



Water Quality Program Annual Update

Planning Committee,

March 11, 2025

Susan Teefy, Manager of Water Quality

Overview

Program updates every six months; this report is for calendar year 2024

- Regulations and Internal Goals
- Per- and Polyfluoroalkyl Substances (PFAS)
- Lead programs
- Microplastics
- Fluoride

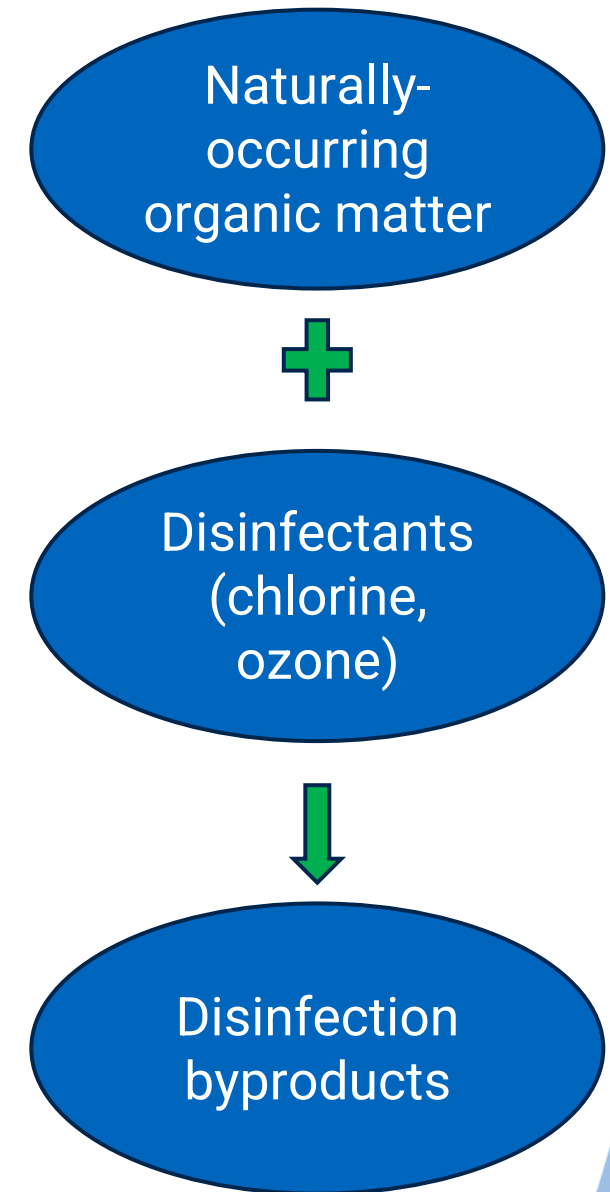
Water Quality Update, Calendar Year 2024

- Met all state and federal drinking water regulations.
- Met 97% of internal water quality goals
 - Goals are significantly more stringent than regulatory requirements
 - 129 of 133 internal goals were met
 - Unmet goals were associated with disinfection byproducts and distribution system and treatment plant operations

