



On the Front Lines

A REPORT TO OUR COMMUNITY | 2020 - 2021

EAST BAY MUNICIPAL UTILITY DISTRICT

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Mokelumne Aqueducts cross the Sacramento-San Joaquin Delta.

EBMUD at a Glance

1¢

average cost per gallon of water delivered



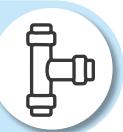
90%

of the water customers use comes from the Mokelumne Watershed in the Sierra Nevada



11.5 billion

gallons of water delivered from the Sacramento River during drought



50 million

gallons of wastewater treated daily



4,200 miles

of pipes maintained throughout the system



57,000 acres

of watershed land managed for the public



140 million

gallons of water delivered daily



MESSAGE FROM THE GENERAL MANAGER



A Blueprint for the Next Century

Grit. Forethought. Vision. This is how our founders mapped out a bold plan to bring reliable, high-quality water from the Sierra Nevada to the East Bay. As the East Bay Municipal Utility District approaches its

100th birthday, we're proud to be a public agency that drives change in a changing world.

EBMUD is on the front lines responding to the greatest issues of our time: the COVID-19 pandemic, climate change, racial justice and equality, access to water and aging infrastructure. Water is vital to the health of our community, economy and environment. These truths became even more evident during the pandemic as our essential employees provided continuous operations to protect public health. During the COVID-19 emergency, EBMUD not only worked to keep the water on, but was among the first agencies in California to cease water shutoffs to ensure water service for all.

EBMUD advanced projects to operate, maintain and repair the District's water system, and protect San Francisco Bay. More than \$700 million was invested in water and wastewater system improvements over the last two years.

To advance climate actions, we've set ambitious greenhouse gas reduction targets. We're also partnering with UC Berkeley to advance infrastructure research and advance utility innovations.

“EBMUD is on the front lines, responding to the greatest issues of our time.”

There are no simple solutions when it comes to forging an equitable and inclusive organization, but our employees are spearheading important work to reduce and eliminate racial and gender bias within EBMUD. Until this happens, we will not rest.

EBMUD has a history of solving problems and we'll tap the same determination, innovation and vision that made this agency what it is today as we work to unlock solutions for the future.

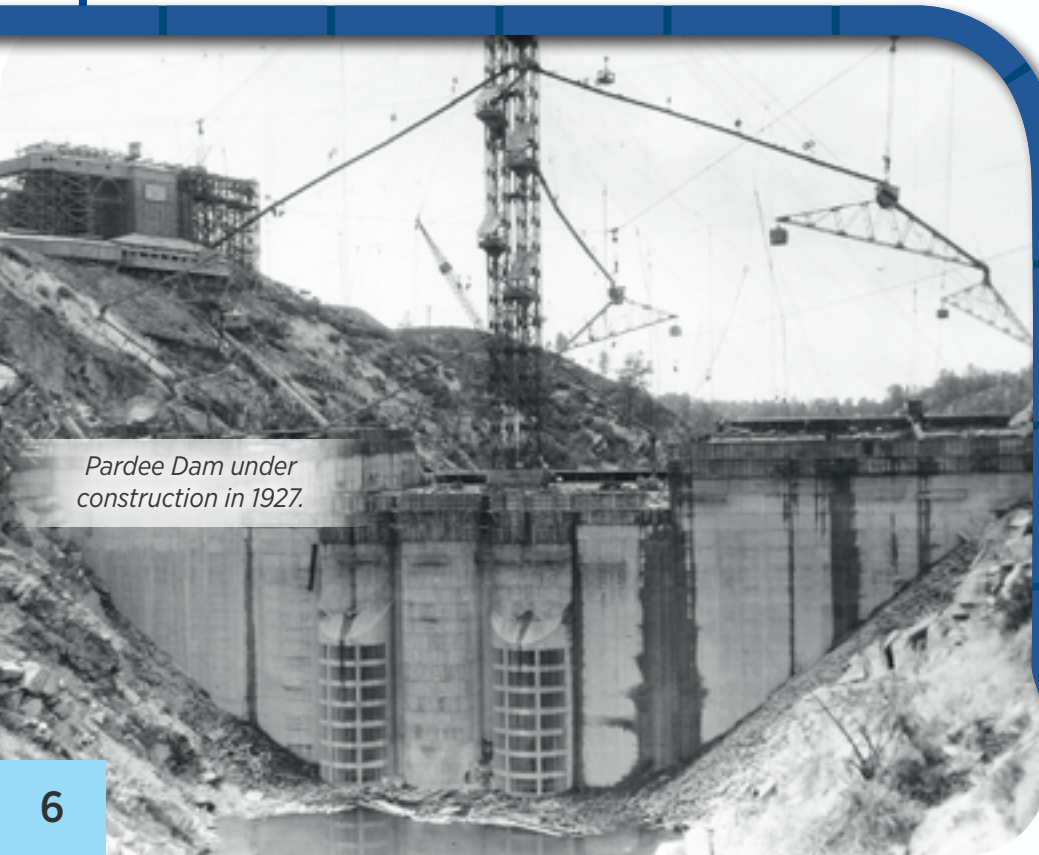
A handwritten signature in black ink that reads "Clifford Chan". The signature is fluid and cursive, written in a professional style.

CLIFFORD C. CHAN, General Manager

History of EBMUD

1920s

► In 1923, frustrated by poor water quality and an unreliable water supply, residents voted to form the East Bay Municipal Utility District. ► **Our founders secured water rights to the Mokelumne River and crews built Pardee Dam—the highest in the world at that time—and the Mokelumne Aqueduct, to bring water from the Sierra Nevada to the East Bay.** ► The first water deliveries occurred on June 23, 1929.



Pardee Dam under construction in 1927.



Section of Mokelumne Aqueduct pipe, used for a float in the National Recovery Act parade in Oakland, 1933.

