Investing in the Future

Ward 2 Briefing

June 6, 2025

Pardee Reservoir

AGENDA

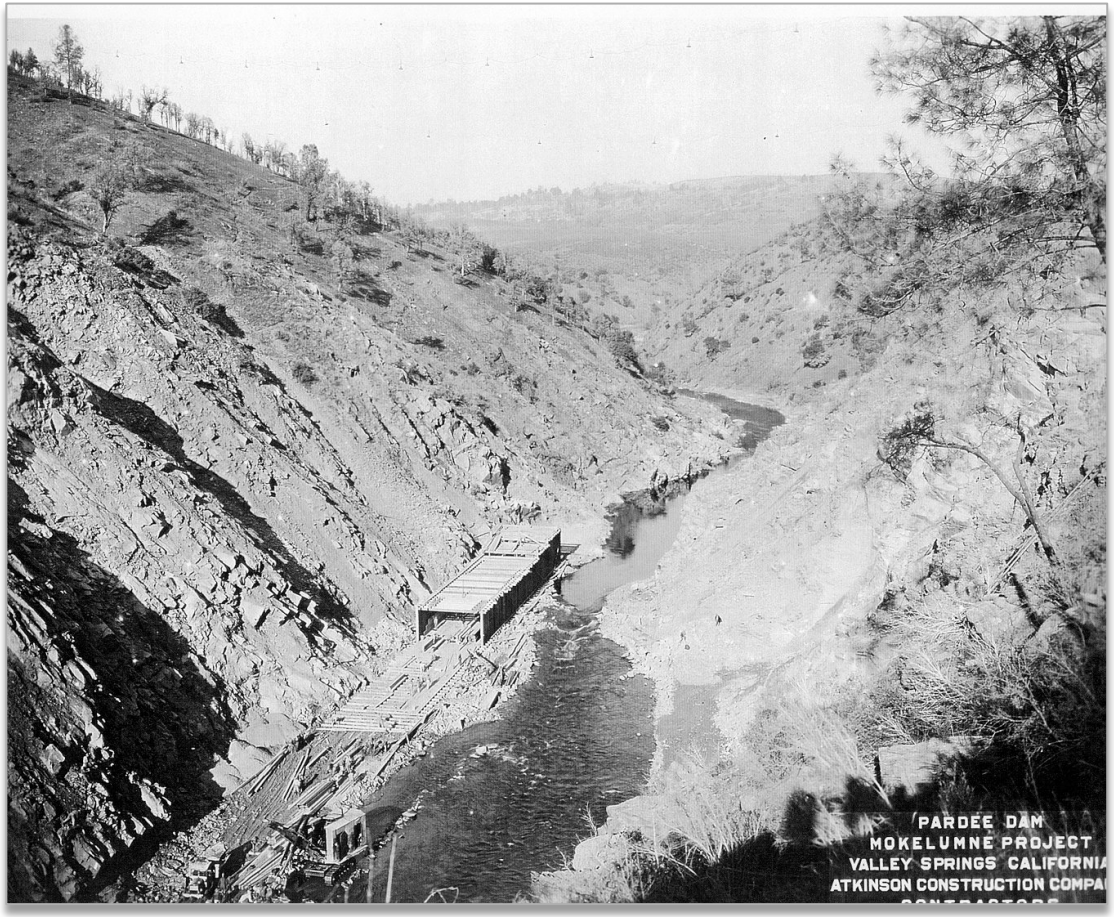
- What is EBMUD?
- Facing the Challenges
- Environmental Stewardship
- Wildfire Preparedness
- Smart Partnerships
- Investing in the Future
- Q & A

EBMUD Education Program

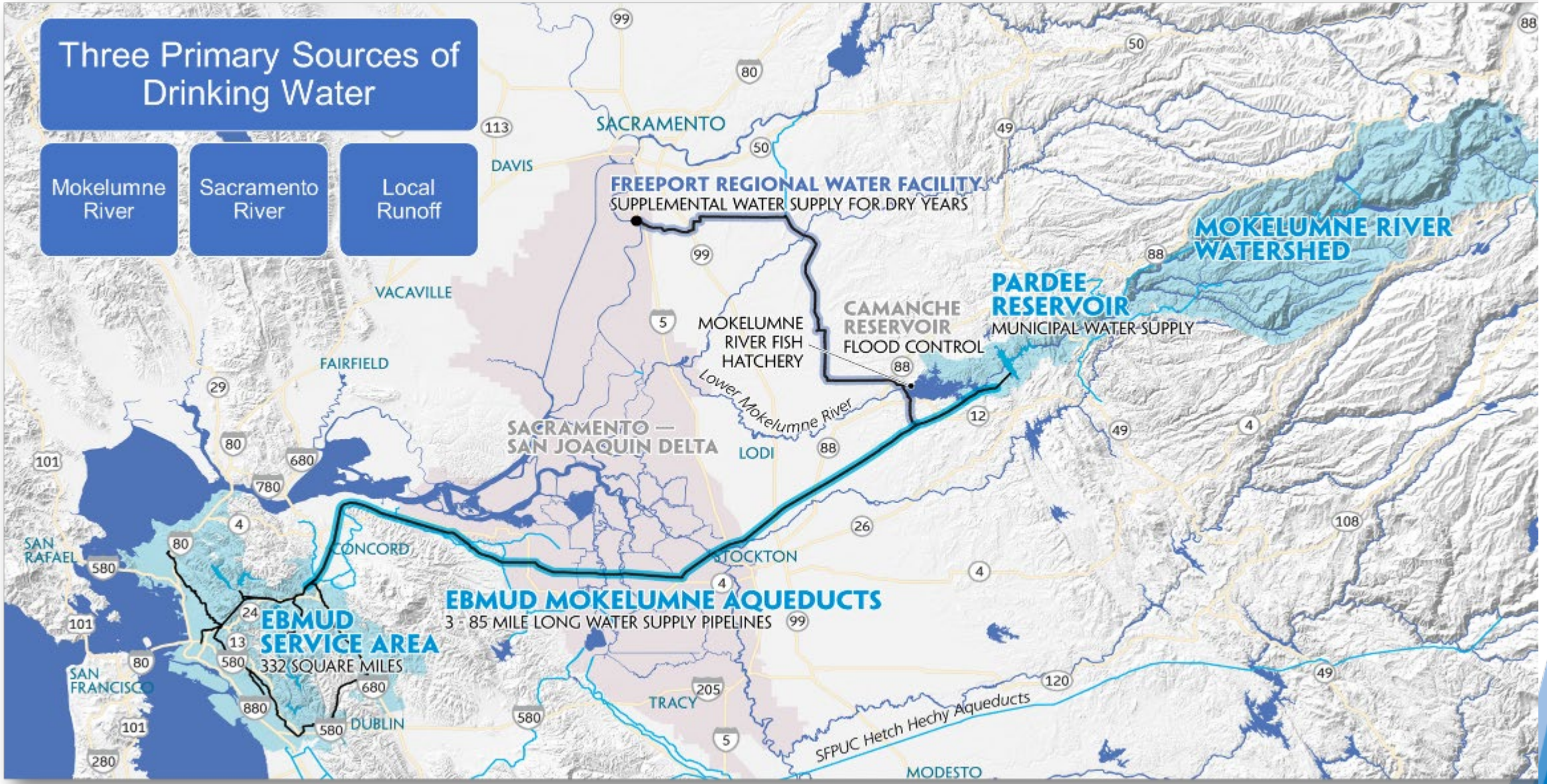
Who is EBMUD?