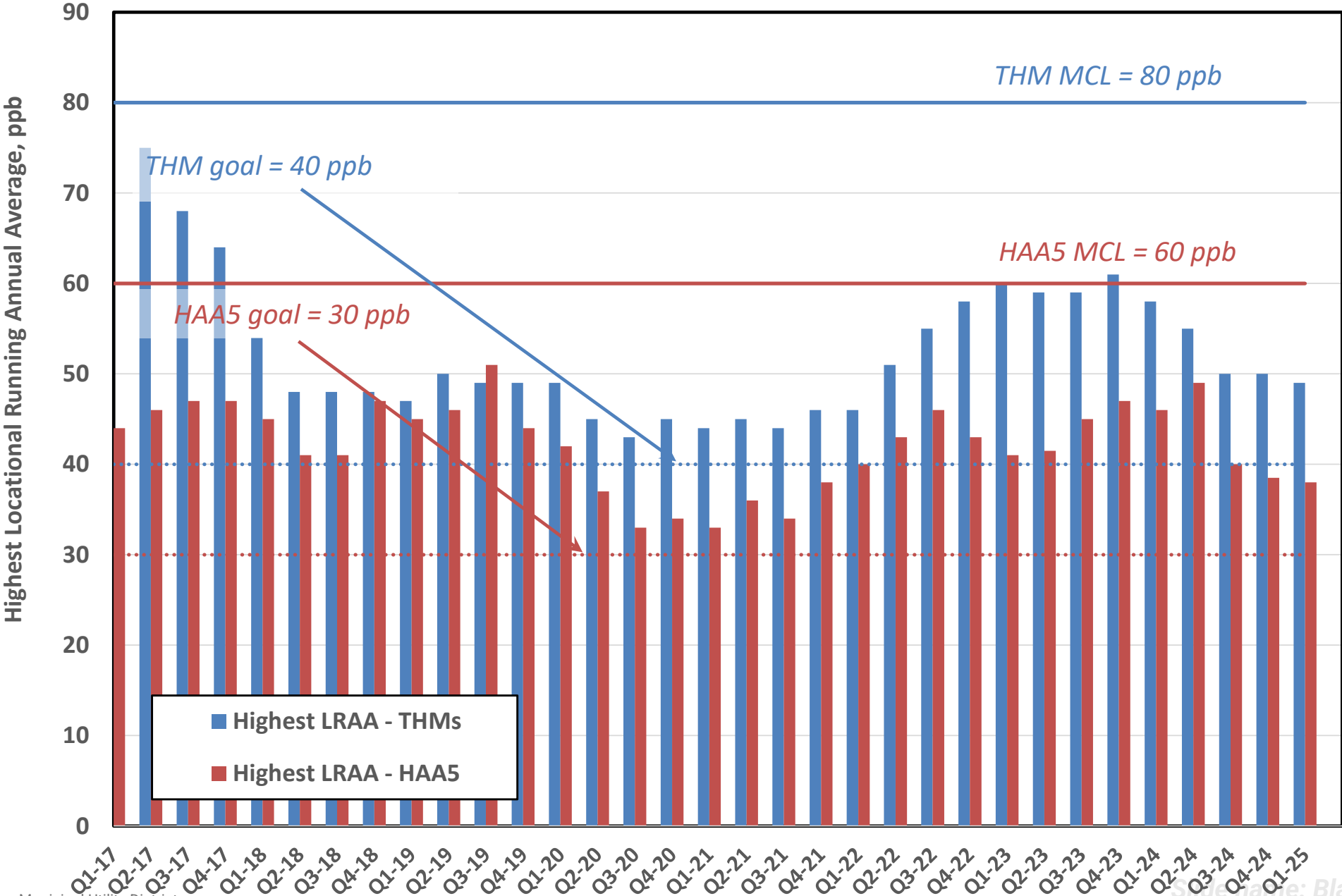


Disinfection Byproducts

- Trihalomethanes (THMs)
 - 34 out of 64 samples exceeded internal goal
- Haloacetic Acids (HAAs)
 - 34 out of 64 samples exceeded internal goal



Disinfection Byproducts



Distribution system chlorine residual

- Chlorine decays with time, necessary to maintain a residual to prevent microbial growth
- Goal is to have at least 0.5 milligram per liter (mg/L) chlorine in 95% of distribution reservoirs every month
- Goal was not met in six of twelve months during 2024
 - Ranged from 90% to 99% each month
 - Staff responded to each event to restore the residual



Chlorine residual sample in the field

Aluminum

- Primary health-based standard is 1,000 ppb
- Secondary aesthetic standard is 200 ppb
- District Goal is 100 ppb in each monthly sample from each water treatment plant
- One sample from one treatment plant was 128 ppb
 - Operators adjusted coagulant dosage to reduce aluminum
 - Sustained elevated aluminum can cause cloudiness in treated water



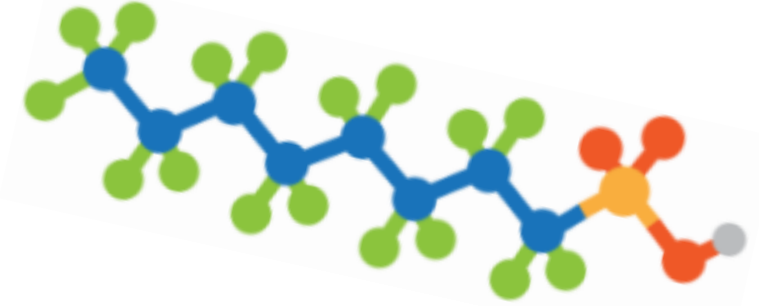
Filter undergoing backwash at Sobrante water treatment plant

