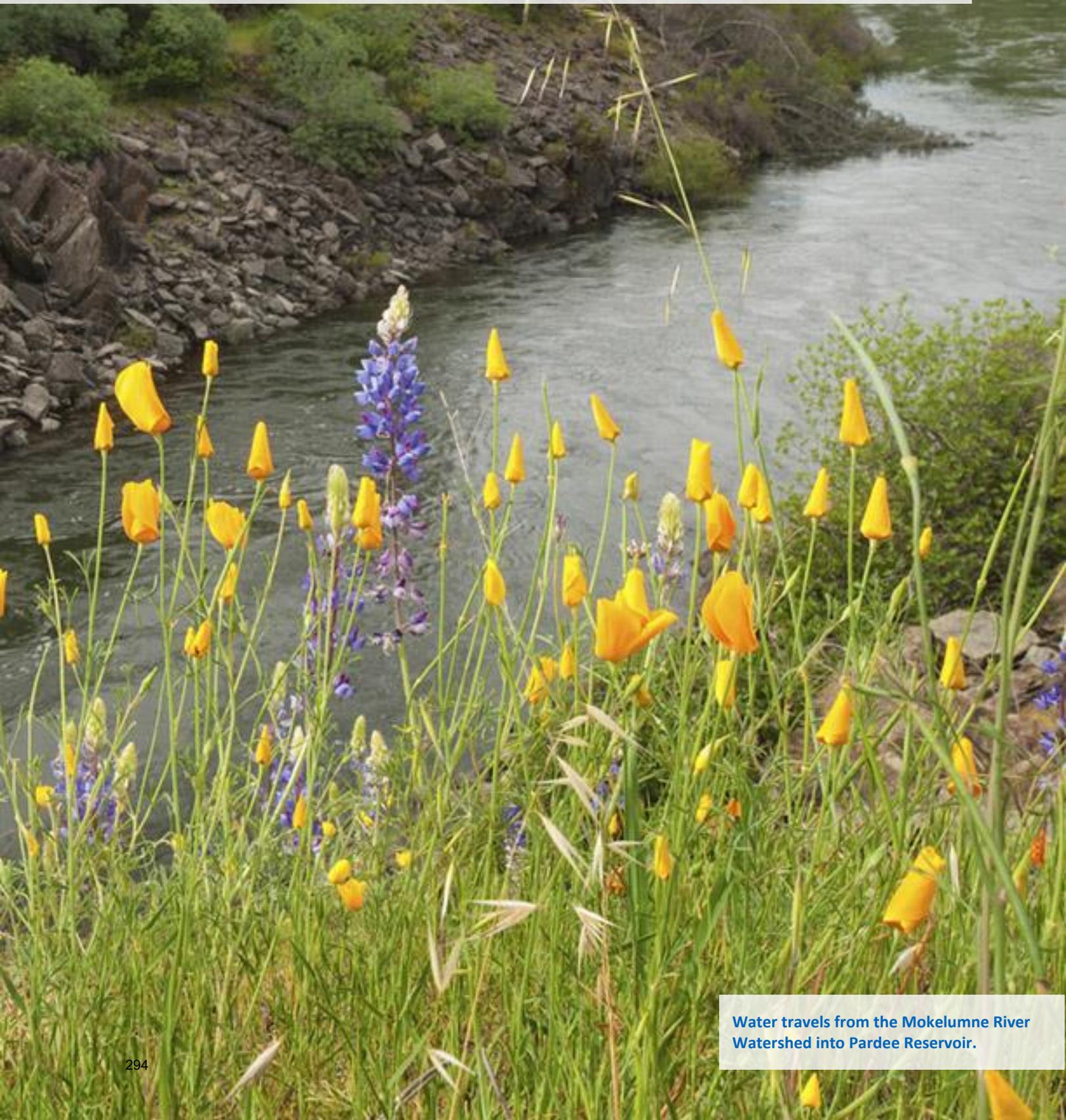
- 💧 Regularly review developing climate change science and evaluate future scenarios that illustrate a range of potential impacts to the District.
- 💧 Maintain a Climate Change Monitoring and Response Plan to inform the District's efforts for future water supply, watershed, water quality, and water and wastewater infrastructure investment decisions.
- 💧 Use the scenarios to identify infrastructure vulnerabilities and make cost-effective infrastructure investments and operational changes to adapt and mitigate impacts based on the best available science and a range of foreseeable conditions (i.e., "no regrets" investments).
- 💧 Educate the public and policymakers on District and industry climate change concerns and interests, participate in research, and advocate for reasonable legislation and regulatory changes.
- 💧 Develop standards to use in planning studies and infrastructure designs.

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Water Quality and Environmental Protection

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

Clifford Chan, Director of Operations and Maintenance



Water travels from the Mokelumne River Watershed into Pardee Reservoir.

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.

Objectives:

- 💧 Use the Watershed Master Plans as the foundation for standards and protocols to ensure drinking water quality and protect natural resources.
- 💧 Perform monitoring and data assessment to adaptively manage the watersheds.
- 💧 Provide public access and recreational opportunities, education and outreach compatible with water quality and natural resource protection, and collect user feedback.
- 💧 Maintain upcountry facilities to support recreation commitments.
- 💧 Protect the Mokelumne River salmonid fishery through habitat enhancement projects, effective and efficient hatchery operations, and a robust science program.
- 💧 Collaborate with stakeholders to protect water quality and the environment in the Mokelumne and East Bay watersheds.
- 💧 Comply with federal and state requirements of the Mokelumne River Project to protect cultural resources, maintain structural integrity, and operate facilities to protect public health and safety, property and the environment.

Strategy 2

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

Objectives:

- 💧 Establish and meet District water quality goals and exceed customers' expectations.
- 💧 Advocate for water quality and environmental regulations that are based on sound science, are protective of public health and beneficial uses and that are attainable and sustainable.
- 💧 Maintain a leadership role in the professional community to further regulatory and legislative initiatives and advocate for protection of public health.
- 💧 Provide timely and accurate water quality information to customers.

Water Quality and Environmental Protection

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.

Objectives:

- 💧 Meet or surpass all water discharge, air, and land requirements.
- 💧 Ensure that management of biosolids is cost-effective, environmentally safe and meets all local ordinance and state and federal requirements.
- 💧 Promote environmental regulations that are based on regional approaches and achieve water quality objectives through cost-effective and sustainable means.

Strategy 4

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

Objectives:

- 💧 Pursue opportunities to recover and utilize resources (e.g., nutrients and minerals), and renewable energy in wastewater.
- 💧 Increase the cost-effective use of renewable energy.
- 💧 Identify and implement energy efficient projects.
- 💧 Reduce the District's greenhouse gas (GHG) emissions.
- 💧 Focus on reduction of pollutants at the source.
- 💧 Identify and implement waste reduction and recycling programs.

Water Quality and Environmental Protection

Strategy 5

Ensure protection and stewardship of San Francisco Bay.

Objectives:

- 💧 Proactively develop and implement regional Pollution Prevention activities that will further reduce pollutant discharges to San Francisco Bay.
- 💧 Support collaborative efforts and programs that develop science-based watershed solutions to address nutrients and other constituents-of-concern in the San Francisco Bay.
- 💧 In collaboration with the satellite collection system communities and the regulators, implement an Inflow and Infiltration Control Program that will over the long term reduce or eliminate the need for wet weather facilities.

Strategy 6

Operate Pardee and Camanche Reservoirs and facilities 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.

Objectives:

- 💧 Balance the competing objectives and requirements by setting clear operational priorities and employing effective models for flow and temperature management.
- 💧 Work collaboratively with stakeholders to adaptively operate Pardee and Camanche Reservoirs to meet downstream objectives for water supply, flood control and environmental resources.
- 💧 Sustain and enhance the successful salmonid fishery on the Lower Mokelumne River through adaptive management of variable flows, temperature optimization, and collaborative efforts with lower Mokelumne stakeholders.
- 💧 Proactively comply with all state, federal, and local permit and license requirements.

Long-Term Infrastructure Investment

“We make investments in resilient infrastructure to ensure safe, reliable delivery of high quality water to our customers and wastewater discharges that protect the San Francisco Bay.”

Jimi Yoloye, Director of Engineering and Construction



EBMUD work crew installing pipeline in the community.

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.

Objectives:

- 💧 Maintain and update a master plan for each asset or group of assets that reflects current condition and performance information and addresses improvements needed to meet defined service-level requirements.
- 💧 Coordinate master plans and capital projects to optimize investments and maximize drinking water quality, and the reliability, safety, flexibility, and overall efficiency of the water and wastewater systems.
- 💧 Periodically inspect and evaluate facilities to support capital and maintenance planning.
- 💧 Consider risk, community and stakeholder concerns, workforce and technology trends, and the potential impacts of climate change as part of the planning process. Involve stakeholders in the project planning and development stage.
- 💧 Ensure that all system improvements and capital projects meet or surpass environmental and regulatory requirements, improve resilience to climate change, and incorporate sustainable practices.

Strategy 2

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

Objectives:

- 💧 Define and document operational needs and reliability goals to inform maintenance decision making.
- 💧 Collect and maintain accurate asset records including criticality, maintenance history, asset condition, and performance for continuous improvement.
- 💧 Expand and refine the use of cost-effective methods and practices to determine the need for maintenance or replacement.
- 💧 Implement preventive, predictive, and corrective maintenance plans to ensure safety, service reliability, and efficiency.
- 💧 Lead the industry in water loss control through using new and innovative technology, effective maintenance practices, and efficient operations.

Long-Term Infrastructure Investment

Strategy 3

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

Objectives:

- 💧 Balance life-cycle costs and risks of plans and projects in the operating and capital budgets to account for near-term needs as well as long-term sustainability and resilience.
- 💧 Complete projects on schedule, within budget and meet the desired intent and quality.
- 💧 Innovate and improve project workflows to maximize efficiency.
- 💧 Use value engineering of proposed capital projects to help implement projects cost-effectively.
- 💧 Coordinate and collaborate construction project scheduling with city, county, and other agencies and communicate with all stakeholders during construction to minimize impacts on communities.

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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."