- East Bay Municipal Utility District (EBMUD) is a not-for-profit utility
- Governed by a seven-member elected board
- Your rate dollars directly fund operations and capital improvements
- All additional revenue is reinvested in the system

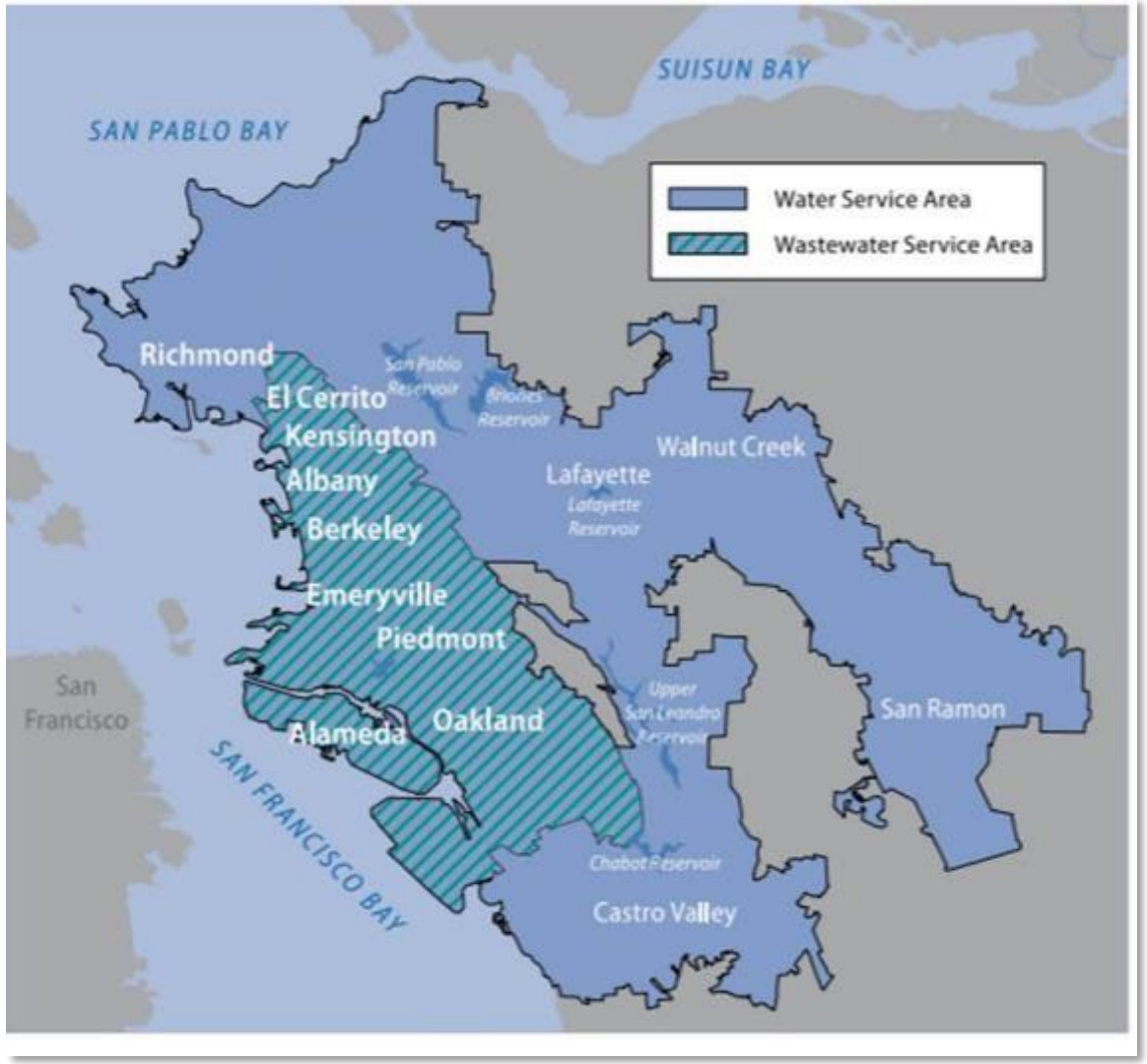
The History of EBMUD



Where Does Your Water Come From?