Source: UC Berkeley, Bancroft Library



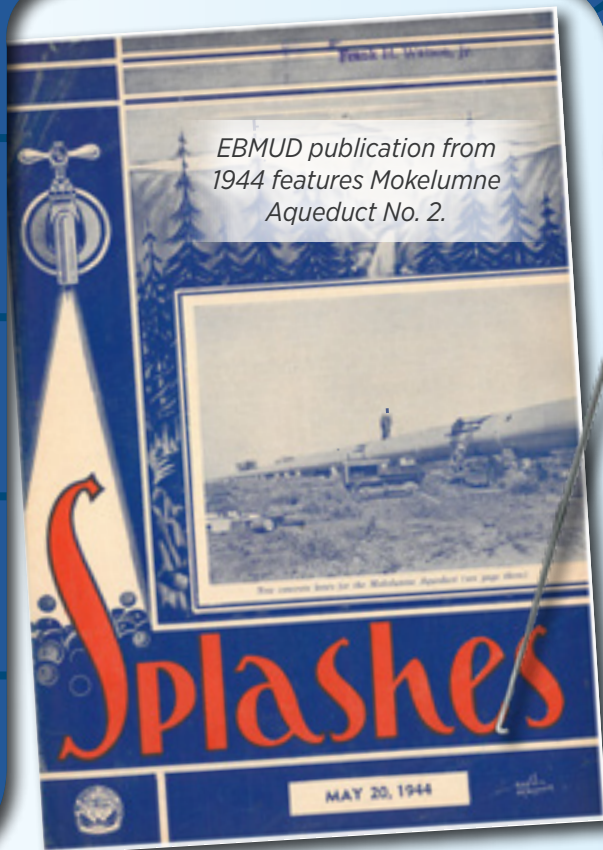
Crews installed cast iron mains in Berkeley.

1930s

► Pardee Reservoir is filled for the first time on March 4, 1930. ► In 1936, EBMUD sold approximately 1,900 acres to the East Bay Regional Park District, which would become the Park District's original three parks at Upper Wildcat Canyon (Tilden), Temescal, and Roundtop (Sibley).

1940s

▶ The second of three Mokelumne Aqueducts, spanning 90 miles from the Sierras to the East Bay, is completed. ▶ EBMUD acquired Camanche water rights to the Mokelumne River. ▶ To address pollution in San Francisco Bay, voters called on EBMUD to provide wastewater treatment for cities along the eastern edge of the bay.



More women joined EBMUD's workforce during World War II, working as meter readers, bookkeepers and switchboard operators.

1950s

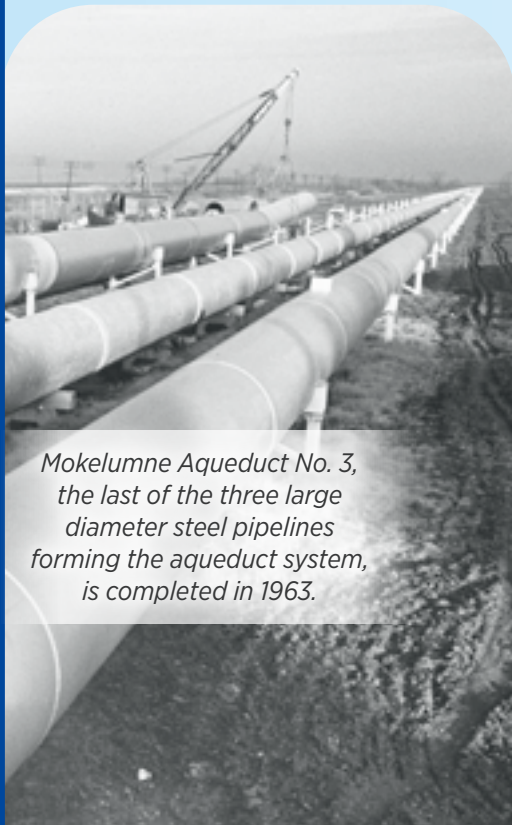
▶ **Wastewater treatment operations commenced.** ▶ Pardee Reservoir is opened to the public for recreation.



Main Wastewater Treatment Plant in Oakland.

1960s

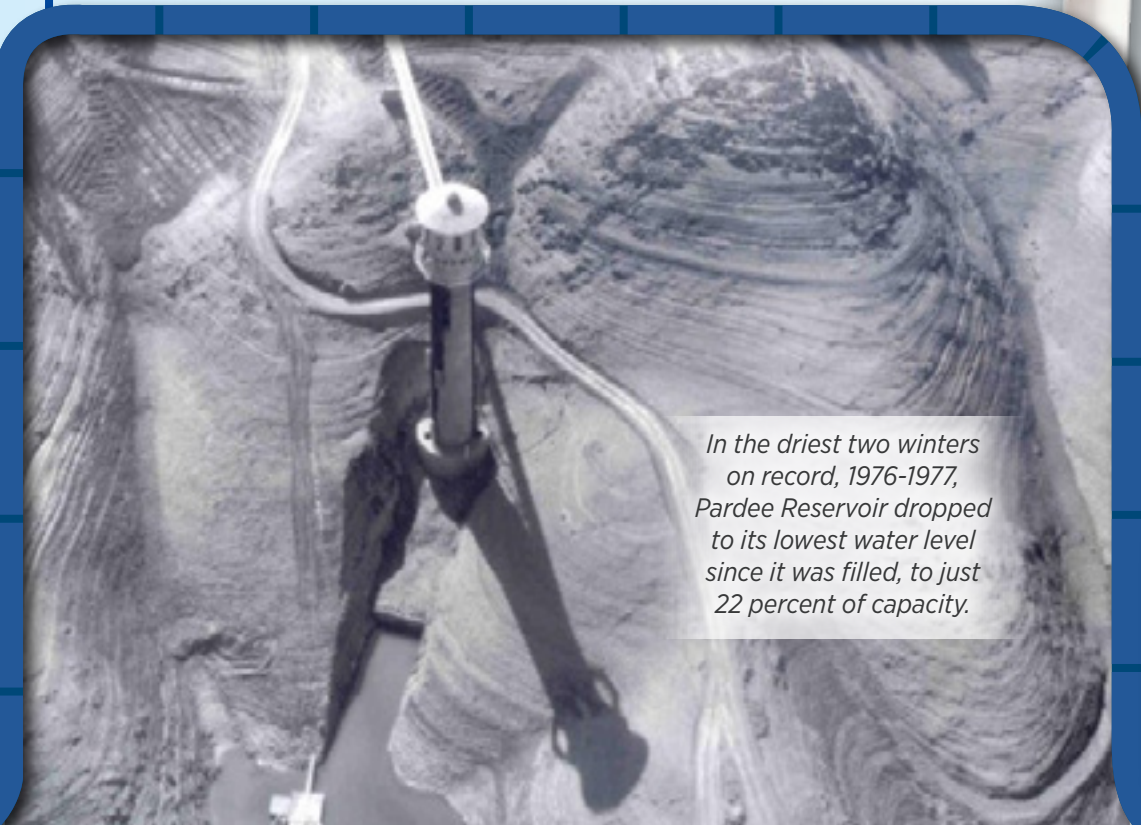
▶ **The third and final Mokelumne Aqueduct is completed.** ▶ Camanche Dam, in the Sierra foothills, and Briones Reservoir Dam, in the East Bay, are constructed. ▶ Lafayette and Chabot Reservoirs are opened to the public. ▶ EBMUD signed an agreement with the U.S. Bureau of Reclamation, opening the door for supplemental water supplies.