Sophia Skoda, Director of Finance

\$5,000

EAST BAY MUNICIPAL UTILITY DISTRICT (ALAMEDA AND CONTRA COSTA COUNTIES, CALIFORNIA) WATER SYSTEM REVENUE BOND, SERIES 2019A (GREEN BONDS)



EAST BAY MUNICIPAL UTILITY DISTRICT, a municipal utility district duly organized and existing under and pursuant to the laws of the State of California (the "District"),

for value received, hereby promises to pay out only out of the Subordinated Water Revenues and funds hereinafter referred to the registered owner named above or registered assignee, on the maturity date specified above subject to any right of prior redemption or payment as provided in the hereinafter mentioned Indenture, the principal amount specified above together with interest thereon from its Maturity Date until the principal amount has been paid, at the interest rate per annum specified above, payable on December 1 and December 1 of each year, interest to be payable in lawful money of the United States of America by deposit in a certain checking account maintained by the District in each calendar year commencing on the 1st day of the calendar month immediately preceding each interest payment date, a certain amount of the proceeds of the Series 2019A Bonds, which amount shall be paid to the Trustee for the use of the District, and the Trustee shall be bound to invest the amount of such proceeds in which the principal amount of such proceeds shall be invested in accordance with the terms and conditions set forth in the

supplemented, between the Trustee and the District, providing for the issuance of said bonds (the "Bonds"). Said authorized issue amount, except as otherwise provided in said Indenture, and consists or may consist of one or more series of varying denominations, dates, maturities, interest rates and other provisions, as in said Water System Subordinated Revenue Bond Indenture provided, all issued and to be issued pursuant to the provisions of the Act (as defined in the Water System Subordinated Revenue Bond Indenture). This Bond is issued pursuant to the Water System Subordinated Revenue Bond Indenture, as amended and supplemented, including a Twenty-Ninth Supplemental Indenture, dated as of June 1, 2019, between the Trustee and the District, authorizing the issuance of the Series 2019A Bonds, and to the Act for a certain amount of the proceeds of the Series 2019A Bonds, which amount shall be paid to the Trustee for the use of the District, and the Trustee shall be bound to invest the amount of such proceeds in accordance with the terms and conditions set forth in the

the Subordinated Water Revenues constitute a trust fund for the security and payment of the interest on and principal of the Bonds, but nevertheless out of Subordinated Water Revenues certain amounts may be applied for other purposes as provided in the Indenture.

The Bonds are limited obligations of the District and are payable, both as to principal and interest, and as to any premiums upon redemption thereof, out of the Subordinated Water Revenues and certain funds held under the Indenture. The general fund of the District is not liable, and the credit or taxing power of the District is not pledged, for the payment of the Bonds or the interest thereon. The Bonds are not secured by a legal or equitable pledge of all or charge, lien or encumbrance upon, any of the property of the District or any of its income or receipts, except the Subordinated Water Revenues and the funds held under the Indenture. No registered owner of this Bond shall ever have the right to compel any exercise of the taxing power of the District to pay the Bond or the interest thereon.

Green bonds finance infrastructure projects that promote environmental sustainability.

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.

Objectives:

- 💧 Maintain financial planning models to include long-term forecasts of operating and capital expenditures, revenue requirements and rates and charges.
- 💧 Ensure the financial plan is based on reasonable, conservative assumptions and accounts for uncertainties.
- 💧 Ensure the financial plan maintains the District’s good standing in the credit markets to provide ready access to cost-effective capital financing.
- 💧 Evaluate the District’s capital financing and debt service coverage policies to optimize cash funding of capital investments.
- 💧 Evaluate the District’s cash reserve policies to consider optimal uses and levels of reserves, including alternative strategies for funding drought-related costs to ensure financial resiliency.

Strategy 2

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

Objectives:

- 💧 Plan for rate increases that are steady, predictable, and based on our strategic needs.
- 💧 Mitigate increases in rates and charges by optimizing use of non-rate revenue and pursue opportunities for cost control through efficiencies and new technologies.
- 💧 Continue to establish rates and charges based on cost of service principles.
- 💧 Periodically conduct third-party cost of service studies.

Long-Term Financial Stability

Strategy 3

Ensure integrity, accountability and transparency in financial management.

Objectives:

- 💧 Develop operating and capital budgets aligned with the Strategic Plan.
- 💧 Manage operating and capital expenditures within their respective budgets.
- 💧 Develop and maintain accurate, timely, and meaningful financial data.
- 💧 Enhance the usability, clarity and accessibility of District financial information.
- 💧 Maintain and regularly evaluate internal financial controls.
- 💧 Conduct regular internal and external financial audits.
- 💧 Promote diversity and equity in contracting, consistent with state and federal laws.

Strategy 4

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

Objectives:

- 💧 Maintain a long-term plan to guide technology investments and resources.
- 💧 Apply a consistent approach to set IT priorities and evaluate, plan, and implement projects that address the needs of customers, employees and, other stakeholders.
- 💧 Ensure all employees have ready access to tools and data so they can provide excellent customer service and maintain and operate our infrastructure.
- 💧 Make effective use of tools and data to best maintain and monitor District infrastructure and develop workflows that enable rapid capture and use of the data.
- 💧 Structure and manage data to support consistent analysis and reporting and provide appropriate access to customers, employees and other stakeholders.
- 💧 Proactively ensure adequate security to meet all regulatory requirements, maintain operations, and protect the privacy of customer and employee data.

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Customer and Community Services

"We strive to meet customer expectations by providing responsive, trusted, and high quality service."

Andrew Lee, Manager of Customer and Community Services



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

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

Strategy 1

Build public awareness of the District's priorities, initiatives, systems and services.

Objectives:

- 💧 Collect and analyze customer feedback on District operations, activities and service experience and expectations.
- 💧 Proactively communicate electronically through multiple channels, via print publications, and media or community events.
- 💧 Maintain a robust web and social media presence.
- 💧 Enhance internal communication, tools and technology to effectively disseminate information to District staff.

Strategy 2

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

Objectives:

- 💧 Employees recognize they are representing the customers' interest and provide professional, high quality service.
- 💧 Invest in business process improvements and technology to enhance the customer experience and customer access to information.
- 💧 Protect customer data and other personally identifiable information.
- 💧 Minimize customer and community impacts from water and wastewater operations.
- 💧 Provide programs and services that support or benefit the community, residents, and businesses.

Customer and Community Services

Strategy 3

Build long-term partnerships in the community, regionally and nationally, in areas of shared interest and in support of the District's mission.

Objectives:

- 💧 Build and actively participate in regional and national industry groups, coalitions, and partnerships to advance common goals.
- 💧 Partner with non-profit, community and education organizations in support of the District's Mission and Strategic Plan.
- 💧 Advance Contract Equity and Diversity Inclusion Programs to enhance diversity and equal opportunities for business owners and prospective and current employees.

Strategy 4

Maintain active Emergency Preparedness and business continuity Programs to plan for, minimize interruptions, and manage the District's essential functions during an emergency and allow for an efficient and effective recovery.

Objectives:

- 💧 Maintain current documentation of emergency response, business continuity, risk and resilience assessment, and disaster recovery plans, including support documents for regional coordination, and mutual assistance.
- 💧 Review and exercise emergency communications, critical functions, information technology infrastructure and protocols to support emergency response and recovery goals at all levels of the organization.
- 💧 Provide training and exercise emergency response, and business continuity plans to achieve response and recovery goals.
- 💧 Provide timely public and employee communication during emergencies and business interruptions.
- 💧 Enhance customer outage notification tools.
- 💧 Work collaboratively with local, city, county, state, and regional stakeholders on emergency preparedness, response, and recovery efforts.

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Workforce Planning and Development

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

Laura Acosta, Manager of Human Resources



Employees receive hands-on training in treatment plant operations.

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

Strategy 1

Coordinate workforce planning activities to determine future needs, identify gaps and implement actions to close the gaps.

Objectives:

- 💧 Preserve intellectual capital (knowledge retention) at all levels of the organization.
- 💧 Regularly evaluate advances in technology and associated skills required for improved efficiency.
- 💧 Regularly analyze evolving workforce needs and risks to ensure the District’s current and future workforce needs are met.

Strategy 2

Continue to develop employees to meet evolving workforce demands and implement actions to close gaps.

Objectives:

- 💧 Offer career and professional development opportunities and support to expand the skills of District employees to meet emerging industry needs.
- 💧 Maximize opportunities to “grow our own” through academies, cross-training, mentoring, and rotation programs.
- 💧 Encourage personal accountability for professional development through programs such as tuition reimbursement and internal training.
- 💧 Implement organizational practices that promote and value employee contributions, safety, employee-well-being, diversity and inclusion, and encourage learning and networking.
- 💧 Engage employees and labor unions in improving the work of the District.

Workforce Planning and Development

Strategy 3

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

Objectives:

- 💧 Engage District employees in values-based continuous improvement efforts with a focus on internal communication, teamwork, performance, and employee recognition.
- 💧 Establish and communicate clear performance and behavioral expectations and standards.
- 💧 Regularly assess and communicate performance against standards.
- 💧 Enhance managers' and supervisors' ability to accurately evaluate and recognize good performance and observable behavior that supports the District values.
- 💧 Provide coaching and opportunities for improvement of performance deficiencies.
- 💧 Incorporate diversity and inclusion practices to support the District's hiring, promotion, and retention goals.

Strategy 4

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

Objectives:

- 💧 Promote EBMUD's industry reputation as an employer of choice.
- 💧 Support our employees as ambassadors in our communities (peer, industry, education) to educate and share knowledge about the District's culture, values, career opportunities and work.
- 💧 Target specific employment markets and partner with colleges and regional agencies to attract and hire quality candidates that reflect the diversity of our community.
- 💧 Seek opportunities to expand internships/apprenticeships and training programs to introduce career opportunities to our community.

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**EAST BAY
MUNICIPAL UTILITY DISTRICT**

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ebmud.com

Key Performance Indicators

Strategic Plan

9th Edition | July 2020

Photo on cover is the Pardee Reservoir.

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Downtown Oakland

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Overview

The purpose of the strategic planning process is to define the actions that need to be taken in the next three to five years to achieve the District’s mission now and well into the future. The Strategic Plan incorporates the District’s mission and principles, and identifies its goals, strategies, objectives and key performance indicators. The Plan guides staff in setting priorities and allocating resources.

- 💧 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 practices.
- 💧 Our **Goals** define in broad terms the high-level achievements the District will pursue; they explain ‘what’ not ‘how’, and tell where we are going rather than how we will get there.
- 💧 Our **Strategies** define the actions that are necessary to achieve each goal, and may take several years to implement.
- 💧 Our **Objectives** reflect what we need to accomplish in the near term.
- 💧 Our **Key Performance Indicators (KPIs)** measure how well we are doing in achieving our goals.



Pardee Reservoir



Recycled Water

This Key Performance Indicators publication focuses solely on the KPIs for Fiscal Years 2021 and 2022. Please see the Strategic Plan document for further details on the Plan including goals, strategies and objectives.

Key Performance Indicators

Key Performance Indicators (KPIs) measure the progress we are making in achieving the Strategic Plan goals. An effective KPI serves as an important measure of progress. KPIs can track efficiency, effectiveness, quality, timeliness, compliance, behaviors, economics, project performance, personnel performance or resource utilization. The KPIs and targets are evaluated and revised as part of the Strategic Plan update process. Performance is reported annually to the Board of Directors. The current set of KPIs is part of the Strategic Plan adopted by the Board of Directors in June 2020.

The following page details all six goals and associated strategies on a single page.



Main Wastewater Treatment Plant

Strategic Plan | Goals and Strategies

East Bay Municipal Utility District | July 2020

Long-Term Water Supply

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** Consider the impacts of climate change and take appropriate action to understand and balance mitigation and adaptation responses to those impacts through sustainable activities.

Water Quality and Environmental Protection

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 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.

Long-Term Infrastructure Investment

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 Financial Stability

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.