New regulations for PFAS

Compound	MCL (ppt)	Health based value (ppt)	Hazard Index (unitless)
Perfluorooctanesulfonic acid (PFOS)	4		
Perfluorooctanoic acid (PFOA)	4		
Perfluorononanoic acid (PFNA)	10	10	1.0
Hexafluoropropylene oxide dimer acid (HFPO-DA)	10	10	
Perfluorohexane sulfonic acid (PFHxS)	10	9	
Perfluorobutane sulfonic acid (PFBS)		2,000	

PFAS = Per- and Poly-fluoroalkyl Substances
 ppt = parts per trillion

PFAS



- Initial monitoring must be done by 2027
- Compliance with new Maximum Contaminant Levels (MCLs) by 2029
- PFAS were included in the latest Unregulated Contaminant Monitoring Rule (UCMR5, 2023-2025)
 - UCMR5 results can be used for initial monitoring
- All results from UCMR5 were below the reporting level
- Additional samples collected in local East Bay watersheds
- Some PFAS compounds are present, particularly in creeks running through developed areas
- Initial analysis indicates that blending will be effective to meet MCLs

PFAS chemical structure representation from USEPA

Lead – current activities

- U.S. Environmental Protection Agency finalized additional changes to regulations in October 2024
- EBMUD completed its inventory of service lines by the October 2024 deadline
- Selected customers were notified by the November 2024 deadline
 - Approximately 3,900 customers with galvanized service lines formerly connected to lead service lines
 - Approximately 220 customers with galvanized service lines with short lead connectors
- Compliance samples taken in 2024, 90th percentile was 3.6 ppb
- Customer sample voucher program continues to be popular
 - Over 4,700 customers have requested free lead test
 - 90 percent of all results continue to be less than 1 ppb

Lead – Additional Requirements for 2027

- Sampling from schools and childcare centers
- Public education campaigns
- Annual notification of customers with galvanized service lines formerly connected to lead service lines
- Inform homeowners about their galvanized pipe requiring replacement, but have no obligation to pay for removal
- Action Level reduced from 15 ppb to 10 ppb
- New sample locations and sampling protocols

Additional issues

- Microplastics
 - State is still revising sampling and analysis protocols
 - EBMUD is participating in initial sampling
- Fluoride
 - Fluoride added since 1976 following local votes, and required by subsequent state law and permit
 - Added at lowest possible level, closely monitored and controlled
 - EBMUD is following the recent scientific publications and monitoring regulatory developments



EBMUD analyst pipetting samples in laboratory

Questions?