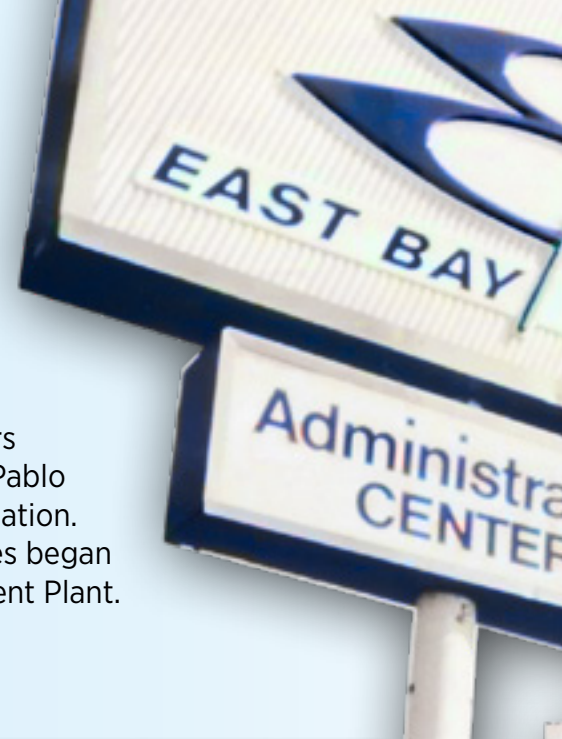
Mokelumne Aqueduct No. 3, the last of the three large diameter steel pipelines forming the aqueduct system, is completed in 1963.

1970s

▶ **1977 was the driest year on record since Pardee Dam was constructed.** ▶ To manage the severe drought, EBMUD implemented the first mandatory water rationing in its history. ▶ EBMUD customers voted to add fluoride to the water. ▶ San Pablo Reservoir grounds opened for public recreation. ▶ Secondary wastewater treatment facilities began operating at the Main Wastewater Treatment Plant.



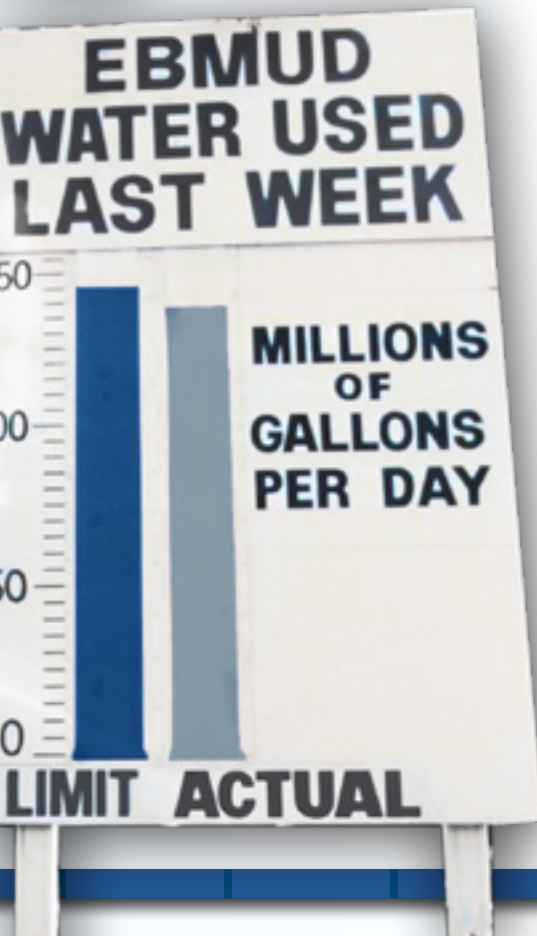
In the driest two winters on record, 1976-1977, Pardee Reservoir dropped to its lowest water level since it was filled, to just 22 percent of capacity.





1980s

- ▶ EBMUD recorded the wettest year on record in 1983. EBMUD began generating hydropower at Pardee Dam in the Sierra foothills and producing renewable energy at the wastewater plant.
- ▶ A wet weather program was initiated to minimize sewer overflows.
- ▶ EBMUD's first Urban Water Management Plan was adopted.
- ▶ A policy to advance minority and women-owned businesses was adopted.
- ▶ A drought in 1988 leaves Camanche Reservoir at 2 percent of capacity.
- ▶ **The Loma Prieta earthquake struck the Bay Area on October 17, 1989.**



EBMUD workers helped with rescues after the 1989 Loma Prieta earthquake collapsed the Cypress Freeway in Oakland.

1990s

▶ **The Seismic Improvement Program was adopted to strengthen the water system over 10 years.** ▶

EBMUD converted from chlorine to chloramine as the distribution system disinfectant. ▶ The North Richmond Water Reclamation Plant began recycled water service for industrial cooling. ▶ Strategic plans were adopted to safeguard future and current water supplies and protect the East Bay watershed and preserve habitats. ▶ A Joint Settlement Agreement was established between EBMUD, U.S. Fish and Wildlife Service, and California Department of Fish and Wildlife, which set flow criteria and water quality requirements on the Lower Mokelumne River. ▶ The Wet Weather Program was completed. ▶ Contract Equity Program adopted.



EBMUD undertook seismic improvements to Mokelumne Aqueduct No. 3.

2000s

- ▶ EBMUD pioneered actions to protect water supplies from drought and natural disasters. EBMUD and its Sacramento County partners broke ground on the Freeport Regional Water Project. ▶ **EBMUD installed the 11-mile Southern Loop emergency pipeline and completed the Claremont Tunnel seismic retrofit.**
- ▶ Innovations in wastewater treatment resulted in a patent for processing biosolids. ▶ EBMUD and its customers managed through another drought.



The seismic upgrade of the Claremont Tunnel secured water supplies in the event of a major earthquake.