Customer and Community Services

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

- Strategy 1** Build public awareness of 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 and in support of the District’s mission.
- Strategy 4** Maintain active Emergency Preparedness and business continuity Programs to plan for, minimize interruptions, and manage the District’s essential functions during an emergency and allow for an efficient and effective recovery.

Workforce Planning and Development

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

- Strategy 1** Coordinate workforce planning activities to determine future needs, identify gaps and implement actions to close the gaps.
- Strategy 2** Continue to develop employees to meet evolving workforce demands and implement actions to close gaps.
- Strategy 3** Support 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.

For the complete Strategic Plan, go to
www.ebmud.com/about-us/who-we-are



Long-Term Water Supply

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:** Consider the impacts of climate change and take appropriate action to understand and balance mitigation and adaptation responses to those impacts through sustainable activities.



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

Long-Term Water Supply

Key Performance Indicator	FY21 Target	FY22 Target
Strategy 1: 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 Placer County Water Agency	Work with Placer County Water Agency to publish a draft environmental document for a long-term water transfer
	Complete technical and environmental studies to support a long-term water transfer project with Yuba Water Agency (YWA), or another transfer partner	Develop an agreement for a long-term water transfer with YWA or another transfer partner
	Construct DREAM project facilities in San Joaquin County and initiate operation	Operate the DREAM Project in San Joaquin County
	Continue working with Bay Area Regional Reliability (BARR) partners to develop the Shared Water Access Program (SWAP)	Complete the BARR SWAP study and pilot test
	Evaluate project yield, costs, governance, and other factors to determine degree of participation in the Los Vaqueros Expansion	
	Complete the 2020 Urban Water Management Plan	
	Continue development of Groundwater Sustainability plan for East Bay Plain	Finalize the Groundwater Sustainability Plan for the East Bay Plain Basin and submit to the Department of Water Resources for review
	Strategy 2: Water Conservation	
70 MGD savings from conservation programs / natural replacement by 2050 (baseline yr. 1995)	Lock in a minimum of 48.4 MGD of water conservation savings	Lock in a minimum of 49.2 MGD of water conservation savings
Meet state long-term framework target by achieving established residential indoor per capita water use	55 gpcd	55 gpcd
	Update Water Conservation Master Plan	Implement Water Conservation Master Plan

Long-Term Water Supply

Key Performance Indicator	FY21 Target	FY22 Target
Strategy 3: Water Recycling		
20 MGD of recycled water capability by 2040	Construct the DERWA groundwater supplemental supply pilot project	Operate the DERWA groundwater supplemental supply pilot project
	Construct the DERWA/Central San summer flow diversion project	Operate the DERWA/Central San summer flow diversion project
	Implement the East Bayshore water quality improvement pilot project	Operate the East Bayshore water quality improvement pilot project
Strategy 4: 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	Update the Climate Change Monitoring & Response Plan to account for new information	Develop planning and design standards that incorporate climate change adaptation and mitigation principles
	Complete annual greenhouse gas emission inventory	Complete annual greenhouse gas emission inventory
Continue District leadership in climate change by participating in climate change studies, workshops or education events	3	3

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Water Quality and Environmental Protection

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 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 travels from the Mokelumne River Watershed into Pardee Reservoir.

Water Quality and Environmental Protection

Key Performance Indicator	FY21 Target	FY22 Target
Strategy 1: Watershed Protection and Management		
Mokelumne River fall-run Chinook salmon returns (long-term average)	4,734	4,734
Strategy 2: Drinking Water Regulations Compliance		
% of water quality regulations met	100%	100%
% of water quality goals met	100%	100%
Strategy 3: Environmental Regulations Compliance		
Number of NPDES and Waste Discharge Permit Notices of violation received	0	0
Strategy 4: Reduce, Recycle, Reuse, Reclaim		
Reduce indirect GHG emissions to zero by 2040 and reduce direct emissions by 50% by 2040 compared to the 2000 baseline	≤ 30,816 MT CO ₂	≤ 29,476 MT CO ₂
Capture biogas sufficient to produce on-site energy to meet electric power demands of the Main Wastewater Treatment Plant and evaluate the best uses of excess biogas	100% of plant power demand	100% of plant power demand
Pursue large-scale photovoltaic project at the Duffel property located in Orinda	Complete permitting and design	Begin construction
Strategy 5: San Francisco Bay Protection		
Implement Private Sewer Lateral Program to reduce wet weather flows and achieve a high compliance rate at point of sales	90%	90%
Strategy 6: Operate Pardee and Camanche Reservoirs and Facilities		
Meet JSA Mokelumne River minimum flow releases 100% of the time	100%	100%
Review operations with lower Mokelumne stakeholders every two years	Conduct stakeholder meeting	N/A

Long-Term Infrastructure Investment

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.



EBMUD work crew installing pipeline in the community.

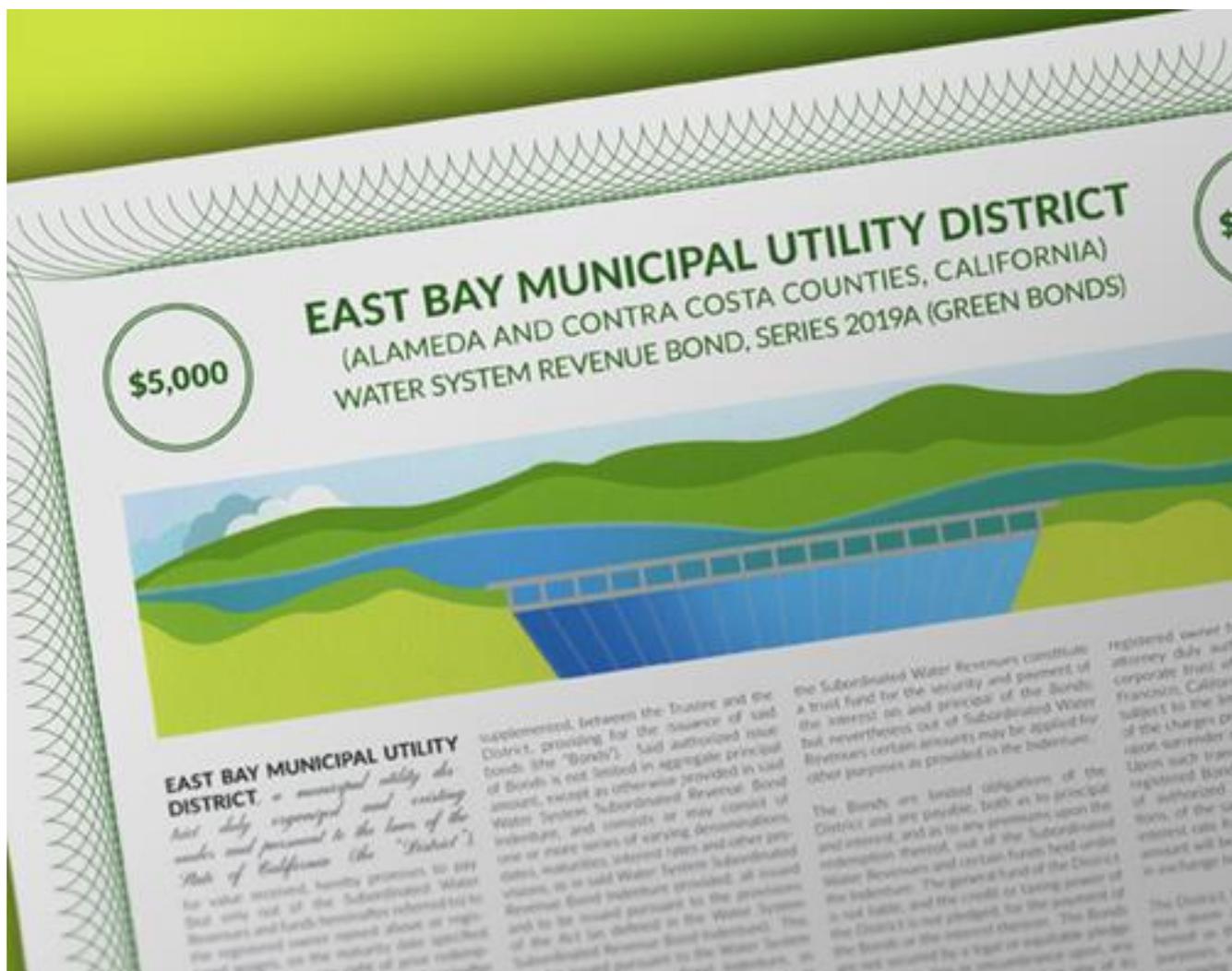
Long-Term Infrastructure Investment

Key Performance Indicator	FY21 Target	FY22 Target
Strategy 1: Master Plans		
Complete the Wastewater Treatment Plant Master Plan	Complete draft plan	Complete final plan
Strategy 2: Effective Infrastructure Maintenance		
Number of water system pipeline breaks per 100 miles of pipe	≤ 20	≤ 20
% of water system corrective work order hours classified high priority	≤ 10%	≤ 10%
Miles of pipe surveyed for leaks	≥ 800	≥ 800
% of water system valves exercised	≥ 10%	≥ 10%
Real water losses in gallons per connection per day	The State Water Resources Control Board is developing a water loss performance standard for each urban retail water supplier in California under Senate Bill 555. The District's performance standard has not been finalized.	The State Water Resources Control Board is developing a water loss performance standard for each urban retail water supplier in California under Senate Bill 555. The District's performance standard has not been finalized.
% of high priority meter repair orders completed in 60 days	≥ 90%	≥ 90%
Strategy 3: Capital Budget Priorities		
Miles of distribution pipe replaced	≥ 20	≥ 20
District directed non-discretionary change orders on construction contracts	≤ 5%	≤ 4%
Number of concrete digesters and concrete aerated grit tanks rehabilitated	2	2
Implement the Orinda Water Treatment Plant Disinfection Improvements (UV/CCB)	Complete design	Begin construction
Cumulative annual average number of steel water tanks rehabilitated	2	2
Cumulative annual average number of pumping plants rehabilitated	2	2

Long-Term Financial Stability

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.



Green bonds finance infrastructure projects that promote environmental sustainability.

Long-Term Financial Stability

Key Performance Indicator	FY21 Target	FY22 Target
Strategy 1: Long-Range Financing Plan		
% of capital program funded from debt	≤ 65%	≤ 65%
Debt service coverage	≥ 1.6 times coverage	≥ 1.6 times coverage
Actual reserves as % of target	≥ 100%	≥ 100%
Strategy 2: Rates and Charges		
Water rates as compared to other Bay Area Agencies	At or below median	At or below median
Wastewater treatment charge as a share of the total bill when compared to other Bay Area agencies	At or below median %	At or below median %
Strategy 3: Integrity, Accountability and Transparency		
% of planned audits completed	100%	100%
% of audit findings resolved within 90 days	100%	100%
Operating expenditures as a percentage of operating budget	≤ 100%	≤ 100%
Capital expenditures as a percentage of capital budgeted cash flow	Between 90% and 110% of a two year rolling average	Between 90% and 110% of a two year rolling average
Strategy 4: Technology		
Cyber Security Operational Readiness		
Planned patch cycles met	> 90%	> 90%
Business recovery exercises	2 per year	2 per year
Security awareness events	4 per year	4 per year
Biennial IT security controls assessment	Complete ISD staff led security and control assessment	Complete independent internal control, security, and vulnerability assessment

Customer and Community Services

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

- Strategy 1:** Build public awareness of 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 and in support of the District's mission.
- Strategy 4:** Maintain active Emergency Preparedness and business continuity Programs to plan for, minimize interruptions, and manage the District's essential functions during an emergency and allow for an efficient and effective recovery.



