

BOARD OF DIRECTORS EAST BAY MUNICIPAL UTILITY DISTRICT

375 - 11th Street, Oakland, CA 94607

Office of the Secretary: (510) 287-0440

AGENDA
Planning Committee
Tuesday, August 12, 2025
9:00 a.m.
Boardroom
375 11th Street
Oakland, CA 94607

*** Please see appendix for public participation instructions***

Committee Members: Directors April Chan {Chair}, Luz Gómez, and Valerie D. Lewis

ROLL CALL:

<u>PUBLIC COMMENT</u>: The Board of Directors is limited by State law to providing a brief response, asking questions for clarification, or referring a matter to staff when responding to items that are not listed on the agenda.

DETERMINATION AND DISCUSSION:

- 1. Regulatory Compliance Semi-Annual Report January 1, 2025 through June 30, 2025 (Briggs)
- 2. Dam Safety Program Annual Report

(Terentieff)

ADJOURNMENT:

Disability Notice

If you require a disability-related modification or accommodation to participate in an EBMUD public meeting please call the Office of the Secretary (510) 287-0404. We will make reasonable arrangements to ensure accessibility. Some special equipment arrangements may require 48 hours advance notice.

Document Availability

Materials related to an item on this agenda that have been submitted to the EBMUD Board of Directors within 72 hours prior to this meeting are available for public inspection in EBMUD's Office of the Secretary at 375 11th Street, Oakland, California, during normal business hours, and can be viewed on our website at www.ebmud.com.

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BEBMUD

APPENDIX

Planning Committee Meeting

EBMUD Board committee meetings will be conducted in person and via Zoom. These meetings are recorded and live-streamed.

Online*

https://ebmud.zoom.us/j/94576194030?pwd=dWZlc3hNU3JNUVBQYmNKWjJSNVZQdz09

Webinar ID: 945 7619 4030

Passcode: 925293

By Phone

Telephone: 1 669 900 6833 Webinar ID: 945 7619 4030

Passcode: 925293

International numbers available: https://ebmud.zoom.us/u/kdmpbwwlg2

*To familiarize yourself with Zoom, please visit https://support.zoom.us/hc/en-us/articles/201362193-Joining-a-Meeting

Providing public comment - The EBMUD Board of Directors is limited by State law to providing a brief response, asking questions for clarification, or referring a matter to staff when responding to items that are not listed on the agenda.

- Each speaker is allotted 3 minutes to speak; the Committee Chair has the discretion to amend this time based on the number of speakers
- The Secretary will track time and inform each speaker when the allotted time has concluded
- Comments on **non-agenda items** will be heard at the beginning of the meeting
- Comments on **agenda items** will be heard when the item is up for consideration
- The Secretary will call each speaker in the order received

In person

• Fill out and submit a blue speaker card which is available in the meeting room

Via Zoom

- Use the raise hand feature in Zoom to indicate you wish to make a public comment https://support.zoom.us/hc/en-us/articles/205566129-Raising-your-hand-in-a-webinar
 - o If you participate by phone, press *9 to raise your hand
- When prompted by the Secretary, please state your name, affiliation if applicable, and topic

Submitting written comments or materials

- Email written comments or other materials for the Board of Directors to SecOffice@ebmud.com
- Please indicate the meeting date and agenda item number or non-agenda item topic in the subject of the email. Contact information is optional.
- Please email by 4 p.m. the day prior to the scheduled regular meeting; written comments and other materials submitted to the Board of Directors will be filed in the record.

To observe the Planning Committee Meeting,

please visit: https://www.ebmud.com/about-us/board-directors/board-meetings/

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: August 7, 2025

MEMO TO: Board of Directors

THROUGH: Clifford C. Chan, General Manager

FROM: David A. Briggs, Director of Operations and Maintenance

SUBJECT: Regulatory Compliance Semi-Annual Report – January 1, 2025 through June 30,

2025

SUMMARY

The attached Regulatory Compliance Semi-Annual Report provides the status of the District's efforts to meet the objectives of and to comply with environmental, health, and safety regulations in accordance with District Policy 7.05 – Sustainability and Resilience, Policy 7.09 – Workplace Safety and Health, and Policy 7.13 – Security. This report will be presented at the August 12, 2025 Planning Committee meeting.