Miller Road Trench Soil Management Update

Planning Committee

March 11, 2025

Gus Cicala, Senior Civil Engineer

Overview

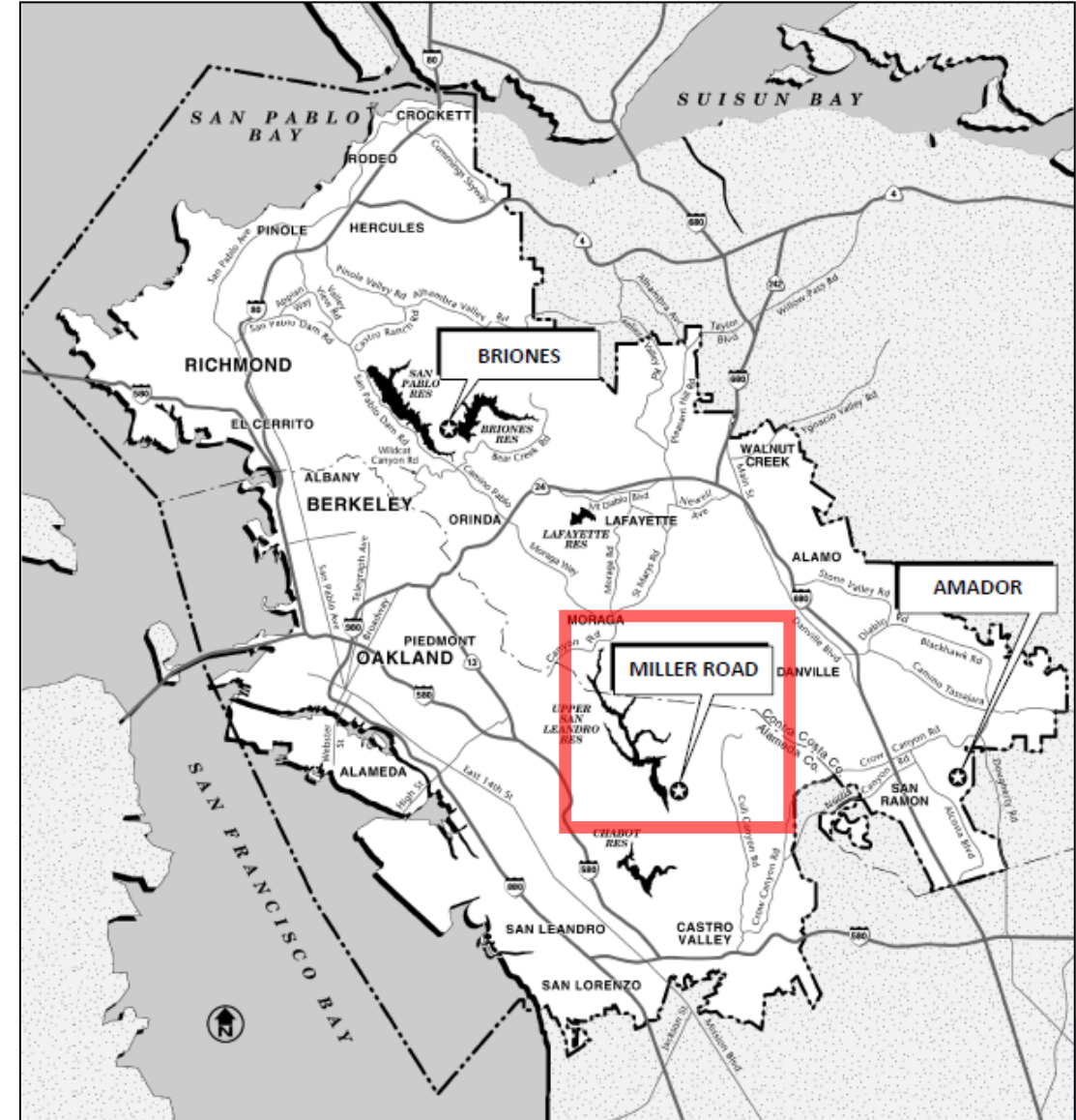
- Project Background and Purpose
- Analysis of Impacts and Mitigations
- Next Steps for Miller Road site
- Trench Soil Management Program Update and next steps



Miller Road Stockpile Site, Nearmap Imagery, July 8, 2023

District Owned Stockpile Sites

- Approximately 55,000 cubic yards (CY) of trench soils are generated annually
- Stockpile sites (capacity / volume filled)
 - Briones (563,000 CY / 164,000 CY)
 - Primary stockpile site
 - Miller Road (123,100 CY / 116,000 CY)
 - Amador (65,000 CY / 58,000 CY)
 - Limited use



District Stockpile Locations

Historical Trench Soil Management Practices



1.

Pipeline replacement



2.

Hauling to temporary stockpile site



3.

Loading truck with engineered backfill for return trip to job site



4.

After temporary storage, re-loading at stockpile sites



5.

Second hauling to permanent disposal



6.

Beneficial reuse or landfill disposal

- Process used since 1960s
- Soil typically hauled twice when District stockpile sites are used
- For permanent disposal, soil is off-hauled periodically from District stockpile sites
- District is expanding use of direct haul to beneficial end use sites which avoids use of temporary stockpiles

Direct Haul

- Dumbarton Quarry (Fremont) for soil from pipeline replacements
 - Utilized on portions of 10 different pipeline replacement projects
 - Direct hauled 9,300 of 60,000 cubic yards generated in 2024
- Potential beneficial reuse / end use sites in development
 - Pleasanton Lakes, Pleasanton
 - Supply Bank at Oakport, Oakland
 - Eden Landing, Hayward
 - North Bay Logistics, Livermore
 - Cullinan Ranch, Vallejo



Dumbarton Quarry, Nearmap Imagery, June 16, 2024

Redwood Road Landslide Repair

- Road closed after January 2023 landslide
- Worked with Alameda County to utilize soil from Miller Road stockpile (<2 miles away)
- Phase 1 completed
Sept 27–Oct 18, 2024
- Transferred approx. 2,000 CY
- Additional soil may be used for two smaller landslides along Redwood Road



Before and After Redwood Road Landslide Repair (Nearmap Imagery)