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

Customer and Community Services

Key Performance Indicator	FY21 Target	FY22 Target
Strategy 1: Communications		
Consolidate District education resources	Complete	Review
Conduct media/advertising campaigns	3	3
Conduct customer opinion research	Complete	N/A
Publish external digital/print publications	8	8
Participate in community engagement events	100	100
Strategy 2: Customer Satisfaction		
% of customers rating the District's services as "Good" or "Excellent": Field Services New Business Water Quality Recreation	≥ 90%	≥ 90%
% of customers rating "Overall Job" as "Good" or "Excellent" from the customer opinion survey	N/A	Establish baseline
Contact Center service level		
Average speed of answer to calls coming into the Contact Center	≤ 60 seconds	≤ 60 seconds
% of calls answered within the target of ≤60 seconds	≥ 80%	≥ 80%
% of customers rating Call Center as "Good" or "Excellent" base on first call resolution, staff knowledge, promptness, courtesy, and overall quality	≥ 80%	≥ 80%
Abandonment rate	≤ 3%	≤ 3%
Timely billing of customer statements as scheduled	≥ 99%	≥ 99%
Notify customers in advance of shut-off for non-payment and provide information on options to avoid service interruption for non-payment of bills per District Regulations – Section 15	100%	100%
% of time customer dependent systems are available	≥ 99.9%	≥ 99.9%
Unplanned water service interruptions per 1,000 active accounts		
< 4 hrs.	≤ 10	≤ 10
4-12 hrs.	≤ 5	≤ 5
> 12 hrs.	≤ 2	≤ 2
Odor complaints near the MWWTP	≤ 30 complaints	≤ 30 complaints

Customer and Community Services

Key Performance Indicator	FY21 Target	FY22 Target
Strategy 3: Partnerships and Programs		
Reduce shut-offs for CAP participants by 10% over two years while increasing CAP enrollment	Performance Measure Only	Performance Measure Only
Proactively review and update shut-off guidelines and Customer Assistance Program (CAP)	Complete review and with Board guidance address COVID impacts	Annual review and adjustment based on experience
Participate in targeted outreach events in disadvantaged communities to increase CAP enrollment	3	3
Strategy 4: Emergency Preparedness		
Update the District's Emergency Operation Plan every five years	Complete update	N/A
Conduct the District's Emergency Operations Team exercise annually	Complete annual exercise	Complete annual exercise
Update all Business Continuity plans every two years	Complete updates	N/A
Conduct Business Continuity exercises annually	100%	100%
Update the District's Risk and Resilience assessment every five years	Complete update	N/A
Conduct annual exercises or meetings with mutual assistance partners and stakeholders	3	3

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Workforce Planning and Development

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

- Strategy 1:** Coordinate workforce planning activities to determine future needs, identify gaps and implement actions to close the gaps.
- Strategy 2:** Continue to develop employees to meet evolving workforce demands and implement actions to close gaps.
- Strategy 3:** Support 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.



Employees receive hands-on training in treatment plant operations.

Workforce Planning and Development

Key Performance Indicator	FY21 Target	FY22 Target
Strategy 1: Workforce Plans		
Number of injury & illness incidents resulting in time away from work per 100 employees	≤ 3.0	≤ 3.0
Injury and Illness Investigations (PE-020 forms) completed within 10 working days	>99%	>99%
Diversity & Inclusion Master Plan	Complete draft	Finalize and implement
Annually implement outreach campaigns on wellbeing themes	4	4
Strategy 2: Employee Development		
Annual average training hours per employee	30	30
Number of employees in development programs (academies, rotations, internships, mentorships)	Performance Measure Only	Performance Measure Only
Strategy 3: District Values		
% of performance plans completed on time	> 99%	> 99%
% of performance appraisals completed on time	> 99%	> 99%
Strategy 4: Recruitment		
% of exams resulting in hiring lists within 60 days or less	80%	80%
% of minorities and % of women on District eligibility lists (including both employees and external applicants)	Performance Measure Only	Performance Measure Only
Number of Interns	Performance Measure Only	Performance Measure Only
% of minority and % of female interns	Performance Measure Only	Performance Measure Only



**EAST BAY
MUNICIPAL UTILITY DISTRICT**

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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.

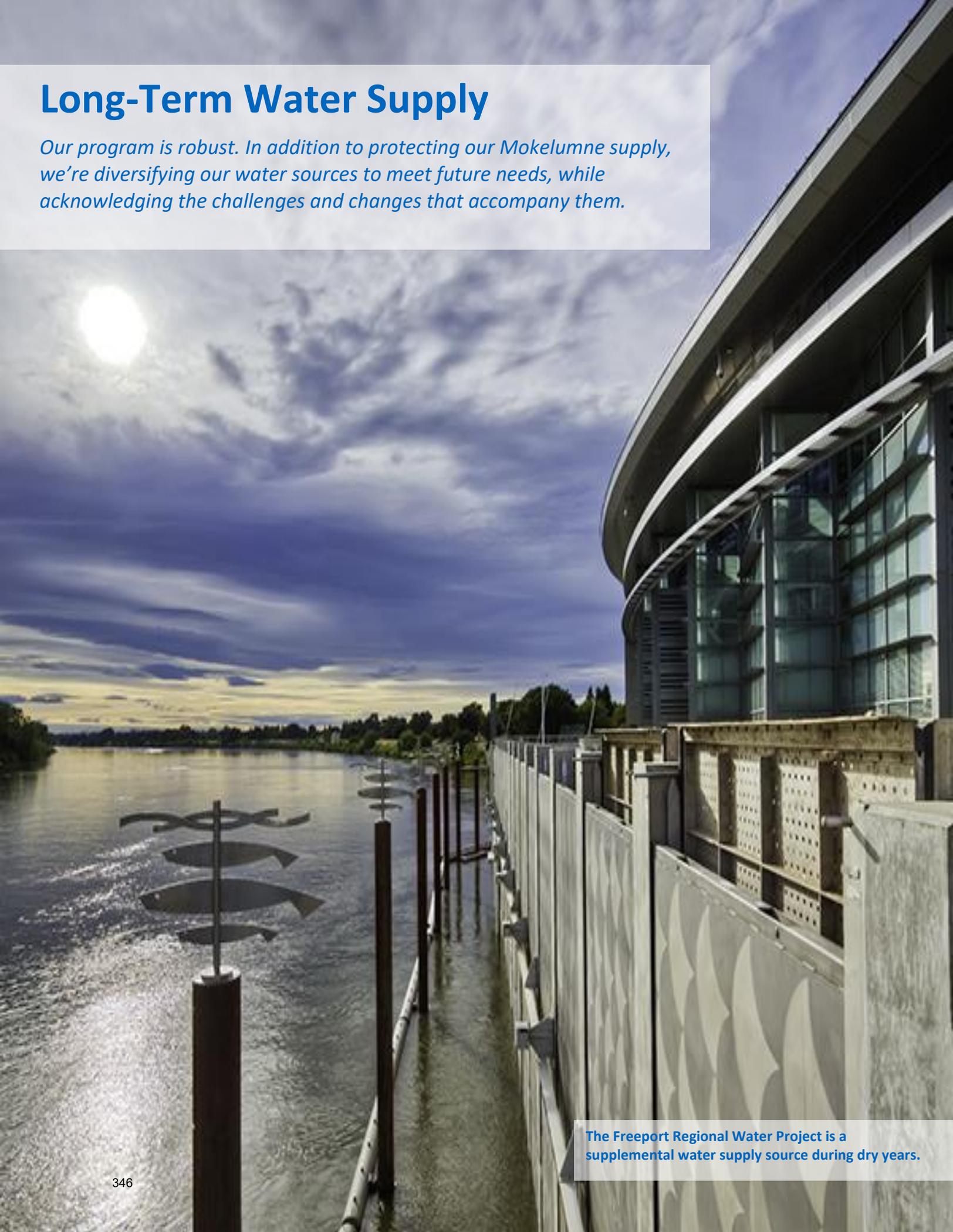
KEY PERFORMANCE INDICATOR – SUMMARY	FY20 TARGET	FY20	FY19	FY18
Long-Term Water Supply				
Additional supply by 2040 to provide 85% reliability under design drought conditions and diversify through regional partnerships	Various	+	+	++
62 MGD savings from conservation programs / natural replacement by 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.

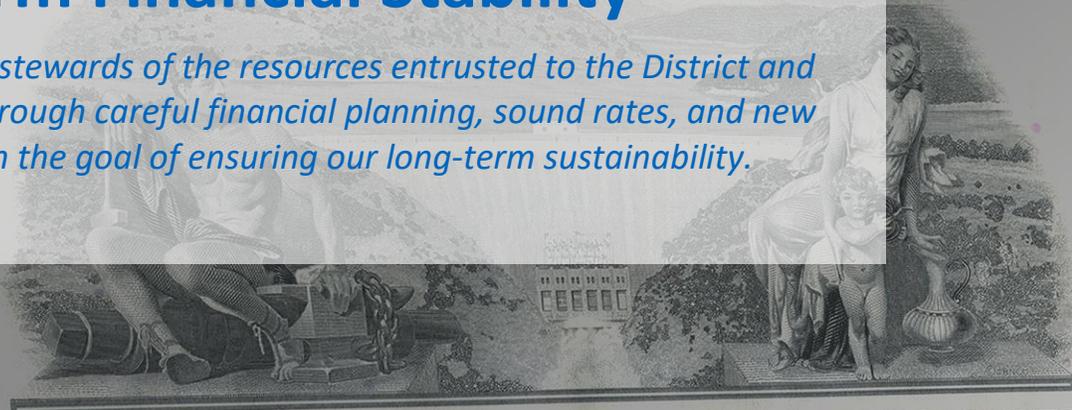
In FY20, contracts were completed for improving three steel reservoirs: the rehabilitation of Scenic and Scenic East Reservoirs in Danville and the replacement of Derby Reservoir in San Ramon with a smaller tank which will improve water quality. The work includes replacing an oversized steel tank with 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 fiscal 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, as 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% 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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SPONSORSHIPS

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SPONSORSHIPS

This section includes District-approved sponsorships for the Fiscal Years 2022 (FY22) and 2023 (FY23). The District sponsors community activities and organizations that support the District's mission and provide educational and outreach opportunities. Sponsorships include, but aren't limited to, booths or tables at trade shows, festivals, street fairs, community events, garden tours, advertising in event programs, and in-kind tasks such as staffing a table and promotional items. The sponsorship budget which is routinely reviewed is approximately \$169,000 in FY22 and \$178,000 in FY23.