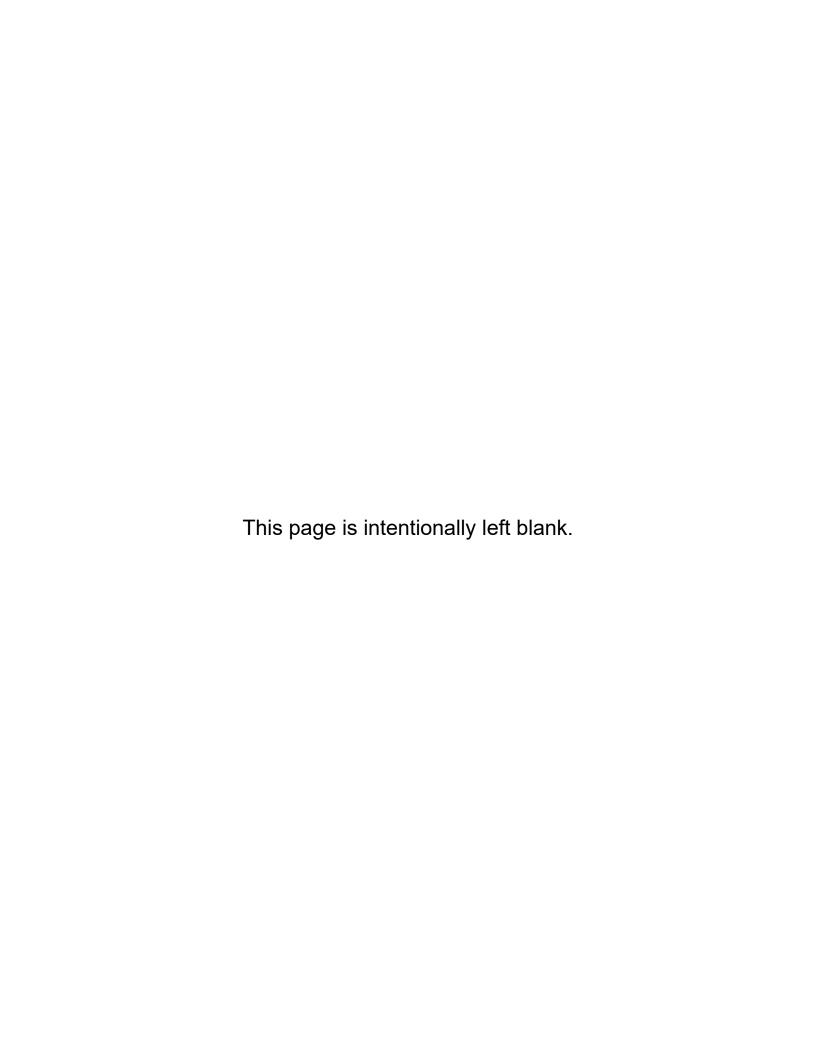
DISCUSSION

Many proactive compliance activities were completed during this reporting period, including regulatory closure of an underground storage tank at Sobrante Water Treatment Plant, Green Business certification at the Adeline Maintenance Center, and completion of an ergonomic assessment of the Meter Reader/Mechanics job classification. Other notable safety, environmental or health-related compliance issues are outlined in the attachment.

CCC:DAB:sd

Attachment: Regulatory Compliance Semi-Annual Report – January 1, 2025 through June 30, 2025

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REGULATORY COMPLIANCE SEMI-ANNUAL REPORT January 1, 2025 through June 30, 2025

This report provides the status of the District's efforts to meet the objectives of and comply with environmental, health, and safety regulations in accordance with District Policy 7.05 – Sustainability and Resilience, Policy 7.09 – Workplace Safety and Health, and Policy 7.13 – Security during the reporting period.

ENVIRONMENTAL COMPLIANCE

Main Wastewater Treatment Plant (MWWTP) Compliance Inspections: On March 18, 2025, the San Francisco Regional Water Quality Control Board (SFRWQCB) inspected the MWWTP for National Pollutant Discharge Elimination System (NPDES) permit compliance. The inspection focused on records, data reporting, and the dechlorination process. No violations or corrective actions were found.

On April 16, 2025, the Bay Area Air Quality Management District (BAAQMD) inspected the MWWTP for compliance with the District's Major Facility Review (Title V) air permit, including a tour of permitted sources and an extensive review of the records. No violations or corrective actions were found.

On May 13, 2025, a third-party, Cameron-Cole, audited the greenhouse gas (GHG) inventory for the MWWTP submitted to the California Air Resources Board (CARB). This GHG inventory is a regulatory requirement and separate from the District's GHG inventory, which includes more emission sources and facilities. It is a regulatory requirement to have an independent audit completed. The auditor verified the District's inventory that was submitted to CARB.

