# Water Supply Reliability



## Making EBMUD's Water Supply Resilient

rought is nothing new in California. During the harsh drought of 1976-77, East Bay residents and businesses felt the pain of severe water rationing. To limit future hardship, EBMUD has invested nearly \$900 million over 50 years to diversify and increase water supplies. While the Pardee Reservoir in the Sierra Nevada foothills remains the East Bay's primary water source, EBMUD's diverse portfolio now includes conservation, supplemental supplies, and recycled water.

#### **Water Conservation**

Saving water is an efficient and cost effective alternative to finding new sources. Since the late 70s, water conservation has been a key aspect of EBMUD's water supply portfolio. EBMUD customers have embraced conservation measures such as water-wise landscaping, low water use fixtures and appliances, fixing leaks, and water smart habits. And we practice what we preach: EBMUD has employed a wide range of tools to reduce leaks and breaks within our own pipelines to make sure our precious water goes to good use.

#### **Supplemental Water Supplies**

The Freeport Regional Water Project can provide up to 100 million gallons of water per day (MGD) from the Sacramento River in drought years, depending on an annual allocation of Central Valley Project water from the US Bureau of Reclamation. Freeport can also bring in water from other sellers. Supplemental supplies lessen the need for mandatory drought restrictions and rationing.

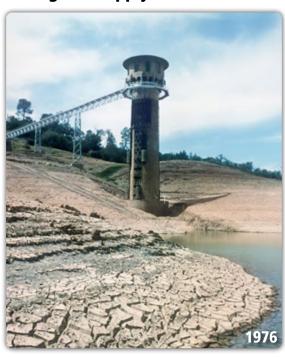
EBMUD has invested nearly \$900 million over 50 years to diversify and increase water supplies.

#### **Recycled Water**

EBMUD has also developed recycled water programs which offset the need for 9 MGD in dry and wet years alike.

These and other programs give us the flexibility we need to weather multi-year droughts.

### **Saving Our Supply**





Despite
another
severe
drought
in 2021,
diversified
water supplies
have helped
to prevent
critically low
water levels
in Pardee
Reservoir.

## 50 Years of Water Supply Reliability

EBMUD has worked consistently over the years to diversify our water supply and chart a path forward to an uncertain future. This timeline represents key milestones in a few of the programs in our diverse water supply portfolio.

1970s

1980s

1990s

2000s

2010s

2020s

1977

WATER CONSERVATION To deal with the severe drought, EBMUD implements the first mandatory drought rationing in 54 years of operation.

MANDATORY CONSERVATION: **35**%

1990s

EBMUD begins to expand our commitment to water conservation, adding programs and incentives for residential customers, irrigators and businesses.



2014-2015

Another drought hits the Bay Area.

MANDATORY CONSERVATION: 20%

2021

Severe drought returns to the Bay Area.

VOLUNTARY
CONSERVATION:
10%

TODAY

The East Bay's water usage is at or below 1970's levels, even though our population has increased by around 20%.

1 FF

SUPPLEMENTAL

WATER SUPPLIES

1970

EBMUD secures approval from the federal government to divert water from the American River during dry years.



2002

EBMUD and Sacramento County Water Agency sign an agreement to work together on The Freeport Project. 2011

The Freeport

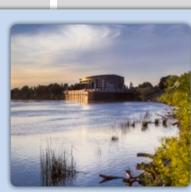
Project is

completed.

Freeport is used for the first time, minimizing EBMUD's mandatory drought

restrictions.

2014



TODAY

EBMUD can use water from the Sacramento River in dry years.

FREEPORT CAPABILITY: 100 MGD



1982

EBMUD begins delivering recycled water to irrigation customers.



1996

EBMUD begins using recycled water to offset industrial use at a large refinery. The first project starts by offsetting up to 4 MGD.

2006-2010

EBMUD launches additional recycled water systems serving large irrigators and businesses in Oakland and San Ramon.
These programs serve up to 5 MGD.
EBMUD adds another 3.5 MGD of capability to offset water use at a refinery.



TODAY

These programs
will reach six more
cities by 2040.
RECYCLED WATER
CAPABILITY:
9 MGD

## 50 Years of Water Supply Reliability

#### What's to Come



EBMUD's Urban Water Management Plan 2020 details our continued commitment to expanding and diversifying water supplies and preparing for worsening cycles of drought, meeting customer needs until 2050 and beyond.

Water conservation from 1995 through 2018 resulted in 46 MGD of water savings.



#### **Water Conservation**

EBMUD will continue innovation, customer partnerships and informational services for saving water. EBMUD will focus on programs including

leak notifications, outdoor water budgeting and meters that provide real-time data on water use.

Leak detection is another way EBMUD saves water. Satellite imaging, monitors that detect pressure spikes and acoustic leak detectors all save water by preventing or catching leaks early.



EBMUD was the first utility in the US to use satellites to detect underground pipe leaks.

EBMUD crews deploy acoustic leak detectors to identify and locate leaks in our system.



#### **Supplemental Water Supplies**

The Freeport project opens doors for EBMUD to access supplemental water sources via the Sacramento river. EBMUD is exploring partnerships to expand our options in future droughts.



#### **Recycled Water**

EBMUD's goal is to increase recycled water program capability from 9 MGD to 20 MGD by 2040. EBMUD continues to build on partnerships with regional wastewater agencies as well as industrial and irrigation customers to expand water recycling.



#### **Groundwater**

EBMUD is the Groundwater Sustainability Agency for our local groundwater basin, and is gathering data to make science-based decisions about groundwater use in the East Bay. EBMUD is also pursuing a pilot program in San Joaquin County to share groundwater storage benefits.



#### **Reservoir Expansion**

With multi-agency partners, the Los Vaqueros Reservoir Expansion could provide EBMUD with 30,000 acre-feet of added storage.



#### **Desalination**

A possible long-term alternative, with other supply options currently prioritized that are lower in cost, energy use and/or carbon emissions.

Learn more about EBMUD's water supply plans at: ebmud.com/UWMP.

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The East Bay Municipal Utility District
has a proud history of providing
high-quality drinking water for
1.4 million customers in Alameda
and Contra Costa counties.

EBMUD's wastewater system serves

EBMUD's wastewater system serves 740,000 customers and helps protect the ecosystem of San Francisco Bay.

EBMUD is a not-for-profit public agency established in 1923.



**East Bay Municipal Utility District** 

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