SPONSORSHIP	FY22	FY23
23RD STREET MERCHANTS ASSOCIATION	-	\$500
ALAMEDA COUNTY ENVIRONMENTAL HEALTH	\$1,430	\$1,430
ALAMEDA COUNTY SCHOOL PROGRAM	-	\$500
ALAMEDA COUNTY SCIENCE AND ENGINEERING FAIR	-	\$500
ALAMEDA COUNTY SPECIAL DISTRICTS ASSOCIATION	-	\$200
ALAMEDA RECREATION AND PARKS	\$75	\$75
ALLIANCE FOR WATER EFFICIENCY - CALIFORNIA WATER EFFICIENCY PARTNERSHIP	-	\$2,000
AMADOR CALAVERAS CONSENSUS GROUP	-	\$500
AMADOR COUNTY FAIR	\$500	\$500
AMADOR COUNTY RECREATION AGENCY	\$500	\$500
AMADOR FLY FISHERS	\$500	\$500
AMADOR TUOLUMNE COUNTY COMMUNITY ACTION AGENCY	\$500	\$500
AMERICAN CONTRACT COMPLIANCE ASSOCIATION	-	\$1,000
AMERICAN FISHERIES SOCIETY	-	\$1,000
AMERICAN INDIAN CHAMBER OF COMMERCE	\$1,500	\$1,500
AMERICAN SOCIETY OF CIVIL ENGINEERS	-	\$1,000
ASIAN BUSINESS LEAGUE SAN FRANCISCO CHAPTER	-	\$1,000
ASIAN ENTERPRISE MAGAZINE	\$500	\$500
ASIAN HEALTH SERVICES	\$500	\$500
ASIAN, INC.	\$1,000	\$1,000
BAY NATURE INSTITUTE	\$1,000	\$1,000
BAY PLANNING COALITION	\$1,000	\$1,000
BAYFRONT CHAMBER OF COMMERCE	\$1,000	\$1,000
BERKELEY JUNETEENTH	\$1,000	\$1,000
BLACK JOY PARADE	\$400	\$400
CALAVERAS COUNTY FAIR	\$500	\$500
CALAVERAS COUNTY WATER DISTRICT	\$1,000	\$1,000
CALAVERAS HEALTHY IMPACT PRODUCT SOLUTIONS	\$1,000	\$1,000
CALAVERAS MENTORING	\$500	\$500
CALIFORNIA HISPANIC CHAMBER OF COMMERCE	\$1,000	\$1,000
CALIFORNIA BLACK CHAMBER OF COMMERCE	\$1,000	\$1,000

SPONSORSHIP	FY22	FY23
CALIFORNIA FOUNDATION ON THE ENVIRONMENT AND THE ECONOMY	\$3,000	\$3,000
CALIFORNIA IRRIGATION INSTITUTE	\$1,000	\$1,000
CALIFORNIA LANDSCAPE CONTRACTORS ASSOCIATION	\$500	\$500
CALIFORNIA NATIVE PLANT SOCIETY	\$1,000	\$1,000
CALIFORNIA WATER EFFICIENCY	\$2,000	\$2,000
CALIFORNIA WATER ENVIRONMENT ASSOCIATION	\$350	\$350
CASTRO VALLEY CHAMBER OF COMMERCE	\$535	\$535
CENTER FOR IRRIGATION TECHNOLOGY	\$500	\$500
CHABOT LOS POSITAS COMMUNITY COLLEGE DISTRICT	\$1,000	\$1,000
CHINESE FOR AFFIRMATIVE ACTION	\$500	\$500
CITY COLLEGE OF SAN FRANCISCO	\$1,000	\$1,000
CITY OF RICHMOND	\$1,250	\$1,250
CITY OF SAN LEANDRO	\$310	\$310
CIVIC PRIDE	\$1,000	\$1,000
COMMUNITY RESOURCES FOR SCIENCE	\$1,500	\$1,500
COMMUNITY WATER CENTER	\$2,000	\$2,000
CONSTRUCTION RESOURCE CENTER	\$2,000	\$2,000
CONTRA COSTA COUNTY COMMUNITY COLLEGE DISTRICT	\$1,000	\$1,000
CONTRA COSTA COUNTY FIRE PROTECTION DISTRICT	\$300	\$300
CONTRA COSTA COUNTY SCHOOL PROGRAM	\$500	\$500
CONTRA COSTA COUNTY SCIENCE & ENGINEERING FAIR	\$500	\$500
CONTRA COSTA SPECIAL DISTRICTS ASSOCIATION	\$200	\$200
COUNCIL OF INDUSTRIES	\$800	\$800
CROCKETT CHAMBER OF COMMERCE	\$300	\$300
CYPRESS MANDELA	\$1,250	\$1,250
DANVILLE CHAMBER OF COMMERCE	\$150	\$150
DANVILLE HOME EXPO	\$600	\$600
DAVID BROWER CENTER	\$2,500	\$2,500
DISABLED VETERAN BUSINESS ALLIANCE	\$500	\$500
DOWNTOWN ALAMEDA BUSINESS ASSOCIATION	-	\$1,000
EARTH DAY/JULY 4TH EVENTS - VARIOUS CITIES	\$1,500	\$1,500
EARTH ISLAND INSTITUTE	\$1,000	\$1,000
EARTHTEAM	\$1,000	\$1,000
EAST BAY ECONOMIC ALLIANCE FOUNDATION	\$1,000	\$1,000
EAST BAY ECONOMIC DEVELOPMENT ASSOCIATION	\$450	\$450
EAST BAY LEADERSHIP COUNCIL	\$2,500	\$2,500
EL SOBRANTE CHAMBER OF COMMERCE	\$305	\$305
ENGINEERS WITHOUT BORDERS	\$1,000	\$1,000
FOOTHILL CONSERVANCY	\$500	\$500
FRIENDS OF SAN LEANDRO CREEK	\$500	\$500

SPONSORSHIP	FY22	FY23
FRIENDS OF SAUSAL CREEK	\$1,000	\$1,000
FRIENDS OF THE GARDENS AT LAKE MERRITT	\$500	\$500
FRIENDS OF THE RIVER	\$1,000	\$1,000
GARDENS AT HEATHER FARMS	\$500	\$500
GREATER RICHMOND INTERFAITH PROGRAM	\$1,000	\$1,000
GREATER STOCKTON CHAMBER OF COMMERCE	\$500	\$500
IMAGINE H2O	\$2,500	\$2,500
INTERNATIONAL PARTNERING INSTITUTE	\$100	\$100
IRRIGATION ASSOCIATION LANDSCAPE	\$500	\$500
JOHN MUIR LAND TRUST	\$1,000	\$1,000
KID SCOOP NEWS	\$1,800	\$1,800
LAFAYETTE CHAMBER OF COMMERCE	\$3,500	\$3,500
LANEY COLLEGE	\$500	\$500
LATINO TIMES	\$500	\$500
LAWRENCE HALL OF SCIENCE	\$1,000	\$1,000
LEAGUE OF WOMAN VOTERS OF THE BAY AREA	\$1,500	\$1,500
LODI CHAMBER OF COMMERCE	\$500	\$500
MINORITY BUSINESS ENTERPRISE MAGAZINE	\$1,000	\$1,000
MORAGA CHAMBER OF COMMERCE	\$750	\$750
MOTHER LODE JOB TRAINING AGENCY	\$500	\$500
NATIONAL ASSOCIATION OF MINORITY CONTRACTOR	\$500	\$500
NATIONAL ASSOCIATION OF WOMEN IN CONSTRUCTION	\$500	\$500
NATIONAL COALITION OF 100 BLACK WOMEN	\$1,000	\$1,000
NATIONAL FORUM FOR BLACK PUBLIC ADMINISTRATORS	\$1,000	\$1,000
NORTH SHATTUCK ASSOCIATION	\$500	\$500
NORTHERN CALIFORNIA WATER ASSOCIATION	\$500	\$500
OAKLAND AFRICAN AMERICAN CHAMBER OF COMMERCE	\$2,000	\$2,000
OAKLAND ART MURMUR	\$500	\$500
OAKLAND ASIAN CULTURAL CENTER	\$1,000	\$1,000
OAKLAND CHINATOWN CHAMBER OF COMMERCE	\$3,000	\$3,000
OAKLAND LATINO CHAMBER OF COMMERCE	\$1,500	\$1,500
OAKLAND METROPOLITAN CHAMBER OF COMMERCE	\$3,000	\$3,000
OAKLAND PARKS AND RECREATION FOUNDATION	\$500	\$500
OAKLAND PRIDE	\$1,500	\$1,500
OAKLAND PUBLIC EDUCATION FUND	\$500	\$500
OAKLAND VIETNAMESE CHAMBER OF COMMERCE	\$2,000	\$2,000
OAKLAND ZOO	\$500	\$500
ORINDA CHAMBER OF COMMERCE	\$200	\$200
OUTDOOR AFRO	\$2,000	\$2,000
PERALTA COMMUNITY COLLEGES FOUNDATION	\$3,000	\$3,000

SPONSORSHIP	FY22	FY23
PLANNING & CONSERVATION LEAGUE	\$2,500	\$2,500
PRIDE AND A PAYCHECK	\$250	\$250
RESCAPE CALIFORNIA	\$1,500	\$1,500
RESIDENTIAL HOMEWORKERS HOA LANDSCAPE	\$500	\$500
RICHMOND CHAMBER OF COMMERCE	\$1,000	\$1,000
RICHMOND DEMO GARDEN	\$500	\$500
RICHMOND MAIN STREET INITIATIVE	\$1,000	\$1,000
RICHMOND POLICE ACTIVITIES LEAGUE	\$1,000	\$1,000
RISING SUN ENERGY CENTER	\$1,000	\$1,000
ROSE FOUNDATION	\$1,000	\$1,000
RUTH BANCROFT GARDEN	\$500	\$500
SACRAMENTO RIVER WATERSHED PROGRAM	\$4,000	\$4,000
SALMONID RESTORATION FEDERATION	\$1,000	\$1,000
SAN FRANCISCO BAY AREA HISPANIC CHAMBER OF COMMERCE	\$2,000	\$2,000
SAN FRANCISCO BAYKEEPER	\$1,500	\$1,500
SAN FRANCISCO ESTUARY PARTNERSHIP	\$1,500	\$1,500
SAN JOAQUIN COUNTY HISPANIC CHAMBER OF COMMERCE	\$3,500	\$3,500
SAN JOAQUIN DELTA COLLEGE FOUNDATION	\$1,000	\$1,000
SAN JOAQUIN FARM BUREAU	\$500	\$500
SAN JOAQUIN FUTURE FARMERS OF AMERICA	\$500	\$500
SAN LEANDRO CHAMBER OF COMMERCE	\$500	\$500
SAN PABLO CHAMBER OF COMMERCE	\$150	\$150
SAN PABLO RESERVOIR	\$750	\$750
SAVE SAN FRANCISCO BAY ASSOCIATION	\$1,000	\$1,000
SIERRA CLUB OF SAN FRANCISCO BAY CHAPTER	\$1,000	\$1,000
SOCIAL AND ENVIRONMENTAL ENTREPRENEURS	\$1,000	\$1,000
SOLANO AVENUE ASSOCIATION	\$450	\$450
SPIRAL GARDENS COMMUNITY FOOD SECURITY PROJECT	\$500	\$500
STEWARDSHIP THROUGH EDUCATION	\$1,500	\$1,500
SUSTAINABLE CONTRA COSTA	\$1,000	\$1,000
SWORDS TO PLOWSHARE	\$3,000	\$3,000
TECH HIRE	\$1,000	\$1,000
THE SIERRA FUND	\$500	\$500
THE UNITY COUNCIL	\$3,000	\$3,000
TRADESWOMEN, INC	\$1,500	\$1,500
TRAINING INSTITUTE FOR LEADERSHIP ENRICHMENT	\$1,500	\$1,500
UC BERKELEY	\$500	\$500
UC BOTANICAL GARDEN AT BERKELEY	\$250	\$250
UC REGENTS BERKELEY	\$1,000	\$1,000
UC REGENTS MASTER GARDENER PROGRAM OF CONTRA COSTA	\$500	\$500