Sobrante Water Treatment Plant (WTP) Underground Storage Tank (UST) Closure and Above-Ground Tank Installation: On June 10, 2025, the UST at the Sobrante WTP was abandoned in place under permit authorization from Contra Costa County. The UST was a 1,000-gallon, double-walled fiberglass tank installed in 1988 that was used to store diesel fuel for the WTP's emergency generator. Soil sampling conducted during the closure process confirmed no contamination in either the soil or groundwater.

The emergency generator is now powered by a newly installed above-ground storage tank equipped with a state-of-the-art monitoring system. This system is integrated into the WTP's control system, allowing for centralized oversight and enhanced operational reliability.

<u>MWWTP NPDES Permit Renewal</u>: Staff completed the permit application to renew the NPDES permit to discharge treated wastewater to the San Francisco Bay and continues to work with the SFRWQCB during the renewal process.

<u>Trench Soils Program</u>: Staff processed 137 Trench Spoils Investigation Requests (TSIRs) in support of new water service applications and Pipeline Rebuild capital improvement projects. This process ensures that all District forces can work in a safe and compliant manner when working in contaminated areas. Staff also identified over 12,000 tons of contaminated trench soil

and slurry for direct disposal at Keller Canyon Landfill, ensuring waste material is handled properly by the contractor, and avoiding storage by the District.

Staff supported the relocation of the District's rock and sand stockpile sites near Briones Reservoir in support of Pipeline Rebuild. The new site is located near Briones Dam, avoids an environmentally sensitive area near San Pablo Creek, and provides better stormwater control.

Green Business Certification: During this reporting period, the Adeline Maintenance Center Administration Building was certified as a green business, which brings the total number of certified District facilities to twelve. The District is a proud partner of the California Green Business Program, a network of local programs operated by counties and cities throughout California. Green Businesses exceed all environmental regulations, and implement specific practices to reduce waste, save water, conserve energy, and protect human health.

Environmental Compliance Training Program: In January 2025, an all-day sanitary sewer system spill response training was held for Pardee staff. The event was in response to the State Water Resources Control Board's updated General Order for sanitary sewer systems, including more stringent spill response requirements. The field training included a hands-on spill response scenario using a simulated overflow through a manhole cover. The classroom element focused on spill reporting requirements and how to estimate spill volumes.

In March 2025, the District held its annual three-day training for staff who work on the District's Integrated Pest Management (IPM) program. The training included sessions on general IPM topics and site-specific topics for East Bay and upcountry properties. Topics included pest control methods, regulations, and environmental protection. A total of 76 people attended the training including District staff and external agencies such as the California Department of Pesticide Regulations (DPR) and the University of California, Davis. The training provided continuing education units for those who hold a Qualified Applicator Certificate.

Several training sessions were held on chlorinated water discharges and permit compliance for field crews, continuous operations staff, and employees in the Pipeline Training Academy. The course provided an overview of how treated water may impact our local waterways, appropriate field response to minimize these impacts, and reporting requirements.

Non-Compliance Issues

Oakport Wet Weather Facility (WWF): On February 4, 2025, a total coliform sample taken at the Oakport WWF exceeded the daily maximum limit. The cause was found to be inadequate disinfection due to a restriction in the flow of sodium hypochlorite through a check valve. The issue was initially mitigated by changing the sodium hypochlorite source tank. Staff inspected, cleaned, and tested the check valve for proper functioning. Subsequent total coliform samples met the limits. A stipulated penalty of \$3,000 is expected for this violation.

Two additional unauthorized discharges of treated wastewater occurred from the Oakport WWF. The first was on April 15, 2025 with the release of 21,350 gallons of treated wastewater. The second was on June 12, 2025 with the release of 2,000 gallons of treated wastewater. These

discharges were unauthorized because Oakport WWF is only permitted to discharge during wet weather. Both discharges occurred during monthly training exercises. In both releases, the effluent gates that usually prevent treated wastewater from being discharged during tests did not fully close. A representative from the gate valve manufacturer was consulted and adjustments were made to prevent further discharges. Neither of these releases impacted surface water because the discharged water was treated, and the volumes were relatively small compared to the wet weather discharge.