Now



WATER CONSERVATION

The East Bay's water

and into



RECYCLED WATER

EBMUD's recycled

the future



SUPPLEMENTAL WATER SUPPLIES

EBMUD, Contra



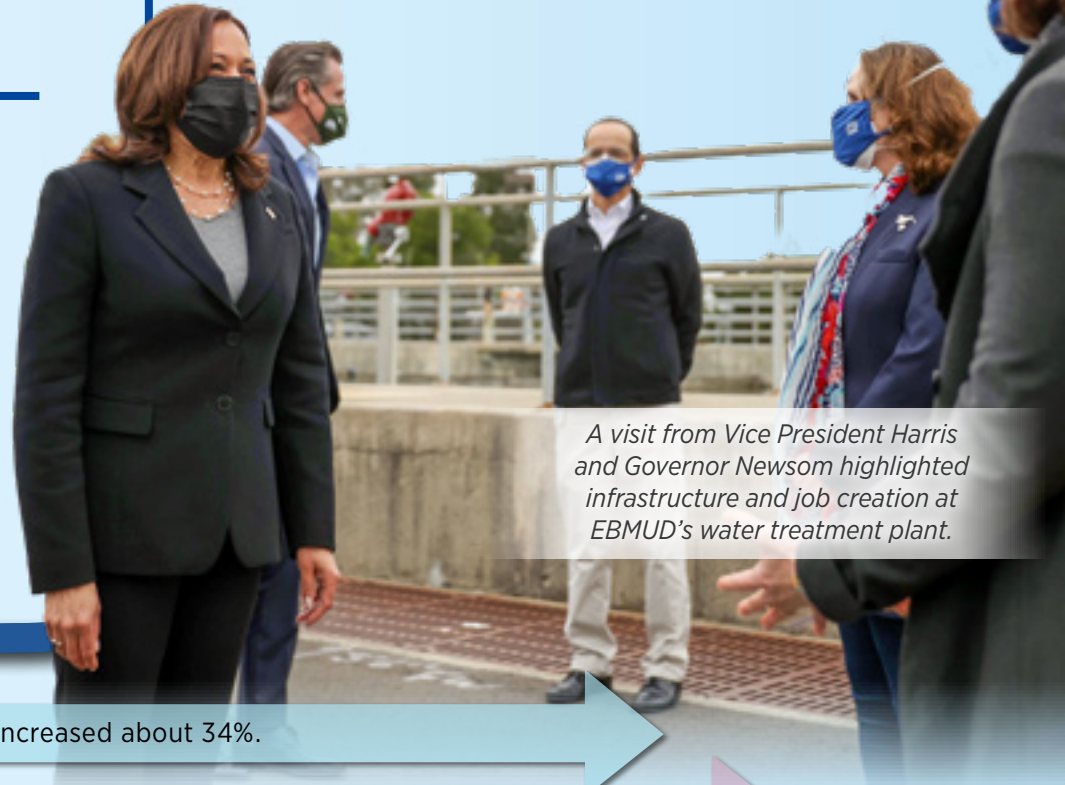
Freeport Regional Water Project in Sacramento County provides supplemental water during drought.

2020s

- ▶ EBMUD adapted operations and safety measures in response to the coronavirus pandemic, providing continuous service to protect public health. ▶ **Vice President Kamala Harris, accompanied by Governor Gavin Newsom, toured the Upper San Leandro Water Treatment Plant in Oakland.** EBMUD's Climate Action Plan outlined goals to reduce water and wastewater emissions by 2030. ▶ UC Berkeley and EBMUD launched the Center for Smart Infrastructure, a research hub that will apply cutting-edge technology to address infrastructure challenges.

2010s

- ▶ EBMUD experienced extreme dry and wet years within this decade. ▶ **Freeport Regional Water Project is completed and used for the first time to augment Mokelumne River water supplies.** ▶ EBMUD helped advance federal legislation to remove lead from drinking-water plumbing. ▶ The Safe Harbor Agreement between EBMUD and U.S. Fish and Wildlife is signed, covering 28,000 acres of Mokelumne watershed. ▶ 37 miles of the Mokelumne River received California's Wild and Scenic River designation. ▶ Richmond Advanced Recycled Expansion (RARE) facility increases recycled water capacity.



A visit from Vice President Harris and Governor Newsom highlighted infrastructure and job creation at EBMUD's water treatment plant.

Water usage is at or below 1970's levels, even though our population has increased about 34%.

The regional water system, serving large irrigators and businesses, will reach six more cities by 2040.

Costa Water District and other Bay Area water agencies are exploring expanding Los Vaqueros Reservoir to increase regional water supply.

Upholding High Water Quality



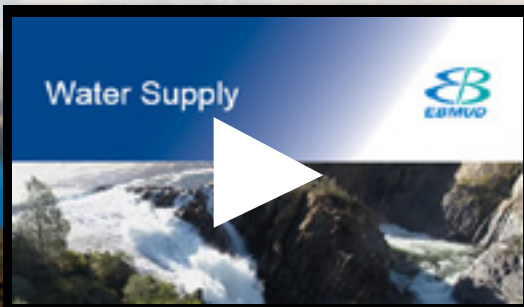
The science of H₂O

One of the most amazing things about the EBMUD water you drink is what's not in it. Bacteria, viruses, metals, dirt—these can all be naturally present in the water from the Sierra Nevada, Sacramento River and the East Bay before EBMUD collects it, treats it and sends it to your tap. Using ever-advancing science, technology and engineering, EBMUD filters out particles from raw water, disinfects it and distributes it through miles of pipes to your faucet.

Just think: EBMUD delivers about 140 million gallons of clean and safe water every day. Our treatment plant operators work 24 hours a day, seven days a week running specialized equipment. Monitoring equipment detects impurities, and a sequence of steps that include aeration, sedimentation, filtration, chemical disinfection and ozonation remove impurities or adjust water composition so that when it reaches your tap, our water meets regulatory and water quality guidelines. Teams of chemists, analysts and microbiologists perform more than 20,000 laboratory tests annually to ensure your drinking water is safe. Next time you take a sip from the faucet, remember—it's what's *not* in the water that makes it wonderful.

Take action

Curious about where your water comes from? Tour the Mokelumne Watershed where we store snowmelt, provide flood control and recreation, generate hydropower and protect fisheries.

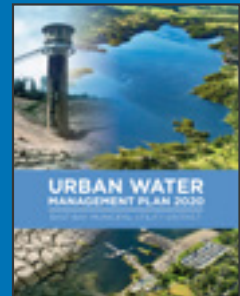


In winter 2020-2021, water runoff fell below what was needed to refill EBMUD reservoirs, including Pardee Reservoir (featured above).