Loading Alameda County Landslide Repair Contractor Trucks

Miller Road Stockpile Site



Periodic Off-haul Events

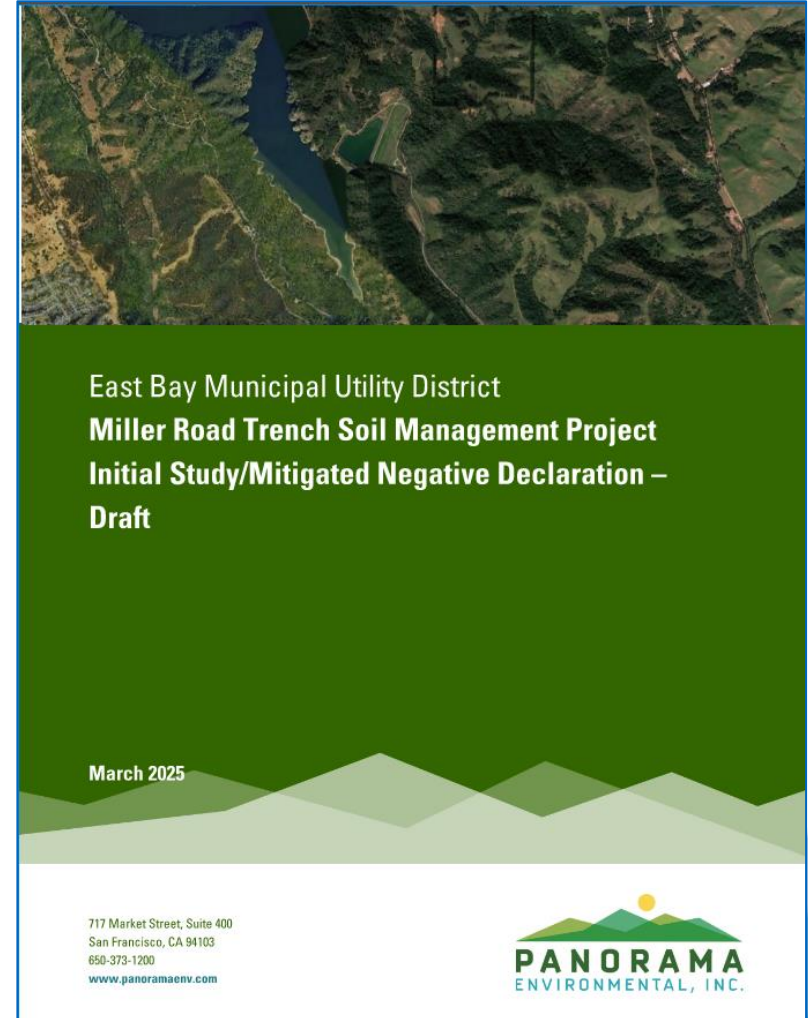
Previous Trench Soil Off-haul Events from Miller Road

Year	Approx. Number of Truck Roundtrips
2005	6,500
2012	800
2019	9,100

- Lessons learned from 2019 off-haul event
- Zoned Agricultural: Conditional Use Permit (CUP) required for continued operation
- California Environmental Quality Act (CEQA) review prior to application for CUP
 - Board approved \$250,000 for CEQA consultant in March 2024

Initial Study/Mitigated Negative Declaration

- Mitigated Negative Declaration (MND) requires any potentially significant impacts to be mitigated to “less than significant”
- Analysis assumed:
 - Continued operation of the site
 - Increased use as pipeline replacement increases
 - Up to 30 miles per year in 2030 (now 25)
 - Various scenarios for off-haul intensity and frequency
- Actual usage in the future expected to decrease as direct haul is expanded



Miller Road Stockpile Site Usage

Component	Historical (2019 event)	Future with No Direct Haul	Future with Expected Level of Direct Haul
Day-to-day Operations	6 trucks/day 1,400 trucks/yr	10 trucks/day 2,200 trucks/yr	3 trucks/day 700 trucks/yr
Off-haul Events	Up to 300 trucks/day, 2 months, 6:30 am to 4:00 pm 9,100 trucks during 2019 off-haul	70 to 200 trucks/day for 1-3 months, 9:00 am to 3:00 pm 4,200 trucks/yr every 5 years	70 to 200 trucks/day for 2 to 4 weeks, 9:00 am to 3:00 pm 1,500 trucks/yr every 5 years