EBMUD Today



Water: 1.4 Million Served

Raw Water System

2 Upcountry Reservoirs, 5 Local Reservoirs

Treatment System

6 Water Treatment Plants

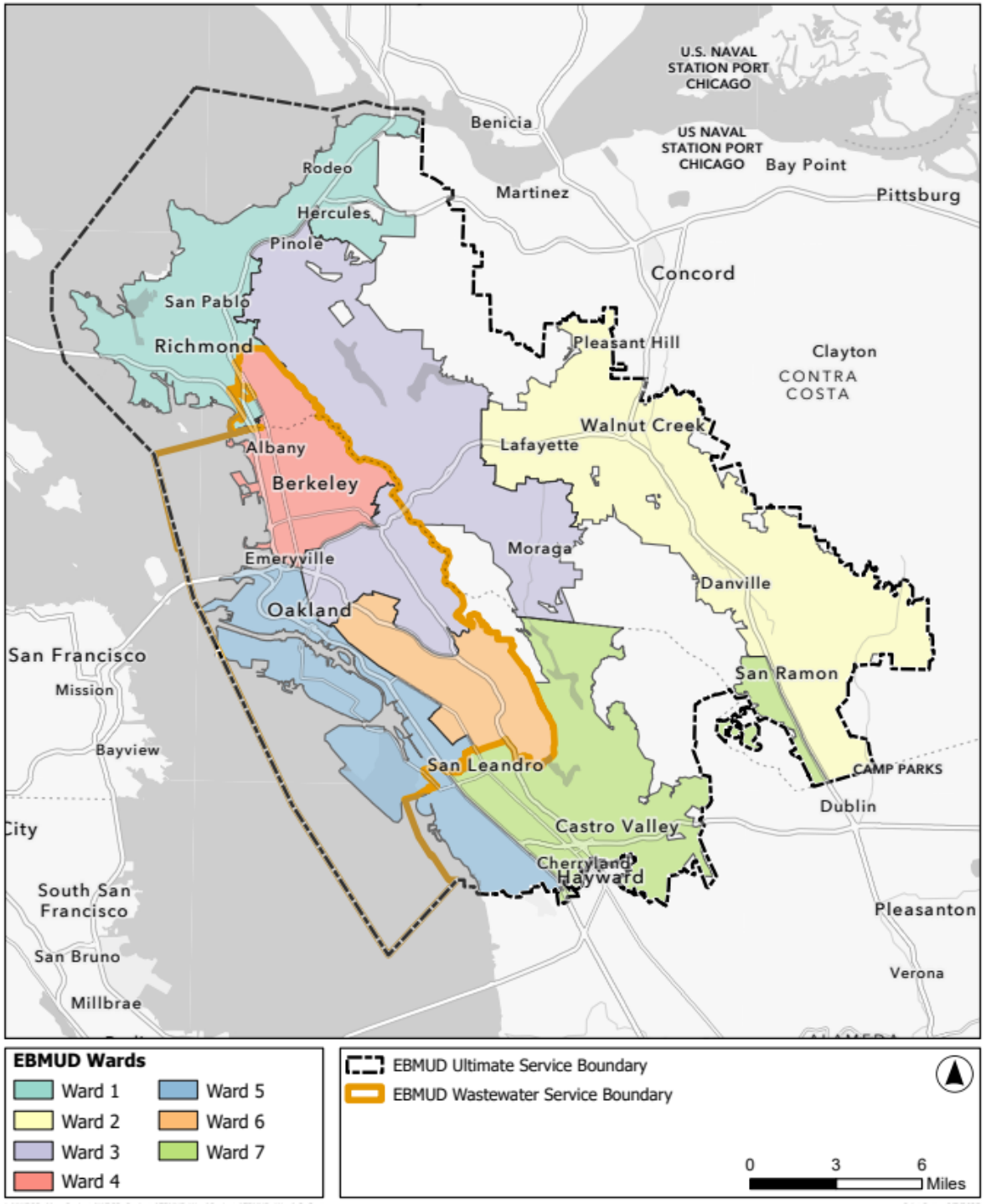
Distribution System

- 4200 Miles of Pipeline
- 122 Pressure Zones
- 164 Reservoirs

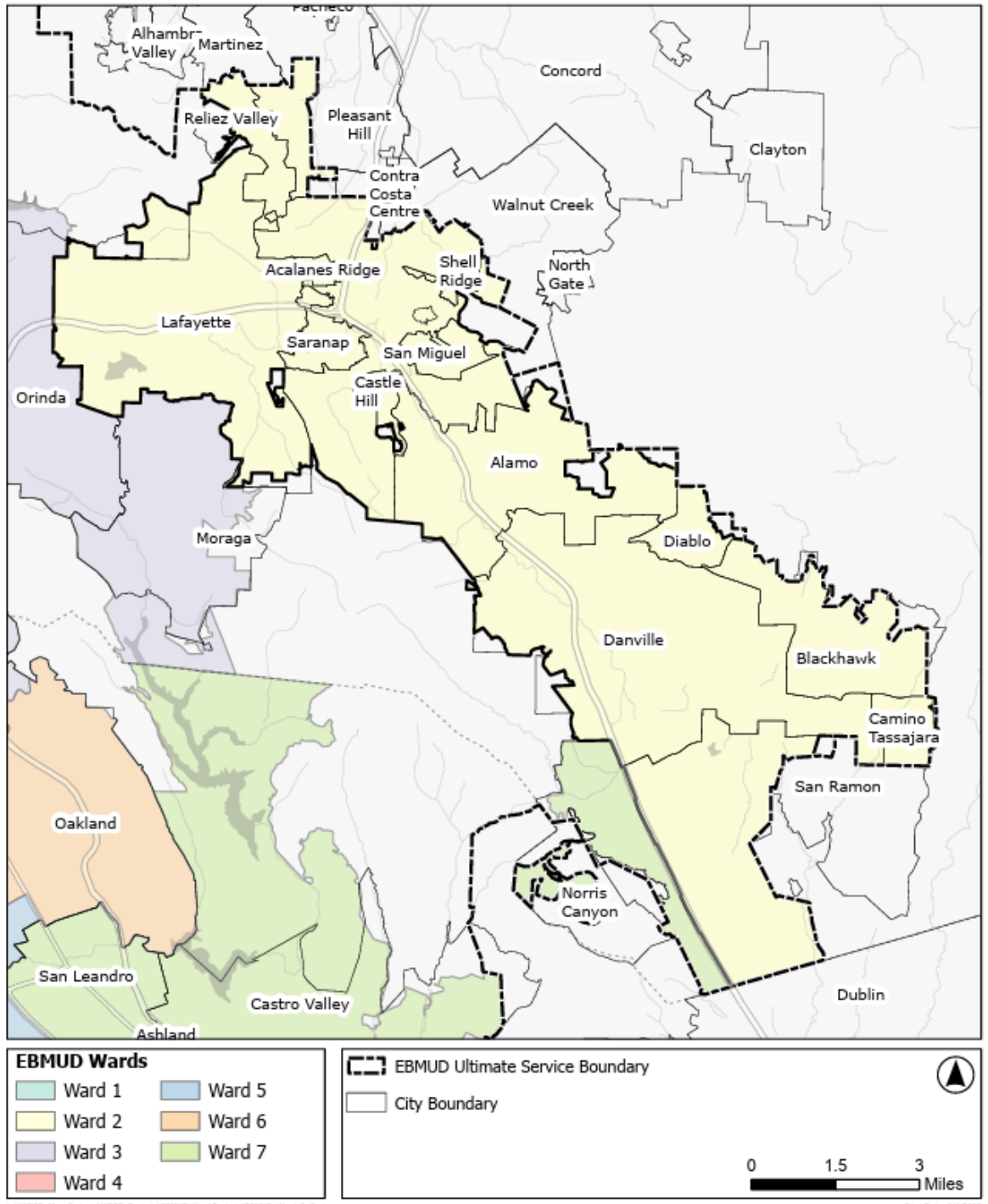
Wastewater: 740,000 Served

- Wastewater Treatment Plant processes 50 Million gallons per day (MGD); up to 320 MGD during rainfall.
- 29 miles of sewer interceptors
- 3 Wet Weather Facilities