SPONSORSHIP	FY22	FY23
UNITED SENIORS OF OAKLAND AND ALAMEDA COUNTY	\$170	\$170
URBAN TILTH	\$750	\$750
US GREEN BUILDING COUNCIL, NORTHERN CALIFORNIA	\$2,500	\$2,500
WALNUT CREEK DOWNTOWN	\$800	\$800
WATER EDUCATION FOUNDATION	\$2,000	\$2,000
WATER FOR PEOPLE	\$1,000	\$1,000
WATERSHED PROJECT	\$1,000	\$1,000
WEST OAKLAND ENVIRONMENTAL INDICATORS PROJECT	\$1,000	\$1,000
WESTERN REGIONAL MINORITY SUPPLIERS	\$2,500	\$2,500
WOMEN CONSTRUCTION OWNERS & EXECUTIVES	\$1,000	\$1,000
WOMEN'S BUSINESS ENTERPRISE COUNCIL PACIFIC - ASTRA SOCIETY INTERNATIONAL	\$2,000	\$2,000
YOUTH OUTSIDE	\$1,000	\$1,000

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MEMBERSHIPS

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MEMBERSHIPS

This section includes District-approved memberships for the Fiscal Years 2022 (FY22) and 2023 (FY23). Memberships must provide a definite and clear benefit to the District. The District routinely reviews and maintains a list of memberships that supports operations or fulfills licensing or certification requirements for employees to perform District work. The membership budget is approximately \$838,000 (FY22) and \$850,000 (FY23).

MEMBERSHIP	FY22	FY23
ALAMEDA COUNTY BAR ASSOCIATION	\$452	\$452
ALAMEDA COUNTY GREEN BUSINESS ASSOCIATION	\$5,000	\$5,000
ALLIANCE FOR WATER EFFICIENCY	\$6,000	\$5,868
AMERICAN CONCRETE INSTITUTE	\$600	\$615
AMERICAN CONTRACT COMPLIANCE ASSOCIATION	\$400	\$400
AMERICAN FISHERIES SOCIETY	\$435	\$435
AMERICAN GEOPHYSICAL UNION	\$50	\$50
AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS	\$290	\$290
AMERICAN PAYROLL ASSOCIATION	\$219	\$219
AMERICAN PUBLIC WORKS ASSOCIATION	\$480	\$480
AMERICAN SOCIETY FOR TESTING AND MATERIALS INTERNATIONAL	\$150	\$150
AMERICAN SOCIETY OF CIVIL ENGINEERS	\$2,310	\$2,310
AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS	\$290	\$290
AMERICAN SOCIETY OF SAFETY PROFESSIONALS	\$215	\$225
AMERICAN SOCIETY OF TESTING AND MATERIALS	\$75	\$75
AMERICAN WATER WORKS ASSOCIATION	\$25,466	\$26,219
AMERICAN WELDING SOCIETY	\$700	\$700
ASIAN BUSINESS LEAGUE OF SAN FRANCISCO	\$100	\$100
ASSOCIATION FOR CALIFORNIA GOVERNMENTAL HUMAN RESOURCES PROFESSIONALS	\$240	\$260
ASSOCIATION FOR TALENT DEVELOPMENT	\$518	\$518
ASSOCIATION OF BAY AREA GOVERNMENTS	\$600	\$600
ASSOCIATION OF CALIFORNIA WATER AGENCIES	\$53,078	\$55,731
ASSOCIATION OF GOVERNMENT ACCOUNTANTS	\$100	\$100
ASSOCIATION OF METROPOLITAN WATER AGENCIES	\$18,080	\$19,900
ASSOCIATION OF RECORDS MANAGERS AND ADMINISTRATORS	\$200	\$200
ASSOCIATION OF STATE DAM SAFETY OFFICIALS	\$605	\$605
ASSOCIATION OF WORKPLACE INVESTIGATORS	\$450	\$450
BAY AREA BIOSOLIDS COALITION	\$26,000	\$26,000
BAY AREA CLEAN WATER AGENCIES	\$107,517	\$111,818
BAY AREA CLIMATE ADAPTATION NETWORK	\$3,000	\$3,000
BAY AREA COUNCIL	\$10,000	\$10,000
BAY AREA RIDGE TRAIL COUNCIL	\$50	\$50

MEMBERSHIP	FY22	FY23
BAY PLANNING COALITION	\$1,200	\$1,200
BIOENERGY ASSOCIATION OF CALIFORNIA	\$5,500	\$5,500
BUSINESS RECOVERY MANAGERS ASSOCIATION	\$110	\$110
CALIFORNIA ASSOCIATION OF PUBLIC INFORMATION OFFICIAL	\$1,100	\$1,100
CALIFORNIA ASSOCIATION OF PUBLIC PROCUREMENT OFFICIALS	\$1,170	\$1,170
CALIFORNIA ASSOCIATION OF PUBLIC RETIREMENT SYSTEMS	\$3,050	\$3,050
CALIFORNIA ASSOCIATION OF SANITATION AGENCIES	\$21,320	\$22,173
CALIFORNIA LAND SURVEYORS ASSOCIATION	\$350	\$350
CALIFORNIA LANDSCAPE CONTRACTORS ASSOCIATION	\$500	\$500
CALIFORNIA MUNICIPAL TREASURERS ASSOCIATION	\$200	\$210
CALIFORNIA MUNICIPAL UTILITIES ASSOCIATION	\$20,100	\$21,400
CALIFORNIA PUBLIC EMPLOYEES LABOR RELATIONS ASSOCIATION	\$1,220	\$1,220
CALIFORNIA REGIONAL COMMON GROUND ALLIANCE	\$100	\$100
CALIFORNIA RURAL WATER ASSOCIATION	\$565	\$580
CALIFORNIA SOCIETY OF MUNICIPAL FINANCE OFFICERS	\$348	\$358
CALIFORNIA SPECIAL DISTRICTS ASSOCIATION	\$8,200	\$8,400
CALIFORNIA URBAN WATER AGENCIES	\$60,000	\$60,000
CALIFORNIA UTILITIES EMERGENCY ASSOCIATION	\$2,325	\$2,500
CALIFORNIA WATER & ENVIRONMENTAL ASSOCIATION	\$200	\$200
CALIFORNIA WATER & ENVIRONMENTAL MODELING FORUM	\$2,500	\$2,500
CALIFORNIA WATER EFFICIENCY PARTNERSHIP	\$22,000	\$22,715
CALIFORNIA WATER ENVIRONMENT ASSOCIATION	\$552	\$552
CALIFORNIA WOMEN IN ENERGY	\$100	\$100
CALIFORNIA WORKERS' COMP INSTITUTE	\$600	\$600
CALSTART MEMBERSHIP	\$1,950	\$1,950
CAPITOL NETWORK	\$330	\$330
CENTER FOR WESTERN WEATHER AND WATER EXTREME'S WATER AFFILIATES GROUP	\$10,000	\$10,000
CENTRAL VALLEY CLEAN WATER ASSOCIATION	\$2,000	\$2,000
CENTRAL VALLEY PROJECT WATER ASSOCIATION	\$3,000	\$3,000
CENTRE FOR ENERGY ADVANCEMENT THROUGH TECHNOLOGICAL INNOVATION	\$19,000	\$19,500
CERTIFIED COMMERCIAL INVESTMENT MEMBER INSTITUTE	\$1,190	\$1,190
CERTIFIED INFORMATION SYSTEMS SECURITY PROFESSIONAL CERTIFICATION	\$255	\$255
CHAMBER OF COMMERCE - ALAMEDA	\$1,500	\$1,500
CHAMBER OF COMMERCE - AMADOR COUNTY	\$525	\$525
CHAMBER OF COMMERCE - AMERICAN INDIAN	\$750	\$750
CHAMBER OF COMMERCE - BAY FRONT	\$500	\$500
CHAMBER OF COMMERCE - BERKELEY	\$525	\$525
CHAMBER OF COMMERCE - CALAVERAS COUNTY	\$660	\$660

MEMBERSHIP	FY22	FY23
CHAMBER OF COMMERCE - CALIFORNIA	\$1,100	\$1,150
CHAMBER OF COMMERCE - CASTRO VALLEY	\$600	\$600
CHAMBER OF COMMERCE - CROCKETT	\$250	\$250
CHAMBER OF COMMERCE - DANVILLE	\$360	\$360
CHAMBER OF COMMERCE - EL CERRITO	\$432	\$432
CHAMBER OF COMMERCE - EL SOBRANTE	\$150	\$150
CHAMBER OF COMMERCE - GREATER STOCKTON	\$360	\$360
CHAMBER OF COMMERCE - HISPANIC ALAMEDA COUNTY	\$300	\$300
CHAMBER OF COMMERCE - LAFAYETTE	\$430	\$430
CHAMBER OF COMMERCE - LODI	\$360	\$360
CHAMBER OF COMMERCE - MORAGA	\$200	\$200
CHAMBER OF COMMERCE - OAKLAND AFRICAN-AMERICAN	\$1,000	\$1,000
CHAMBER OF COMMERCE - OAKLAND CHINATOWN	\$340	\$340
CHAMBER OF COMMERCE - OAKLAND LATINO	\$750	\$750
CHAMBER OF COMMERCE - OAKLAND METROPOLITAN	\$6,600	\$6,600
CHAMBER OF COMMERCE - ORINDA	\$240	\$240
CHAMBER OF COMMERCE - PLEASANT HILL	\$445	\$445
CHAMBER OF COMMERCE - RICHMOND	\$550	\$550
CHAMBER OF COMMERCE - SAN JOAQUIN COUNTY HISPANIC	\$150	\$150
CHAMBER OF COMMERCE - SAN LEANDRO	\$350	\$350
CHAMBER OF COMMERCE - SAN RAMON	\$550	\$550
CHAMBER OF COMMERCE - WALNUT CREEK	\$855	\$855
CHIEF INFORMATION OFFICER FORUM	\$750	\$750
CLIMATE REGISTRY	\$4,200	\$4,410
CONSTRUCTION MANAGEMENT ASSOCIATION OF AMERICA	\$1,310	\$1,310
CONSTRUCTION SPECIFICATIONS INSTITUTE	\$370	\$370
CONTRA COSTA COUNTY GREEN BUSINESS	\$5,000	\$5,000
COUNCIL OF INDUSTRIES	\$2,200	\$2,200
EARTHQUAKE ENGINEERING RESEARCH INSTITUTE	\$295	\$295
EAST BAY ECONOMIC DEVELOPMENT ALLIANCE	\$1,500	\$1,500
EAST BAY LEADERSHIP COUNCIL	\$2,500	\$2,500
EAST BAY RENTAL HOUSING ASSOCIATION	\$750	\$750
EAST BAY SUSTAINABLE BUSINESS ALLIANCE	\$275	\$275
EMPLOYEE ASSISTANCE PROFESSIONAL ASSOCIATION	\$200	\$210
EXCHANGE CLUB OF SAN RAMON VALLEY	\$198	\$198
GOLDEN GATE BUSINESS ASSOCIATION	\$295	\$295
GOVERNMENT FINANCE OFFICERS ASSOCIATION	\$700	\$700
GROUNDWATER RESOURCES	\$375	\$375
HELP DESK INSTITUTE	\$295	\$295
HILLS EMERGENCY FORUM	\$5,500	\$5,500