Major milestones

- In 2020 and 2021, your drinking water was consistently the highest quality, surpassing every public health requirement set by state and federal requirements. Read the annual water quality report at ebmud.com/waterquality.
- Low precipitation made Rain Year 2021 the driest year in the East Bay and the second driest year in the Mokelumne River Watershed. In April, EBMUD declared a Stage 1 drought, asking customers to voluntarily conserve 10 percent. From July to October 2021, EBMUD customers met the goal, conserving 10 percent compared to 2020.
- In October 2021, EBMUD began drawing about 11.5 billion gallons of water from the Sacramento River via the Freeport Regional Water Project, under our contract with the U.S. Bureau of Reclamation to provide supplemental supplies in dry years.
- In 2021, two key documents were updated and adopted. The Urban Water Management Plan updated EBMUD's projected water supplies versus water demands over the next 30 years, and the Water Shortage Contingency Plan provided a framework for prolonged drought response.
- In June 2021, the Mokelumne River became a cold water refuge for fish from the American River. About 500,000 fingerling steelhead from the American River were transferred to the Mokelumne River Fish Hatchery as a refuge from high temperatures, until they could safely return home. EBMUD partnered with the U.S. Bureau of Reclamation and the California Department of Fish and Wildlife to make this move possible.
- EBMUD biologists are continuously improving the natural habitat of the Mokelumne River to protect Chinook salmon and steelhead. Over the last two years, EBMUD created 2.26 acres of restored floodplain, planted 528 native trees and added 1,815 cubic yards of fish spawning gravel into the Mokelumne River. Three diversion screens were installed in 2021 to protect migrating juvenile salmon from entering into irrigation pumps as they travel to the ocean.



Infrastructure Investments

Investments you can taste

Following the last drought, EBMUD upgraded its treatment plants to improve the way we treat water from other sources outside of the Mokelumne River Watershed. Our facilities were ready just in time to treat supplemental water from the Sacramento River during the current drought.

EBMUD recently completed the \$46 million infrastructure upgrade to Upper San Leandro and Sobrante Water Treatment Plants – where approximately 11.5 billion gallons of Sacramento River water will be treated. The new systems are equipped with greater ozone capacity to treat different water sources and address taste and odor issues that may occur from warming temperatures that cause algae blooms. The upgrades are more energy efficient and reduce carbon emissions too.

Our Capital Improvement Program is focused on keeping up with the demands of drought, climate change and aging infrastructure. Expect more work to come. EBMUD spends roughly two-thirds of its annual budget on capital investments to stay ahead and keep our system running smoothly to better serve you. Construction projects are never easy, but they are worth it as we prepare for changing times ahead.



Take

We're constantly investing in infrastructure to improve water quality and construction projects at ebmud.com.

The future

The upgraded Sobrante Water Treatment Plant is one of EBMUD's six water treatment plants and is processing supplemental water during the drought.



Major milestones

Capital Investments in Fiscal Years 2020 & 2021



Water Treatment Plants

Facilities improved: **2** | Investment: **\$46 million**



Small Diameter Pipelines

Length upgraded: **42 miles** | Investment: **\$109.2 million**



Neighborhood Reservoirs

Facilities improved: **11** | Investment: **\$59.6 million**



Pumping Plants

Facilities improved: **7** | Investment: **\$20.9 million**



Wastewater Interceptors

Length upgraded: **1,900 linear ft.** | Investment: **\$8.5 million**



Main Wastewater Treatment Plant

Systems improved: **5** | Investment: **\$22.5 million**

Action



Continuously improving water systems to ensure quality. View projects underway [in construction](#).

of water



Innovations in Water

New techniques to find leaks

The Bay Area is home to revolutionary technological advances — from smartphones and smart cars to social media. In the East Bay, we're driving innovations for water and wastewater to better serve you.

Satellites circling the planet collect information for agencies like the United States Geological Survey, and EBMUD is now using this data, too. We're identifying leaks on water pipes using satellite information so we can repair our pipes before leaks surface.

Innovative technologies make detective work easier. EBMUD uses devices to listen for pipe leaks before they surface. Using acoustics, or sound frequencies, we detect leaks at night when noise is the lowest and leaks are the loudest. In Fiscal Years 2020 and 2021, we identified more than 200 leaks using these high-tech devices. Before we dig up leaky pipes, we use a host of hand-held technologies to pinpoint their location underground. To better manage pressure spikes that can lead to main breaks, EBMUD has monitors to spot pressure peaks.



EBMUD's leak detection and technologies including satellite




Technicians use a variety of methods to identify underground leaks, information and acoustic devices.

Major milestones

- In Fiscal Years 2020 and 2021, EBMUD crews repaired 1,864 main breaks and replaced 42 miles of water mains in the East Bay.
- After extensive testing, EBMUD received its first delivery of ductile iron pipes in 2021 – marking the most significant change in pipe material since the 1970s.
- To advance water reliability, EBMUD is constructing the Mokelumne Aqueduct tie-in facility for the Demonstration Recharge, Extraction and Aquifer Management (DREAM) Project. This pilot project will supplement EBMUD’s raw water supply with up to one million gallons of groundwater per day for a total of no more than 500 acre-feet of groundwater.
- The Center for Smart Infrastructure at University of California, Berkeley, was established with EBMUD to research, test, evaluate, and develop infrastructure solutions for water and wastewater. The Center will test earthquake-resilient pipelines, and develop new technologies, such as intelligent systems and networks, remote sensing and monitoring, and data analytics for informed utility decision-making.

Take action

Get the latest information about emergency outages and leaks at [ebmud.com/alerts](https://www.ebmud.com/alerts).

Investing in innovation 



Innovations in Wastewater

COVID-19 clues in wastewater

Researchers have long known that wastewater can provide health insights into a community. When the pandemic began, researchers mobilized and partnered with wastewater agencies including EBMUD.

In 2020, EBMUD began providing wastewater samples to Stanford University, UC Berkeley and the University of South Carolina to measure the concentration of the virus that causes COVID-19. These samples helped researchers develop ground-breaking methods to detect the coronavirus in wastewater. By analyzing wastewater, changes in disease prevalence in hundreds of thousands of individuals is assessed all in one sample.

EBMUD is part of a Bay Area epidemiology group which unites wastewater utilities, public health officers, and laboratories to analyze regional wastewater samples. EBMUD, along with wastewater utilities nationwide, contributed to a U.S. Department of Health and Human Services sampling program to help public health and medical experts make decisions regarding resources, shelter-in-place orders and outreach. EBMUD is a proud partner in this national effort, which takes our mission to protect public health to a whole new level.

Improving the way we treat wastewater

EBMUD uses this same ingenuity and creativity to address other significant issues, including recovering wastewater as a resource; adapting to climate change; finding cost-effective methods to reduce nutrient contributions to the San Francisco Bay; advancing the science on carbon sequestration through biosolids land application; using machine learning to identify sources of infiltration; and exploring new fuels and products from biogas.