EBMUD Wards



WARD 2



2025 Total System Storage

Reservoir	Current Storage, *TAF	Percent of Average	Percent of Capacity
Pardee	180.3	96%	88%
Camanche	339.4	112%	81%
East Bay	137.1	98%	91%
Total System	**656.8**	**104%**	**85%**

- Projected: 629 TAF by Sept 30, 2025

**TAF: Thousand Acre-Feet*

FACING THE CHALLENGES

THE CHALLENGES

- Aging infrastructure
- Ensuring water quality
- Securing water supply
- Impacts of climate change
- Increasing costs pressures

Aging Infrastructure and Ensuring Water Quality

THE CHALLENGE

Infrastructure is reaching the end of its useful life. Water quality depends on reliable infrastructure

Aging Infrastructure and Ensuring Water Quality

MEETING THE CHALLENGE
Upgrades and rehabilitation of water treatment plants and reservoirs ensure we can rely on our existing infrastructure

Water Treatment Plant Upgrades

Orinda WTP Disinfection and Chemical System Safety Improvements Project

Scope

- Install ultraviolet and chlorine contact basin (CCB) disinfection
- State-of-the-art maintenance facility
- Upgrade chemical systems and improve electrical reliability

Drivers

- Improve maintenance and reliability, drought operations, water quality, and climate change resilience

Schedule

- In construction through 2027

USL WTP Maintenance and Reliability Project and Chemical System Safety Project

Scope

- Eliminate capacity restrictions in treatment and solids handling systems
- Improve safety and reliability, and mitigate seismic issues
- Replace 90-year-old CCB, and upgrade electrical and chemical systems

Drivers

- Improve maintenance and reliability, drought operations, water quality, and climate change resilience

Schedule

- In construction through 2028

Sobrante WTP Chemical System Safety Improvements Project

Scope

- Upgrade chemical systems and improve electrical reliability

Drivers

- Improve safety, maintenance, and reliability

Schedule

- In construction through 2028

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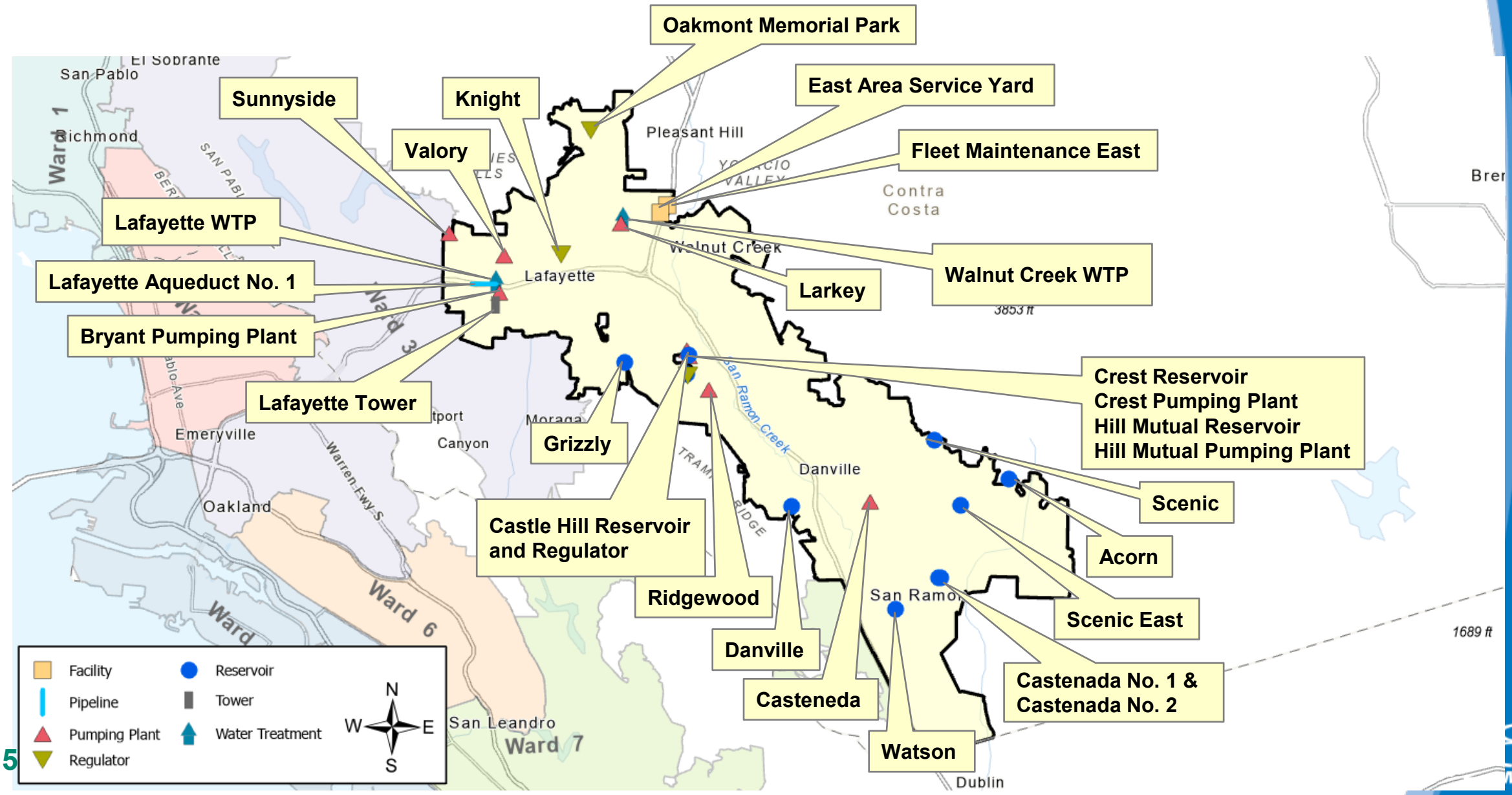
Pipeline Replacement in Ward 2