Environmental Factors	Less than Significant	Less than Significant with Mitigation	Significant and Unavoidable with Mitigation
Aesthetics	√		
Agriculture & Forestry	√		
Air Quality	√		
Biological	√		
Cultural	√		
Energy	√		
Geology & Soils	√		
Greenhouse Gas Emissions	√		
Hazards & Hazardous Materials	√		
Hydrology & Water Quality	√		
Land Use & Planning	√		
Noise	√		
Transportation		√	
Tribal Cultural	√		
Utilities & Service Systems	√		
Wildfire		√	

Mitigation Measures – Transportation Safety

- Give written traffic safety requirements to truck drivers
 - Road safety, defensive driving, navigating through school zones, and blind spot monitoring
- Prohibit truck parking or queuing on Redwood Road. Use illuminated signs or temporary stop signs for wide turns at Redwood/Miller Road.
- Restrict trucks to designated routes
- Install radar speed feedback signs and warning signs for truck traffic alerts
- Conduct frequent truck inspections for safety
- Inform the public about truck traffic via media and community meetings
- Conduct pre- and post-event roadway surveys to assess and repair pavement damage
- Coordinate with emergency services and sensitive land uses, such as police and fire stations, schools, and medical facilities

Next Steps

Committee Support Recommendation to Board	March 11, 2025
Release Draft MND for public comment	March 20, 2025
Comment Period with public outreach	March 20 - April 21, 2025
○ Castro Valley Municipal Advisory Council (Land Use)	March 24, 2025
○ General Public Meeting (virtual)	April 3, 2025
Prepare Final MND and response to comments	Summer 2025
Board to Consider Adoption of Final MND	August 12, 2025
Application for full Conditional Use Permit	September 2025



Questions?





Updated Plans for Alcohol and Personal Watercraft Prohibitions at Camanche Reservoir

Planning Committee

March 11, 2025

Chuck Beckman, Manager of Watershed & Recreation

Agenda

- Overview of EBMUD Watershed and Recreation Rules and Regulations
- Status of Proposed Changes
- Update on Closure to Recreational Boating
- Next steps

Watershed and Recreation Rules and Regulations Overview

- Watershed and Recreation Rules and Regulations govern activities for East Bay and Mokelumne Watersheds and recreation areas
- Last update was completed in 2018
- Proposed revisions were presented to the Camanche Regional Park Advisory Board November 21, 2024
- Planning committee accepted staff recommendation of the proposed changes November 12, 2024

Status of Proposed Changes

- Addition of definitions for electric bicycles and electric scooters
- Prohibition of motorized personal watercraft (PWC) like jet skis, wave runners, and hydrofoils
- Editorial changes for clarity and consistency
- During public hearing on December 10, 2024, Board requested revisions and additional time to discuss proposed changes

Status of Proposed Changes

- Invasive golden mussels were discovered in the Stockton Delta in late October 2024
- To prevent the spread of golden mussels to District reservoirs, boat ramps were closed to the public on November 25, 2024
- Changes to watershed rules and regulations have been suspended to focus on developing a plan to re-open to boating
- Seasonal alcohol prohibition does not require amending the rules and regulations

Seasonal Alcohol Prohibition

- The seasonal alcohol prohibition at Camanche Recreation Area will apply to the recreation area only from May 1 to September 30
- Residents of the Camanche mobilehome parks will not be prohibited from possessing alcohol within the mobilehome park boundary
- The Camanche alcohol prohibition was presented to the Camanche Regional Park Advisory Board November 21, 2024, and to the EBMUD Planning Committee on November 12, 2024.
- Camanche visitors have been notified of the prohibition on District and concessionaire's website and social media.
- Notifications to the public will increase in April with renewed social media messaging and signs in the recreation area.

Update on Closure to Recreational Boating

- Staff is gathering information toward developing a plan to re-open District reservoirs to boats.
- The plan would likely require the following of all boats launching at District facilities:
 - Vessel history
 - Visual inspection
 - 30-day quarantine
- Staff are still collecting information to determine if decontamination methods used to control quagga and zebra mussels are effective for golden mussels.
- Any boat launch reopening plan would likely change boating and PWC usage. Therefore, staff recommends a pause in the PWC prohibition.

Next Steps

- Implement seasonal alcohol prohibition at Camanche Recreation Area beginning May 1, 2025.
- Continue to develop and refine plan to re-open District reservoirs to boating
- Revisit the proposed revisions to the Watershed and Recreation Rules and Regulations in 2026.



Questions?