Wastewater inspectors (left) extract samples from Bay toilets and drains, and research microbiologists (right) analyze the samples for COVID-19.



from East
logists



Major milestones

- In 2021, EBMUD completed an Integrated Master Plan for the Main Wastewater Treatment Plant to address aging infrastructure, alleviate capacity constraints, prepare for new regulations, and adapt to a changing climate.
- In 2021, EBMUD's Resource Recovery Program celebrated its 20th anniversary. This program recycles organic waste, produces soil amendment and generates renewable electricity. The program has reduced greenhouse gas emissions equivalent to removing 22,000 cars from the road.
- EBMUD invested \$17 million to rehabilitate over one mile of large diameter sewer pipe in Oakland, which will ensure long-term reliability and keep rising groundwater out.
- Through Fiscal Year 2021, certified 540 miles of leak-free private sewer laterals to reduce inflow and infiltration during storms.

Take action

Take a virtual tour of the EBMUD Wastewater Treatment Plant to learn how wastewater treatment protects public health and San Francisco Bay. Sign up at ebmud.com/wwtp-tours.



Sustainability and Resilience

E-mission possible

Our mission (statement) should we choose to accept it is “to manage the natural resources with which the District is entrusted.” Mission accepted! In September 2020, EBMUD adopted an aggressive greenhouse gas emissions target by setting out to be carbon neutral for water operations by 2030 — 10 years prior to previous targets. To do this, we will reduce direct emissions, purchase and develop renewable energy sources, and operate more efficiently.

With green design in mind, we incorporated a solar (photovoltaic) system at Carisbrook Reservoir and Skyline Pumping Plant in Oakland.

In Orinda, we’re developing our largest photovoltaic project, capable of generating approximately 5-megawatts (enough to offset about 8 percent of our total energy use). This project reached a major milestone in September 2021 – approval from the City of Orinda Planning Commission. The project design is expected to be completed in winter 2021 and construction to start in spring 2022. The project will provide zero emission electricity to District facilities throughout the service area.

These efforts add to our continuing achievements. The Main Wastewater Treatment Plant captures biogas and converts it into renewable energy. On the Mokelumne River, we generate renewable hydropower. EBMUD is setting ambitious emissions goals, seizing technologies and investing in green infrastructure – because we can’t afford to wait.

Take action



EBMUD’s Climate Action Plan, published in 2021, is available at [ebmud.com/sustainability](https://www.ebmud.com/sustainability)

All of our
renewable diesel
water/wastewater
transportation a
pledge t

Major milestones



In 2021, EBMUD customers stepped up water conservation, saving 10 percent compared to 2020.



In June 2021, EBMUD partnered with Dublin-San Ramon Services District and Central Contra Costa Sanitary District (Central San) to temporarily divert 700,000 gallons per day of wastewater from Central San, which was further treated to supplement recycled water in San Ramon Valley to irrigate, saving potable water supply.



passenger vehicles are hybrid or all-electric, and we're using in most medium and heavy-duty vehicles. We're also the first water utility to join CALSTART, an organization advancing clean and the first utility within our industry to sign the Drive to Zero to advance zero- and near-zero-emission commercial vehicles.



EBMUD continued to convert irrigation sites to receive recycled water including a golf course in San Ramon and landscaped areas in Emeryville, offsetting drinking water use. EBMUD has the capability to serve 9 million gallons of recycled water daily to parks, golf courses, school grounds, refineries, construction sites and other non-potable uses.

Planning and Preparedness

Dealing with disruption

EBMUD is always on high alert preparing for a multitude of uncertainties that may impact water and wastewater services. Whether it is hardening our systems against earthquakes or reinforcing our wastewater treatment systems from severe storms to dealing with catastrophic infrastructure repairs, our team is ready to handle the disruptions that may come.

However, California's increasingly severe wildfires has brought on a host of unpredictable challenges. In October 2020, EBMUD's preparations paid off when PG&E conducted a widespread preemptive power shutoff event due to high fire risk, requiring our agency to operate pre-deployed backup generators to power facilities throughout the East Bay.

This event affected 96 EBMUD facilities including our largest water treatment plant, 33 pumping plants and 32 neighborhood storage tanks. We're proud that our water and wastewater services continued without interruption. We asked customers to help by minimizing water use in affected pressure zones and our community responded by significantly saving water. It took EBMUD's expert emergency operations team and our incredible customers to keep the water flowing.



EBMUD installs generators (left) to maintain operations during weather-related power shutoffs, we partner with fire departments to create fuel breaks and conduct controlled burns, and we remove flammable vegetation including dying Monterey pines (right).



Major milestones

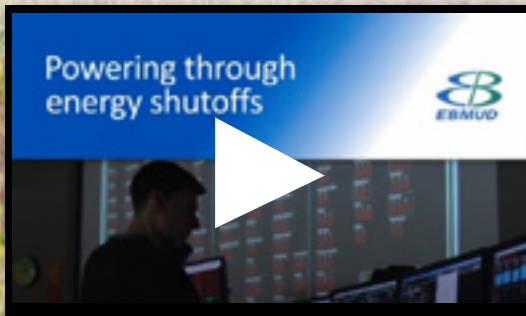
- In November 2021, EBMUD purchased five portable generators to provide support at critical pumping plants and to offset future rental costs when Public Safety Power Shutoffs occur due to severe weather. The portable generators will be available for deployment for any power emergency.
- In December 2020, the Grizzly Peak Fuel Reduction Project was completed six years ahead of schedule. This \$800,000 project reduced fire fuels across 20 acres in the East Bay.
- EBMUD is escalating efforts to remove vegetation that can contribute to fuel load. We're responding to tree die-offs by removing 100 dead trees per week in fall and winter 2021, and we're collaborating with Moraga-Orinda Fire District via a CalFire grant to remove vegetation at an increased rate. All the while, taking into consideration sensitive habitats and protected species.
- All of EBMUD's state and federally regulated dams were inspected in 2020 and 2021, and the dams were found to be safe for operations. EBMUD also updated its Emergency Action Plans for Pardee and Camanche dams and held a virtual seminar and emergency stakeholder drill.
- Emergency Action Plans for EBMUD's local reservoirs were updated and approved by the state, which included updates to flood inundation maps for state regulated dams. Failure of any EBMUD dam is extremely unlikely. However, the maps provide information about a hypothetical failure of a dam or its related structures, such as a spillway or outlet, to assist in emergency preparedness and planning.