City	Miles
Alamo	1.3
Danville	2.2
Diablo	2.2
Lafayette	9.5
Pleasant Hill	3.85
Walnut Creek	6.3
***Total Miles**	**23.65**

*See handout for details

Capital Projects in Ward 2



Securing Future Water Supply

THE CHALLENGE

Mokelumne supply is variable and vulnerable to droughts and climate change

Securing Future Water Supply

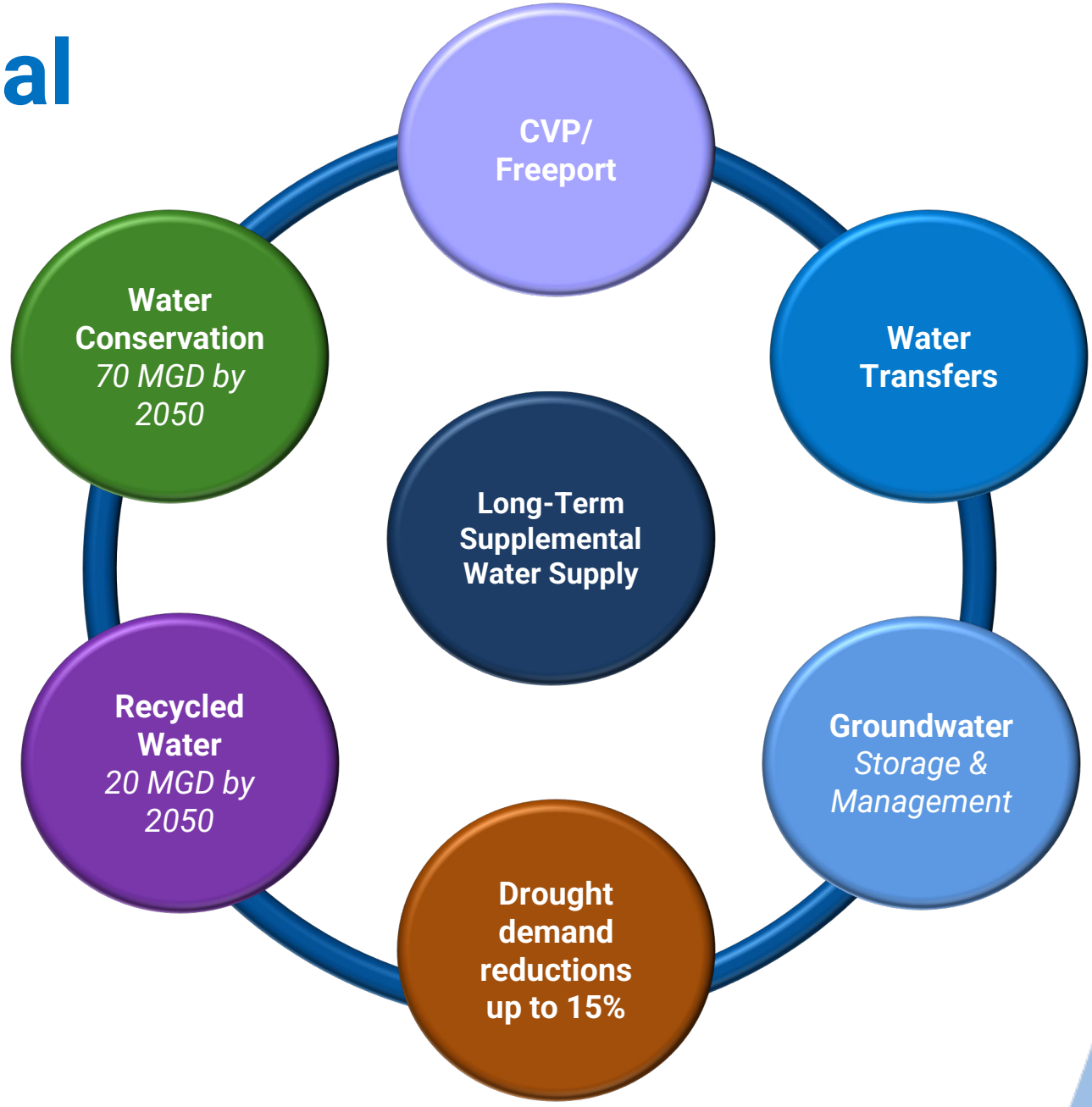
MEETING THE CHALLENGE

EBMUD maintains a diverse water portfolio and is updating its Urban Water Management Plan to achieve a reliable water supply through 2055.

EBMUD Supplemental Water Portfolio

Strategy

"Continue building a resilient and sustainable water supply through diversifying the water supply portfolio"



CVP: Central Valley Project

Potential Future Supplemental Supply Sources

Supply Alternatives	Yield (TAF)	Key Considerations
Water Transfers	Up to 47 TAF per year when available	• Long-term partnerships for drought supply; • Quantities variable; transfers less reliable as drought deepens.
Future Non-potable Reuse	Up to 14 TAF (13 MGD)	• Leverage federal funding to expand the program. • Difficult to achieve goal due to declining wastewater flows
Potable Reuse (Purified Water)	20 to 34 TAF (17.9 to 30 MGD)	• Future opportunity with locally controlled supply. • Long lead time for education and outreach and to develop project; complex permitting and operations.
San Joaquin County Groundwater Banking	Up to 20 TAF	• Opportunity to develop long-term storage project. • Permits, wells and groundwater levels, may limit extraction capacity
Bayside	Up to 5 TAF	• Water supply for deeper droughts and emergency. • Outreach to address community concerns.

Embracing Water Conservation

Water Conservation:

Use water wisely at home and in the garden to stretch supplies and protect our shared resources.

- Reducing water use through efficient habits, tools, and landscaping.
- EBMUD offers rebates for lawn conversion, irrigation upgrades, and flowmeters.
- Free water-saving devices available for customers.

Recycled Water:

Highly treated wastewater for non-drinking purposes.

- Reuse of highly treated wastewater for non-drinking (non-potable) purposes.
- Used for irrigation, industrial cooling, and toilet flushing.
- Separate purple pipe system ensures safety.
- EBMUD aims to recycle 20 million gallons per day by 2050.