MEMBERSHIP	FY22	FY23
INFORMATION SYSTEM AUDIT & CONTROL ASSOCIATION	\$215	\$215
INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS	\$1,258	\$1,258
INSTITUTE OF GOVERNMENTAL ADVOCATES	\$220	\$220
INSTITUTE OF INTERNAL AUDITORS	\$195	\$195
INTERNATIONAL ASSOCIATION FOR HUMAN RESOURCE INFORMATION MANAGEMENT	\$250	\$250
INTERNATIONAL FOUNDATION OF EMPLOYEE BENEFIT PLANS	\$1,075	\$1,075
INTERNATIONAL INSTITUTE OF MUNICIPAL CLERKS	\$280	\$290
INTERNATIONAL RIGHT OF WAY ASSOCIATION	\$1,000	\$1,000
INTERNATIONAL SOCIETY OF AUTOMATION	\$110	\$110
IRRIGATION ASSOCIATION	\$650	\$615
ISLE UTILITIES / TECHNOLOGY APPROVAL GROUP	\$13,200	\$13,200
LEAGUE OF CALIFORNIA SURVEYING ORGANIZATIONS	\$50	\$50
MOUNTAIN COUNTIES WATER RESOURCES ASSOCIATION	\$500	\$500
NATIONAL ASSOCIATION OF CLEAN WATER AGENCIES	\$33,644	\$34,990
NATIONAL ASSOCIATION OF COLLEGES AND EMPLOYERS	\$600	\$600
NATIONAL ASSOCIATION OF GOVERNMENTAL DEFINED CONTRIBUTION ADMINISTRATORS	\$750	\$750
NATIONAL ASSOCIATION OF LOCAL GOVERNMENT AUDITORS	\$200	\$200
NATIONAL ASSOCIATION OF MINORITY CONTRACTORS	\$1,600	\$1,600
NATIONAL ASSOCIATION OF REALTORS	\$210	\$210
NATIONAL ASSOCIATION OF WOMEN BUSINESS OWNERS	\$100	\$100
NATIONAL ENVIRONMENTAL LABORATORY ACCREDITATION CONFERENCE INSTITUTE	\$75	\$75
NATIONAL FIRE PROTECTION ASSOCIATION	\$580	\$580
NATIONAL NOTARY ASSOCIATION	\$50	\$0
NATIONAL PENSION EDUCATION ASSOCIATION	\$500	\$500
NEXT CONCEPT HUMAN RESOURCES ASSOCIATION	\$189	\$189
NORTH AMERICAN COMPUTER EXCHANGE	\$10,000	\$10,300
NORTH AMERICAN SOCIETY OF TRENCHLESS TECHNOLOGY	\$550	\$550
NORTHERN CALIFORNIA BACKFLOW PREVENTION	\$360	\$405
NORTHERN CALIFORNIA INSTITUTE OF FOOD TECHNOLOGISTS	\$119	\$119
NORTHERN CALIFORNIA JOINT POLE ASSOCIATION	\$603	\$603
NORTHERN CALIFORNIA PIPE USERS GROUP	\$400	\$400
PARK RANGERS ASSOCIATION OF CALIFORNIA	\$200	\$200
PESTICIDE APPLICATORS PROFESSIONAL ASSOCIATION	\$1,050	\$1,050
PRISM: PUBLIC RETIREMENT INFORMATION SYSTEMS MANAGEMENT	\$350	\$350
PROJECT MANAGEMENT INSTITUTE CERTIFICATION	\$1,201	\$1,217
PUBLIC AGENCY RISK MANAGEMENT ASSOCIATION	\$200	\$200
RESCAPE CALIFORNIA	\$100	\$100
RISK & INSURANCE MANAGEMENT SOCIETY	\$1,000	\$1,090

MEMBERSHIP	FY22	FY23
SAN FRANCISCO BAY AREA GEOSPATIAL	\$120	\$120
SAN FRANCISCO BAY AREA PLANNING AND URBAN RESEARCH ASSOCIATION	\$300	\$300
SAN FRANCISCO BAY HISPANIC CHAMBER OF COMMERCE	\$300	\$300
SAN FRANCISCO PARALEGAL ASSOCIATION	\$85	\$85
SOCIETY FOR CONSERVATION GIS	\$600	\$618
SOCIETY FOR HUMAN RESOURCE MANAGEMENT	\$1,953	\$1,734
SOCIETY FOR PROTECTIVE COATING	\$850	\$850
SOCIETY FOR RANGE MANAGEMENT	\$135	\$135
STATE BAR OF CALIFORNIA	\$6,606	\$6,606
STRUCTURAL ENGINEERS ASSOCIATION OF NORTHERN CALIFORNIA	\$900	\$900
SUSTAINABLE CONTRA COSTA COUNTY	\$500	\$500
THE WILDLIFE SOCIETY	\$165	\$165
TOASTMASTERS	\$2,700	\$2,700
TOGETHER BAY AREA	\$5,000	\$5,000
UNDERGROUND SERVICE ALERT	\$4,700	\$5,000
UNITED STATES SOCIETY OF DAMS	\$790	\$790
US GREEN BUILDING COUNCIL	\$750	\$750
WATER CUSTOMER CARE FORUM	\$650	\$650
WATER EDUCATION FOUNDATION	\$12,365	\$13,601
WATER ENVIRONMENT FEDERATION	\$1,950	\$1,950
WATER RESEARCH FOUNDATION	\$195,503	\$195,503
WATEREUSE ASSOCIATION	\$20,621	\$15,795
WEST OAKLAND COMMERCE ASSOCIATION	\$190	\$190
WESTERN REGIONAL MINORITY SUPPLIER DEVELOPMENT COUNCIL	\$2,500	\$2,500
WOMEN CONSTRUCTION OWNERS AND EXECUTIVES	\$750	\$750
WOMEN'S BUSINESS ENTERPRISE COUNCIL	\$1,500	\$1,500

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GLOSSARY

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Glossary

AB	Administration Building.
Accrual Basis	Accounting method that records income items when they are earned and records deductions when expenses are incurred.
ADM	Administration Department.
Adopted Budget	A balanced financial plan for a specific period of time authorized by the Board of Directors.
AFSCME	American Federation of State, County and Municipal Employees.
AMC	Adeline Maintenance Center.
Amended Budget	A budget that reflects budgetary transfers that occurred after adoption of the budget. The total amended budget amount does not exceed the Board approved appropriation.
Amortization	The process of incrementally charging the cost of an asset to expense over its expected period of use, which shifts the asset from the balance sheet to the income statement. Amortization is commonly used for the gradual write-down of the cost of intangible assets that have a specific useful life. Examples of intangible assets are patents, copyrights, and trademarks.
Appointment Type	Indicates the character of a staff position. The following are the appointment types: Regular, Civil Service Exempt, Intermittent, Temporary, Part-Time, Limited-Term, and Temporary Construction.
Appropriation	Funds for expenditure in the operating and capital budget authorized by the Board of Directors for a specific purpose.
Authorized FTE	A full-time equivalent (FTE) approved by the Board of Directors.
AWWA	American Water Works Association.
Balanced Budget	The budget is balanced when revenues are equal to or greater than expenditures including debt service and ending fund balances meet minimum policy levels.
Bargaining Unit	Employees represented by American Federation of State, County and Municipal Employees, Locals 444 and 2019; the International Federation of Professional and Technical Engineers, Local 21; and the International Union of Operating Engineers, Local 39.
Benefit Costs	The District's costs associated with employee compensation over and above salary and wages such as retirement, health care, Social Security, disability, and unemployment insurance.

Biennial Budget	A biennial budget contains two standalone annual budgets. The second year of the budget is reviewed and reaffirmed by the Board of Directors.
Board of Directors	The seven public officials elected to represent the wards within the District service area. Also referred to as the “Board”.
Bonds	A form of borrowing where bonds are sold to investors, and the proceeds are used to pay for capital expenditures. Debt service payments are made to repay the bond holders. The District’s goal is to limit debt funded capital to no more than 65 percent of the total capital program.
Budget	A financial plan that outlines estimated revenues and expenditures for the year to provide customers with safe, reliable water and wastewater services.
Build America Bonds	A type of municipal bond created under the American Recovery and Reinvestment Act of 2009.
Capital Appropriation	Board approved funding for capital projects for which relatively accurate time estimates can be made. Unspent appropriations carry forward to the next fiscal year.
Capital Budget	A financial plan for purchasing, constructing, or rehabilitating fixed assets such as equipment, facilities, and systems.
Capital Cash Flow	Cash disbursements for capital projects. The estimated capital cash flow is used to calculate the rates, and the amount and timing of borrowings to meet the projected expenditure needs for a given time period.
Capital Expenditures/ Expenses	Expenditures related to capital projects such as the purchase or construction of equipment, building structures, aqueducts and water/sewer pipelines that have a useful life greater than three years and a cost greater than \$5,000.
Capital Improvement Program	The Board approved set of capital projects that typically results in the construction of new capital facilities, or the modification or upgrade of existing facilities over a five-year period. Project costs include all expenditures to purchase, study, plan, design, construct, or repair/upgrade new or existing physical facilities. Also referred to as “CIP”.
Capital Labor	The portion of District labor costs supporting the capital improvement program.
Capital Steering Committee	Capital Steering Committee is responsible for the oversight and development of the biennial CIP recommendation to the General Manager. Also referred to as “CSC”.