Take action

When the power turns off, how does EBMUD keep the water on? Find out how we prepare for disruptions. You can prepare for any event by storing emergency water at home. You need at least two gallons per person per day for seven days minimum. Don't forget pets. Learn more at ebmud.com/waterstorage.



Powering through energy shutoffs



maintain
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Customer Service

Get the help you need

There is no question about it—living in the East Bay can be expensive. Housing, food and services come at a premium. Utility costs add up, too. During the pandemic, tough times got even tougher. That's why EBMUD took action during the COVID-19 emergency to help our most vulnerable customers by suspending water shutoffs and restoring water service to all customers who were shutoff due to non-payment; and we did this before the governor required this of all water utilities. Looking beyond the pandemic, EBMUD is implementing a new policy to keep the water on to meet basic needs of customers severely behind on their water bills.

We also expanded enrollment in our Customer Assistance Program (CAP), which provides discounts on water and wastewater rates to income eligible households. If you qualify, the CAP can reduce your water bill by up to 50 percent and your wastewater bill by up to 35 percent. Our CAP has been proudly serving our community for nearly 35 years, where we have helped nearly 9,000 eligible households with their water bills.

Our priority is to ensure reliable water and wastewater services for our community, while keeping rates affordable. Even so, some customers may need extra help and that's where we come in. Give us a call at 866-403-2683, Monday-Friday, 8 a.m.-4:30 p.m., or visit ebmud.com/CAP.



1,220

water-saving devices and 678 conservation rebates provided



9,000

enrollees in the Customer Assistance Program

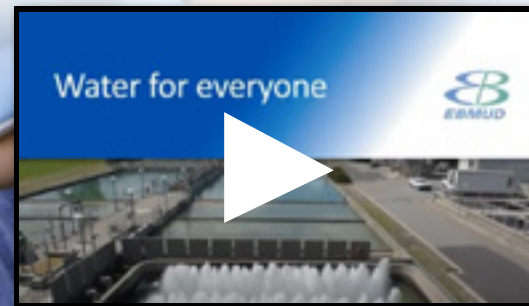


224,000

calls fielded by customer service representatives

Take action

EBMUD can help you save water with leak alerts, home survey kits, and lawn conversion rebates. Visit ebmud.com/watersmart.



Face time via screen time

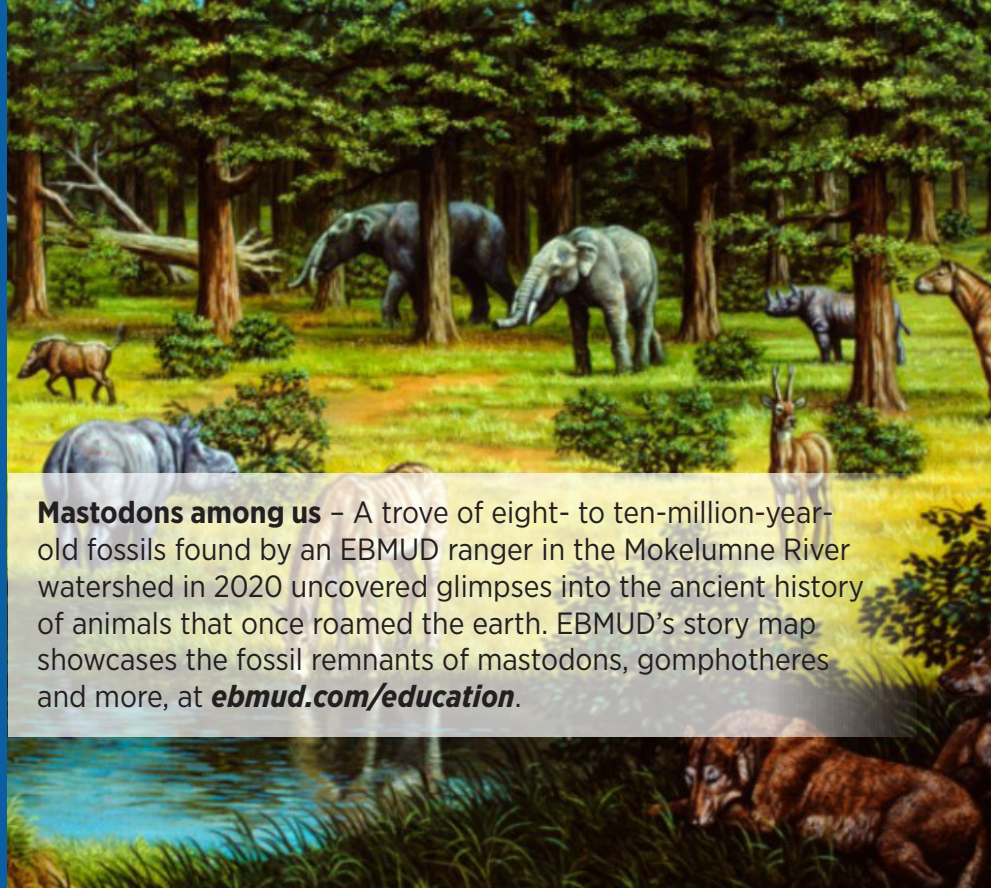
While in-person activities like fairs and classroom visits took a back seat during the pandemic, new ways to connect and serve our customers took center stage.

H₂O know – In 2020, EBMUD began email notifications to customers affected by emergency water outages. Sign up to receive emails by logging into your account and updating your email at ebmud.com.

Water-side chat – In 2021, EBMUD kicked off a “Water Wednesdays Speaker Series” to connect with the community on topics such as drought, wildfires, water quality and more. More than 700 participants tuned in. Watch the replays at ebmud.com/waterwednesday.

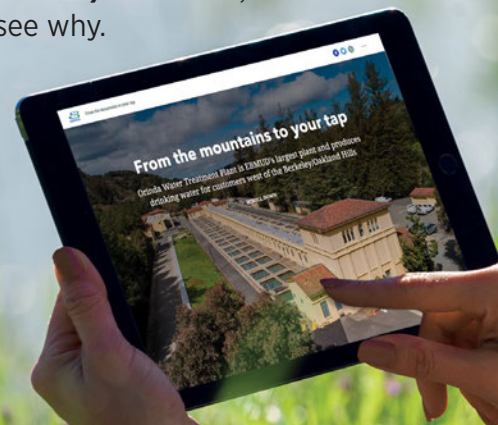
All aboard – In person Board of Directors meetings moved online in 2020, ensuring public access to water and wastewater policy discussions vital to the region. Meetings occur every 2nd and 4th Tuesday of the month at ebmud.com/board-meetings.