Climate Change

THE CHALLENGE

Climate Change is impacting water quality and the environment

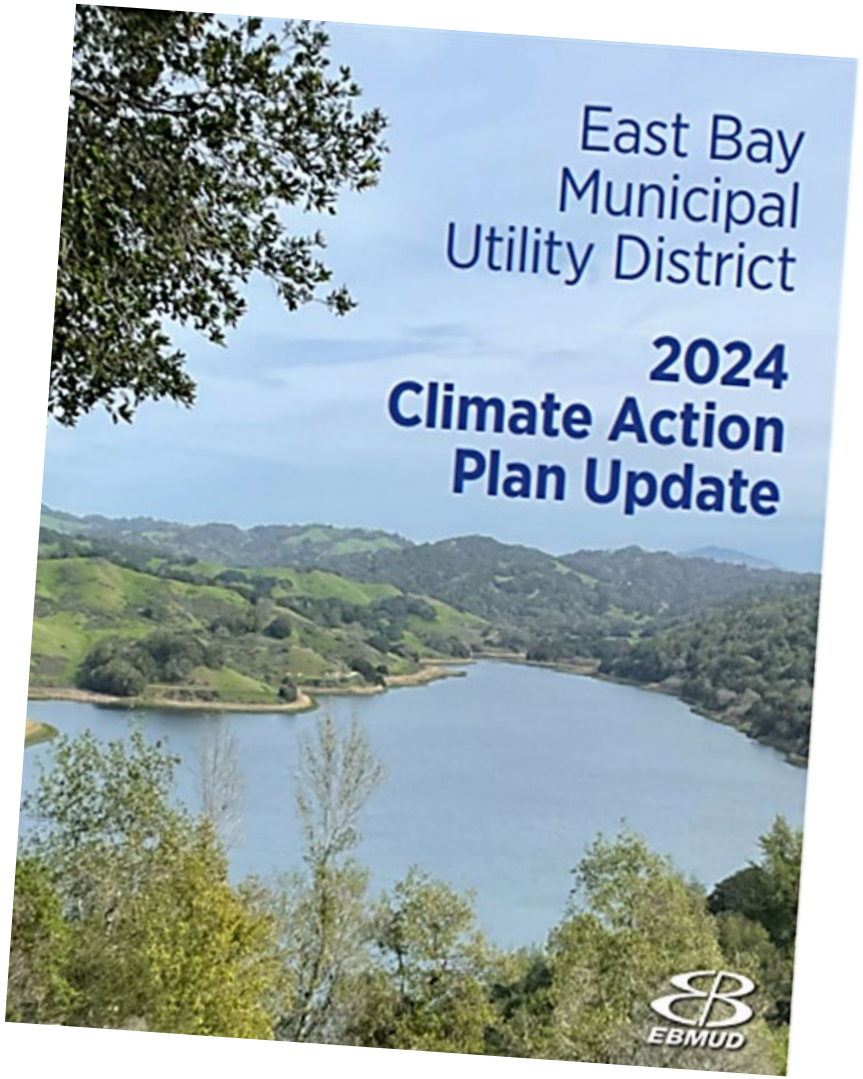
Climate Change

MEETING THE CHALLENGE

Adapting through infrastructure investments and minimizing our impact on the environment

EBMUD Climate Action Plan

- Reviews the science on how climate change may affect the District's operations and customers
- Identifies mitigation actions to meet greenhouse gas reduction goals
- Describes adaptation plans to ensure the resilience of District services over time



Reducing our Footprint

EBMUD Goal: achieve carbon neutrality by 2030

- Minimize energy use
- Purchase low or emissions-free energy
- Develop renewable energy projects – 5 MW Duffel PV Project
- Transition to renewable diesel
- Convert fleet to Zero Emission Vehicles

Adaptation Strategies

- Long-term water supply via a diversified portfolio
- Capital upgrades at our Water Treatment Plants and distribution system
- Planning for sea level rise
- Reducing nutrient discharge from our Main Wastewater Treatment Plant
- Supporting wildlife on our watersheds and in the Mokelumne River

Environmental Stewardship—It's in our DNA

MEETING THE CHALLENGE
Ensure environmental stewardship for the watershed and the SF Bay

Mokelumne Watershed Protection

Rangeland Management

- Grazing to reduce grassland fuels
- Maintain ground cover to prevent erosion
- Control invasive species
- Improve soil health & water infiltration

Restoration

- Rebuild native plan communities
- Enhance biodiversity and habitat quality
- Strengthen long-term watershed function
- Stabilize soils to reduce erosion

Fuels Reduction

- Decrease wildfire intensity and spread
- Reduce potential sediment and ash runoff into waterways
- Support the recovery of native vegetation
- Protect soil structure and infiltration capacity

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Mokelumne River Habitat Restoration