Capital Support	A method for allocating capital support function costs to a capital project. Costs are allocated using a rate applied to direct labor. Capital support in the operations budget will decrease operating expense by a like amount and reallocate the cost to the capital budget.
CCF	One hundred cubic feet of water which equals 748 gallons or one unit.
CIP	Capital Improvement Program.
Civil Service	The status of an employee who occupies a full-time Regular or less-than-full-time Regular position and has completed probation in that classification.
Commercial Paper	Short-term financing for capital projects.
Consent Decree	An agreement or settlement to resolve a dispute between two parties.
Contingency	Funds budgeted each fiscal year to cover projected labor-related expenses such as the employee cost of living adjustment which is based upon each year's February Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) in the San Francisco-Oakland-Hayward area. The contingency budget also includes funding for unanticipated needs which may arise before the next budget cycle.
Cost of Service Study	A study of providing water and wastewater services conducted by a third-party to allocate costs among customer classes based on usage characteristics in compliance with Proposition 218 requirements and industry standards.
CP	See Commercial Paper.
CSC	See Capital Steering Committee.
CSMFO	California Society of Municipal Finance Officers.
CUS	Customer and Community Services Department.
Customer Information System	The District's system for billing customers, collecting revenue, and recording account information.
Debt Service	Expenditures for interest and principal repayment on bonds or other debt.
Debt Service Coverage	The ratio of net revenues to debt service requirements, calculated in accordance with the District's bond documents. The District's policy is to maintain a debt coverage ratio of at least 1.6.
Debt-Funded Capital	Expenditures for capital projects which are funded by bonds, loans, or other debt.

Department	A major organizational unit with overall managerial responsibility for functional programs of the District.
Depreciation	An accounting method of allocating the cost of an asset over the useful life of the asset.
DERWA	Dublin San Ramon Services District, East Bay Municipal Utility District, Recycled Water Authority, a joint program to supply recycled water to portions of San Ramon, Danville, Blackhawk, and surrounding areas.
Distribution System	Water treatment plants, storage reservoirs, pumping plants, pipelines, and appurtenances that treat and transmit water to customers.
District	East Bay Municipal Utility District.
Division	A major organizational unit of a Department. Most departments have several divisions, each providing different services.
Drought	A decrease in the total water system storage at District reservoirs over an extended period of time which results in a water shortage for meeting customers' demand.
DSOD	The California Department of Water Resources Division of Safety of Dams.
East Bay	Communities located in Alameda and Contra Costa counties on the east side of the San Francisco Bay.
EBMUD	East Bay Municipal Utility District. A publicly owned utility formed in 1923 under the Municipal Utility District Act to provide water service, and in 1944 wastewater service in portions of Alameda and Contra Costa Counties. Also referred to as the "District".
EBRWP	East Bayshore Recycled Water Project.
ECP	Extendable Commercial Paper.
EEO	Equal Employment Opportunity.
Encumbrance	The obligated but unspent portion of a contingent liability established through a purchase order. The budget recognizes an encumbrance as an obligation.
ENG	Engineering and Construction Department.
Enterprise Fund	A type of proprietary fund in which a user charge, rather than taxes, is charged to external users for goods or services, and costs are recovered.
ERF	Equipment Replacement Fund.

Expenditure	The payment of an obligation.
Expenditure Category	There are three types of operating expenditure categories: labor, contracts, and all other costs or operation/maintenance.
FERC	Federal Energy Regulatory Commission.
Fiduciary Fund	A fund in which assets are held by a governmental unit in a trustee capacity or as an agent for individuals, private organizations, and/or other governmental units. EBMUD has four types of fiduciary funds: Pension (and other employee benefit), Investment, Private-Purpose and Agency.
FIN	Finance Department.
FIS	Financial Information System.
Fiscal Year	The 12-month period that begins July 1 and ends June 30 of the following calendar year. Also referred to as "FY".
FM&O	Fully-Maintained and Operated.
FOG	Fats, oils, and grease.
Freeport Regional Water Project	A joint project with the Sacramento County Water Agency to secure a supplemental dry-year water supply.
FTE	See Full-Time Equivalent.
Full-Time Equivalent	Ratio of the number of hours an employee is paid compared to the number of working hours. An employee who works full-time (2,080 hours per year) counts as one Full-Time Equivalent. Also referred to as "FTE".
Fund	A fiscal entity with a set of accounts recording financial resources, together with all related liabilities, which are segregated for the purpose of carrying on specific activities in accordance with special regulations or restrictions. The primary District funds are the Water System Fund and Wastewater System Fund.
Fund Balance	The net position of governmental funds calculated in accordance with the generally accepted accounting principles and used in financial reporting.
Funded Position	Authorized position that the Board of Directors has appropriated funding for a fiscal year.
FY	See Fiscal Year.
GAAP	Generally Accepted Accounting Principles.

GASB	Governmental Accounting Standards Board.
GDP	Gross domestic product.
General Manager	The chief executive officer of the District hired by the Board of Directors. Also referred to as “GM”.
GFOA	Government Finance Officers Association.
GM	See General Manager.
GPD	Gallons Per Day.
HRD	Human Resources Department.
HRIS	Human Resources Information System.
Infrastructure	The tangible physical components that ensure delivery of reliable, high quality water and wastewater service such as reservoirs, pumping plants, pipelines, and anaerobic digesters.
INT	See Intermittent.
Intermittent	Intermittent employees work less than full-time but work more than part-time, typically 32 hours per week or more than 1,040 aggregate hours per payroll year. Also referred to as “INT”.
Intradistrict	Certain internal service accounts such as vehicle expenses are included in balance sheets to assure that internal expenses are not counted twice within the operations budget.
ISD	Information Systems Department.
JSA	Joint Settlement Agreement.
Key Performance Indicators	Indicators with specific targets that measure how well the District is progressing in achieving its goals under the Strategic Plan. Also referred to as “KPI”.
KPI	See Key Performance Indicators.
Limited-Term	Positions of a limited duration (maximum of four years) intended to augment regular District staff to accomplish extra work or other operational programs and activities. Also referred to as “LT”.
LT	See Limited-Term.
MCD	Maintenance and Construction Department.
MG	Million Gallons.

MGD	Million Gallons per Day. (One MGD = 3.07 acre feet which is the volume of water required to cover one acre of land to a depth of one foot).
MMIS	Materials Management Information System.
Modified Cash Flow Basis	Income and expense accounting method that records revenue when cash is received, and records expenses when cash is paid.
MUD Act	Municipal Utility District Act was passed by the California Legislature in 1921; codified in the Public Utilities Code of the State of California, Ch. 764, Stats. 1951 and thereafter amended.
MWWTP	Main Wastewater Treatment Plant.
NOE	Notice of Exemption.
NRD	Natural Resources Department.
NRP	Non-represented.
OGC	Office of the General Counsel.
OGM	Office of the General Manager.
Operating Budget	A financial plan to fund ongoing operations costs incurred to operate the District; excludes the building of capital assets which are included in the capital budget.
Operating Labor	The portion of the District's labor costs supporting the day-to-day operations.
Organization	A group of staff organized into one unit or section working under a division or department. This is the lowest level at which operating budgets are developed.
OSD	Operations and Maintenance Support Department.
Part-Time	Part-time employees are restricted to working no more than 832 hours per year, and do not have civil service status.
Pay-As-You-Go	Capital financing strategy to pay-as-you-go by cash funding capital projects with current and accumulated revenues rather than borrowing funds that will be repaid with future revenues.
PEPRA	California Public Employees' Pension Reform Act.
PGS	Power Generation Station.
PP	Pumping Plant.

Program	Broadly defined group of related capital reference projects combined to facilitate planning and decision making.
Project	Project level identified in the CIP comprised of a discrete set of tasks that can be carried out independently but require coordination with other projects to ensure overall program success. Appropriation requests are authorized at this level. Also referred to as "Reference Project".
Proposed Budget	The recommended balanced financial plan for a specific period of time submitted for consideration to the Board of Directors prior to the start of the Proposition 218 notification process.
Proposition 218	Passed by California voters in 1996 gave taxpayers the right to vote on all local taxes and requires taxpayer approval of property related assessments and fees.
Proprietary Fund	Proprietary funds are used to account for a government's ongoing activities that are similar to businesses found in the private sector. These funds are considered self-supporting in that the services rendered by them are generally financed through user charges or on a cost reimbursement basis. There are two types of EBMUD proprietary funds: Enterprise and Internal Service.
PT	See Part-Time.
PZ	Pressure Zone.
PZI	Pressure Zone Improvements.
RARE	Richmond Advanced Recycled Expansion project.
Rates	Charges for services to District customers that cover the costs of such services while allowing the District to remain revenue neutral.
RCS	Regulator/Rate Control Station.
Reference Project	See Project.
REG	See Regular.
Regular	A full-time civil service position.
Reserves	Reserves include cash, operating and policy reserves. Reserves are available for self-insurance claims, unplanned revenue changes, working capital, worker's compensation, and unanticipated contingencies.
Revenue	Monies the District receives from rates and charges, property taxes, sale of energy, and other sources. Revenues are used to pay expenditures and fund reserves.

Revenue Funded Capital	Expenditures on capital projects which are funded by current year revenues rather than by debt, grants or other funds.
SCC	See System Capacity Charges.
SD-1	Special District No. 1. Created in 1944, responsible for the treatment and disposal of all domestic, commercial, and industrial wastewater from the cities of Alameda, Albany, Berkeley, Emeryville, Oakland, Piedmont, and the Stege Sanitary District (City of El Cerrito, Richmond annex and the Kensington area).
SEP	Special Employment Program.
SIR	Self-Insured Retention.
SMT	Senior Management Team.
Staffing	The number and character of positions that have been authorized by the Board of Directors and have been determined necessary to carry out District functions.
Step Increases	Employee salary increases based on progression along a salary market range.
Strategic Plan	A document that provides a blueprint for how the District will respond to future challenges and changing priorities. It outlines specific goals, strategies, and objectives to guide the District to where it wants to be and establishes criteria to measure progress.
Strategy	Highest level of capital improvement activities, generally a grouping of related programs. Represents key capital objectives as defined in the Mission Statement, Strategic Plan, and Board of Directors policies and directives.
SWRCB	State Water Resources Control Board.
System Capacity Charges	Charges paid at the time of new connections to the water system to compensate the District for construction of capital facilities that provide water service, such as reservoirs, transmission facilities, treatment facilities, and treated water storage facilities. Also referred to as "SCC".
TC	See Temporary Construction.
TEMP	See Temporary.
Temporary	Positions limited to six-month duration and do not have civil service status.

Temporary Construction	Positions of limited and specified duration typically associated with a specific capital project. Temporary Construction positions do not have civil service status. Also referred to as “TC”.
Uniform System of Accounts for Water Utilities	Guidelines established for the financial reporting of accounts, account structure and definitions, used to track revenue, expenses and asset and liability balances. The District uses the Uniform System of Accounts for Water Utilities established by the California Public Utilities Commission.
USL	Upper San Leandro.
Wastewater Capacity Fee	Charges paid at the time of new connections to the wastewater system to compensate the District for capital facilities that provide wastewater treatment, such as interceptors, primary and secondary treatment facilities, and wet weather treatment plants. Also referred to as “WCF”.
WCF	See Wastewater Capacity Fee.
WOD	Water Operations Department.
WRD	Water Resources Department.
WRP	Water Recycling Program.
WSMP	The Water Supply Management Program is a plan for ensuring a reliable high quality water supply for the future that includes pursuing supplemental supplies, water conservation, and recycled water.
WTP	Water Treatment Plant.
WWF	Wet Weather Facilities.