Cyber hikes – To encourage exploration of our watershed land and 90 miles of local trails, EBMUD launched an interactive East Bay trails map that shows detailed trail locations at ebmud.com/eastbaytrails.



Mastodons among us – A trove of eight- to ten-million-year-old fossils found by an EBMUD ranger in the Mokelumne River watershed in 2020 uncovered glimpses into the ancient history of animals that once roamed the earth. EBMUD’s story map showcases the fossil remnants of mastodons, gomphotheres and more, at ebmud.com/education.

Special treatment – With a cup of coffee in hand, discover how the water for your java is treated to the highest standards at Orinda Water Treatment Plant. In service since 1936, this plant underwent a \$22 million upgrade to ensure reliability. We call this plant “a work horse” and after taking this tour at ebmud.com/education, we’re confident you’ll see why.



Essential Workforce

Always here for you

EBMUD's work is essential. Every one of EBMUD's employees has sworn a civil service oath, no matter the disaster. If an earthquake strikes, we're prepared to make repairs. If droughts loom, we're ready to secure water sources, mobilize community conservation and harness recycled water. During storms, we're on guard to protect San Francisco Bay from untreated wastewater. And during fire danger periods, when homes, businesses and critical facilities may be de-energized, EBMUD is working through public safety power shutoffs, to ensure the water never stops flowing.

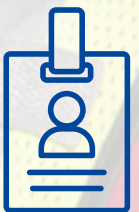
The pandemic underscored EBMUD's role in safeguarding the public health of customers with each hand wash and every flush. We adapted to ensure water and wastewater operations continued uninterrupted. We activated our Emergency Operations Team and adapted to a changing world. We even developed our own hand sanitizer and sterilization methods for masks when both were in short supply to keep our essential employees safe. EBMUD worked to treat your water and wastewater to the highest standards as we forged ahead to improve the systems that we all rely on.

It takes a team of dedicated employees to deliver unflinching service, and that is our commitment to you. We will work through every emergency to serve you, come what may.



Take action

Join EBMUD and be part of a team committed to protecting public health and the environment. Check out our latest job listings and apply today. More info at [ebmud.com/jobs](https://www.ebmud.com/jobs).





Major milestones

- EBMUD hired 363 new employees in the last two years, approximately one-fifth of our workforce. We participated in 91 events to support a diverse pipeline of candidates.
- During the pandemic, EBMUD staff mentored and supported our future workforce, hosting our first High School Virtual Internship Program. Other learning opportunities provided students with maintenance and machining training in a socially distant manner.
- EBMUD sponsored the continuing education of 22 graduates in Fiscal Years 2020 and 2021 as part of a cohort program developed with Laney College, for a total of 43 student graduates since the program began in 2017.
- EBMUD launched a Diversity, Equity, and Inclusion Strategic Plan with corresponding equity initiatives to foster fair and just practices within EBMUD and our community.



EBMUD offers an array of career options from water quality inspectors to plumbers, rangers, community liaisons, treatment and distribution operators and more. Find your fit at EBMUD.

Managing Finances

Investing with you in mind

Although much of EBMUD's infrastructure is hidden beneath streets in your neighborhood, we work hard to ensure our financial decisions are visible to everyone. As a not-for-profit public utility, we are committed to prudent and transparent management of revenue collected to fund essential operations and capital improvements.

Our budget is developed and approved by our elected seven-member Board after analyzing a portfolio of potential infrastructure investments and determining the highest-priority projects based on regulatory compliance, safety, cost-effectiveness and service improvement.

Over the last two years, we have invested more than \$700 million to improve our aging water and wastewater infrastructure and are planning an additional \$2.25 billion in vital improvements over the next five years.

That means every time you see an EBMUD crew, we are hard at work rehabilitating treatment plants, pumping plants and reservoirs, and replacing and repairing pipelines. At our Main Wastewater Treatment Plant, we're focused on upgrades to pump stations and sewer interceptors to protect the ecosystem of San Francisco Bay.

Thank you for entrusting us to keep EBMUD's system running strong now and into the next century.



Water: Your rate dollar at work

EBMUD provides high-quality drinking water for 1.4 million customers in Alameda and Contra Costa counties.



Infrastructure improvements 56¢
Pipelines, reservoirs, treatment plants, pumping plants

Water service 28¢
Storage, treatment, delivery, system maintenance

Administration 7¢
Internal support services

Customer service 4¢
Call center, education, water conservation, billing, collection

Natural resource management 3¢
Public recreation, watershed management, fisheries program

Regulatory compliance 2¢
Ensures all drinking water standards are met or surpassed

\$1 total

Wastewater: Your rate dollar at work

EBMUD treats approximately 50 million gallons of wastewater daily for 740,000 customers along San Francisco Bay, protecting public health and the environment.

42¢ Infrastructure improvements
Wastewater treatment plant facilities, sewer interceptors

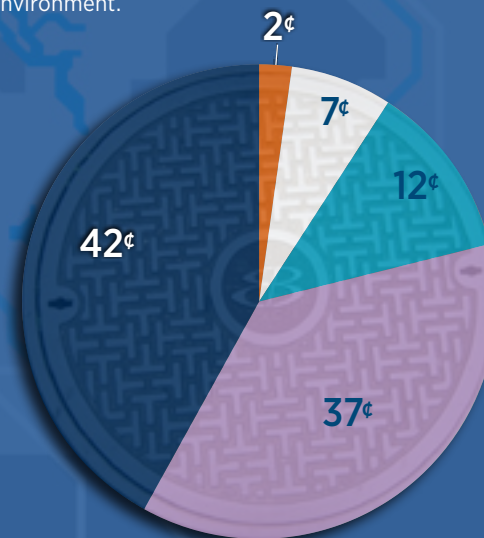
37¢ Wastewater treatment
Operations and maintenance of main treatment plant and wet weather facilities

12¢ Environmental/regulatory compliance
Pollution prevention, water quality lab, inflow/infiltration control

7¢ Administration
Internal support services

2¢ Customer service
Call center, education, billing, collection

\$1 total



Major milestones

- A \$2.25 billion budget was adopted for Fiscal Years 2022 and 2023, of which 64 percent is dedicated to capital-investments.
- Fitch Ratings affirmed its AA+ ratings on both the District's Water Revenue Bonds and Wastewater Revenue Bonds. EBMUD has one of the highest credit-ratings among public utilities in the country.
- EBMUD received the Government Finance Officers Association National Award for Excellence for its Fiscal Years 2020 and 2021 Budget-in-Brief publication, available at ebmud.com/rates.



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