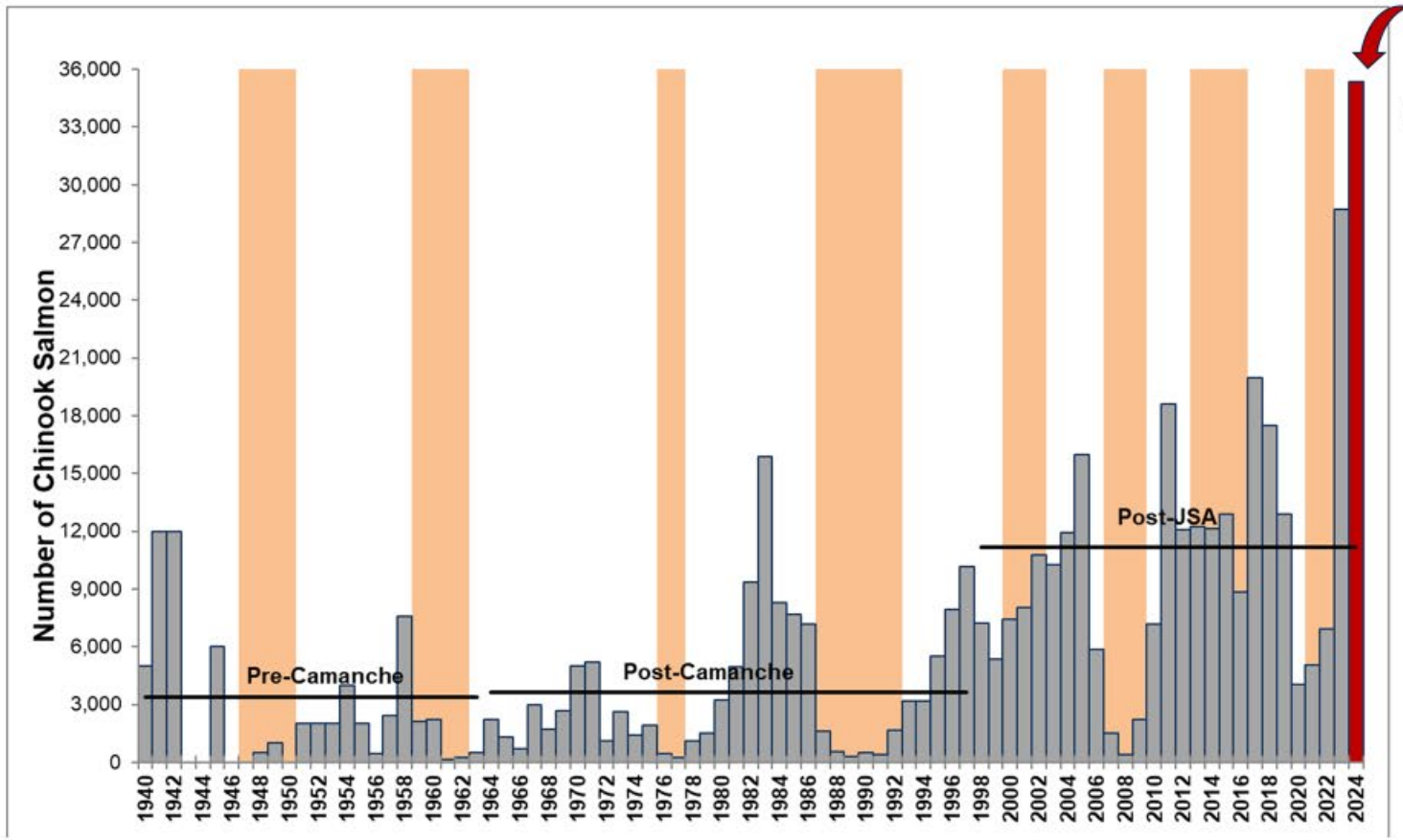
Gravel Augmentation

- 1990-1998: Site-specific projects
- 1999-2016: SHIRA (reach-scale restoration)
- 2017-present: SHIRA (reach-scale Maintenance)

Floodplain & Side channels

- 2005, 2015-present

Fishery Success and Mokelumne River Fish Hatchery



35,363

Visit

Location: 25800 North McIntire Road, Clements, CA 95227

Hours: Open 8:00 a.m. to 3:00 p.m.

Contact: 209-759-3383

Mokelumne@wildlife.ca.gov

Wildfire Preparedness

MEETING THE CHALLENGE
Proactively managing vegetation and infrastructure to safeguard our watersheds and communities from wildfire threats.

EBMUD Fire Preparedness

1991 East Bay Hills Fire Lessons Learned

- Operational – Fill storage for red flag warnings
- Equipment – Standardize hydrants, disperse emergency generators
- Infrastructure – Install pipeline upgrades and stationary generators
- Coordination – Conduct joint recurring meetings with fire agencies and cities/counties

East Bay Fuel Watershed Fuel Management

Fuel Management Plans for the East Bay and Mokelumne Watersheds

- Grazing Program
- San Pablo Pine Tree Removal Project
  - Mechanical Fuel Reduction
  - Native Oak Tree Regeneration
  - Pile Burning

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Fuel Breaks

This work is part of a multi-agency, grant-funded project that includes East Bay Regional Park District, Berkeley Fire, and UC Berkeley

Before:

After:

EBMUD Emergency Response

- EBMUD 24/7 Control Centers
  - Coordinate with fire agencies
  - Manage reservoir water levels
- Portable generators and pumps are ready for deployment
- Local water storage to support aerial firefighting

Smart Partnerships

MEETING THE CHALLENGE

Partnering for Innovation in planning, design, construction, results in safety and savings

Berkeley
CENTER FOR
Smart Infrastructure

EBMUD

LA DWP

San Francisco Public Utilities Commission

YUBA WATER AGENCY

PG&E

enel

ERDC

Caltrans

Oregon Department of Transportation

BERKELEY LAB
Bringing Science Solutions to the World

NSF

U.S. Department of Transportation
Pipeline and Hazardous Materials Safety Administration

Berkeley

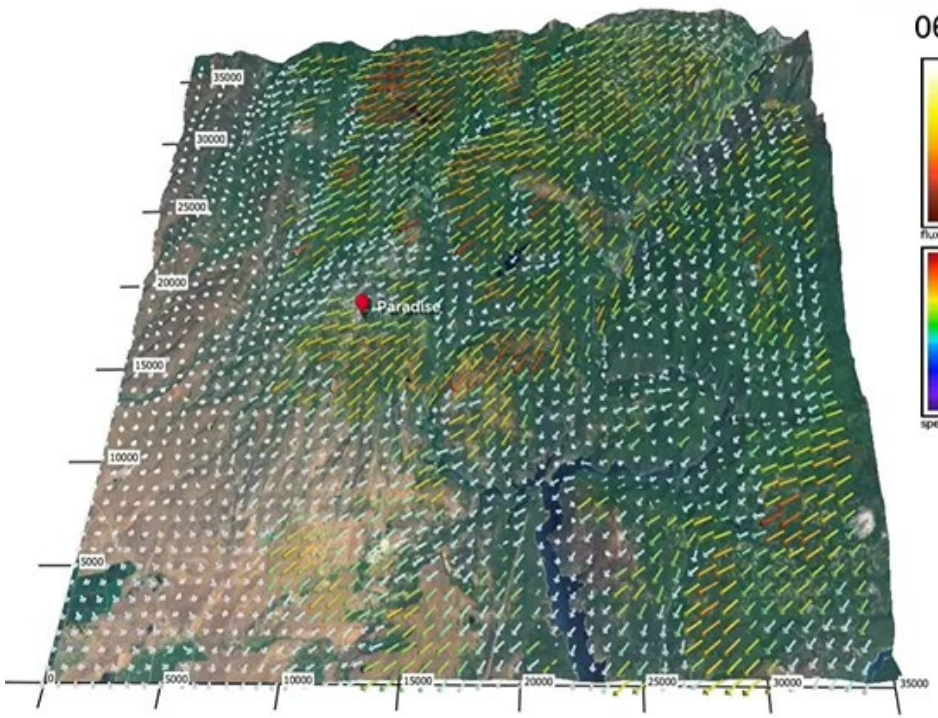
https://smartinfrastructure.berkeley.edu/

EBMUD

1 Pipe Data → Big Data

2 Machine Learning

3 Visualize Risk



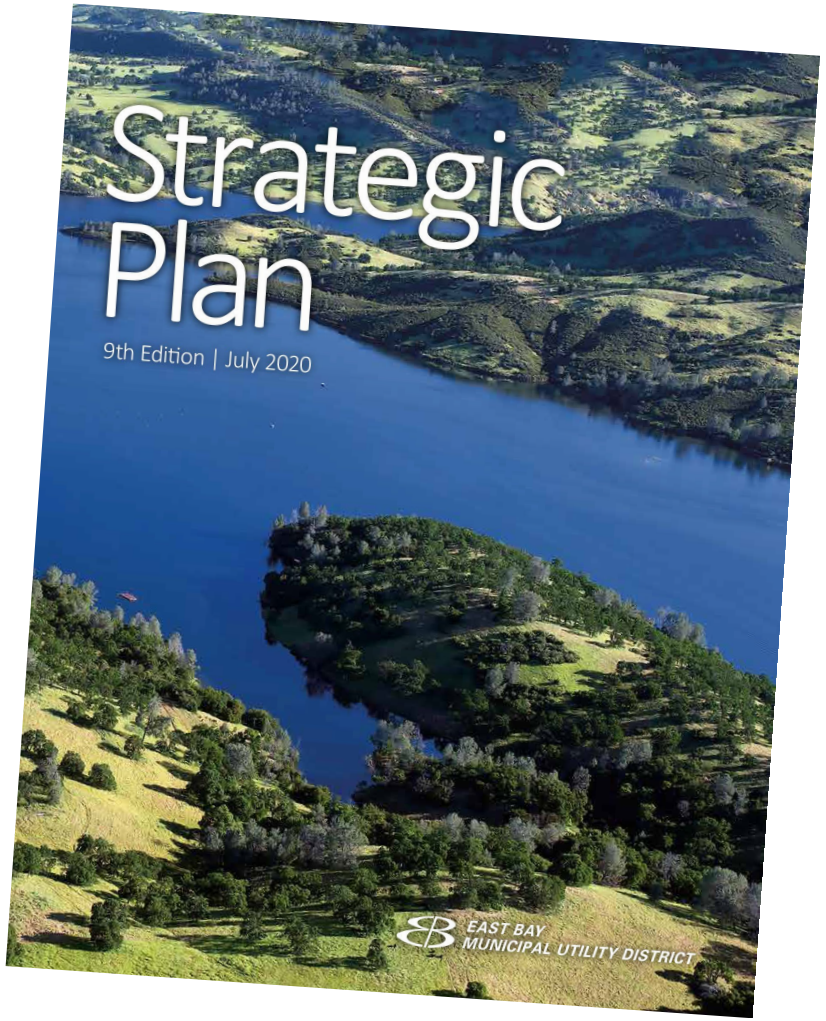
Increasing Cost Pressures

THE CHALLENGE

Rising costs impact all facets of water and wastewater service

Rising Costs Impacts

- **Major Infrastructure Investment Demands:** The District's 10-year Capital Improvement Program includes $5.6 billion including aging pipeline replacement, water treatment plant modernization, and reservoir and pumping plant rehabilitation.
- **Increase in Day-to-Day Costs:** Wage and benefit pressures, higher insurance and risk management costs, and increased energy, chemicals, technology, and security costs.
- **Increased Debt Service Costs:** Debt issuance helps spread the costs of infrastructure improvements over time but drives up near-term budgets.



Investing in the Future: Managing Rising Costs

MEETING THE CHALLENGE

Despite these challenges, the District maintains long-term financial stability through a balanced mix of rate increases, debt financing, and operational efficiencies – and keeping average water costs under 2 cents per gallon.

Investing in Reliability: Water System

- Aging Infrastructure
  - Pipeline Rebuild & Large Diameter Pipelines
  - Orinda and Upper San Leandro Water Treatment Plants (WTP)
  - Central Reservoir Replacement
  - Mokelumne Aqueduct No. 2 Relining
  - Lafayette Aqueduct No. 1 Relining
- Water Quality
  - Pardee Chemical Plant Improvements
  - Lafayette WTP Disinfection & Residual Improvements
- Climate Change & Resiliency
  - Walnut Creek WTP Pretreatment Improvements
  - Recycled Water Improvements
- Fiscal Responsibility
  - Maintain strong financial position and sustainable finances

EBMUD

Water: How We Invest in Your Service

EBMUD carefully manages funds to deliver high-quality drinking water to 1.4 million customers in Alameda and Contra Costa counties.

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

26¢ Water Service
Storage, treatment, delivery, system maintenance

7¢ Administration & Customer Service
Call center, education, billing, support services

6¢ Natural Resource Management & Regulatory Compliance
Public recreation, watershed management, water quality

5¢ Water Supply
Supply planning, conservation, alternative water supplies

$1 total

Cost of Service Study & Rates

- Cost of Service (COS) studies required every 10 years and charges must reflect EBMUD's cost to provide service
- FY 2026 and 2027 proposed rates based on 2025 Water COS and 2019 Wastewater COS
  - Impact of 2025 COS changes before rate increase is similar or slightly lower bill for median and below Single Family Residential (SFR) water users

Cost of Service Study & Rates

- New rates effective July 1, 2025 (pending Board approval)
- Water is about 2 cents per gallon
- Impact of combined COS changes and rate increases: Median SFR water bill will increase by about 12 cents per day in FY26 and another 14 cents per day in FY27

Customer Assistance Program (CAP)

- Established in 1987 – one of the first programs in the state; funded by non-rate revenue.
- Provides financial support to vulnerable populations including homeless shelters.
- Applicants must be a customer and have a water meter.
- Enrollment is valid for two years, must be recertified.
- Benefits include:
  - *50% off water service and flow charges (max of 1,050 gallons per month per person*

Household Size	2024 EBMUD CAP Income Eligibility*	2024 Federal Poverty Guidelines (200%)
1	$62,300	$30,120
2	$62,300	$40,880
3	$70,100	$51,640
4	$77,850	$62,400
***add $6,250 for each additional household member**		

Next Steps & Schedule

	Milestone	Date(s)
☑	Board Workshops on Climate Action Plan, Recycled Water, COS, Strategic Plan & KPIs	January – September 2024
☑	Infrastructure Workshop	November 26, 2024
☑	Board Workshop #1	January 28, 2025
☑	Board Workshop #2 & Prop-218 Rates	March 25, 2025
☐	Public Outreach	March – June 2025
☐	GM Report on Rates & Charges	May 13, 2025
☐	Public Hearing on Prop 218 Rates Board Considers Adopting Budget & Rates	June 10, 2025

Questions?

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