<u>Fueling Facilities</u>: On January 27, 2025, San Joaquin Valley Air Pollution Control District issued a Notice of Violation and Proposed Settlement Letter, including a \$450 civil penalty, for failure to conduct the required vapor recovery testing within 60 days from start-up of the newly installed fuel tank dispensing system at the Mokelumne River Fish Hatchery.

WORKPLACE HEALTH AND SAFETY

<u>Lost-Time Injury Rate (LTIR)</u>: As of June 30, 2025, the District's LTIR was 1.62, which is lower than the 2.25 rate recorded on June 30, 2024. The LTIR reflects the number of work-related injuries or illnesses resulting in days away from work per 100 employees.

Required Safety Practices (RSPs): Staff maintain 52 RSPs providing regulatory guidance for operational District-wide activities. Four RSPs were updated during this reporting period: RSP 300 – Incident Reporting, RSP 1800 – Electrical Safety, RSP 2200 – Lead, and RSP 2400 – Site Security & Emergency Action Plan (SSEAP). The revisions to RSP 2200 focused on the new Cal/OSHA Lead Standard, which required changes to the District's approach to work involving lead-containing materials.

<u>Local and Joint Safety Committees</u>: A total of 49 Local Safety Committee meetings were held. Additionally, the Joint Safety Committee, comprised of management and Local 444 representatives, met quarterly.

<u>Training</u>: Staff delivered more than 15,600 hours of training, over 550 sessions, exceeding the internal goal of 12,000 hours. Notably, the Operations and Maintenance Department (OMD) achieved over 95 percent completion in key areas, including the new Workplace Violence Prevention training, the updated Lead Standard, and Asbestos Awareness.

<u>Jobsite Inspections</u>: A total of 57 job site inspections were conducted, including pipeline installations, main breaks, hazardous materials handling, equipment maintenance, and construction support. Of these, 53 were satisfactory, two required improvements, and two were deemed unsatisfactory. The inspections supported operational safety and environmental compliance across multiple field crews and projects throughout the year.

<u>Ergonomic Program</u>: To reduce musculoskeletal injuries, staff conducted 66 ergonomic assessments. These assessments included office workstation evaluations, vehicle-related evaluations, and field-based tasks. The team also completed a field-specific ergonomic assessment for Meter Reader/Mechanics, focusing on job tasks such as manual handling, repetitive motion, and awkward postures. Findings from these assessments were used to

recommend ergonomic equipment, task modifications, and best practices to minimize injury risk and improve employee comfort.

<u>Damage Information Reporting Tool (DIRT) Investigations</u>: Staff conducted 23 DIRT investigations after underground utilities were damaged during construction or maintenance. Fifteen involved mismarked utilities, four involved correctly marked utilities, and four were due to other factors. The findings from these investigations provided valuable insights, helping field crews during excavations to improve safe work practices around both marked and unmarked underground utilities.

<u>Annual No Lost Time Injury Celebrations</u>: Six OMD sections were recognized for achieving one year with no lost time injuries. This achievement reflects each team's strong commitment to safe work practices and incident prevention.

Cal/OSHA Inspections

Notice of Complaint at Orinda WTP: On March 10, 2025, the District received a Notice of Complaint regarding temporary stairs at the Orinda WTP, citing inadequate handrails and insufficient illumination. The stairs were within the active construction area, managed by a contractor. Under Cal/OSHA's multi-employer worksite rules, the contractor is solely responsible for job-site safety and regulatory compliance within the construction site. Following receipt of the complaint, the District coordinated with the contractor to investigate and address the concerns. A response was submitted to Cal/OSHA on March 20, 2025.

<u>Inspection at Lafayette Aqueduct</u>: On April 1, 2025, Cal/OSHA issued a general citation and notification of penalty following an inspection of the Lafayette Aqueduct near the Lafayette Water Treatment Plant on October 17, 2024. The citations were for failure to ensure employees were not exposed to asbestos and failure to adequately implement confined space procedures. The District has appealed these citations and a hearing is scheduled for September 10, 2025.

Notice of Complaint at Oakland Worksite (Jackson Street and 5th Street): On May 16, 2025, the District received a Notice of Complaint from Cal/OSHA regarding traffic control and worker safety at the Oakland-Alameda Access Project. Upon review, the District established that District crews were operating under an approved and appropriate temporary traffic control plan approved by Caltrans through the City of Oakland. Both Caltrans and the City has traffic control jurisdiction based on the right-of-way. District staff reviewed the complaint, confirmed protocols were followed to ensure both worker and public safety, and responded to Cal/OSHA on May 21, 2025.

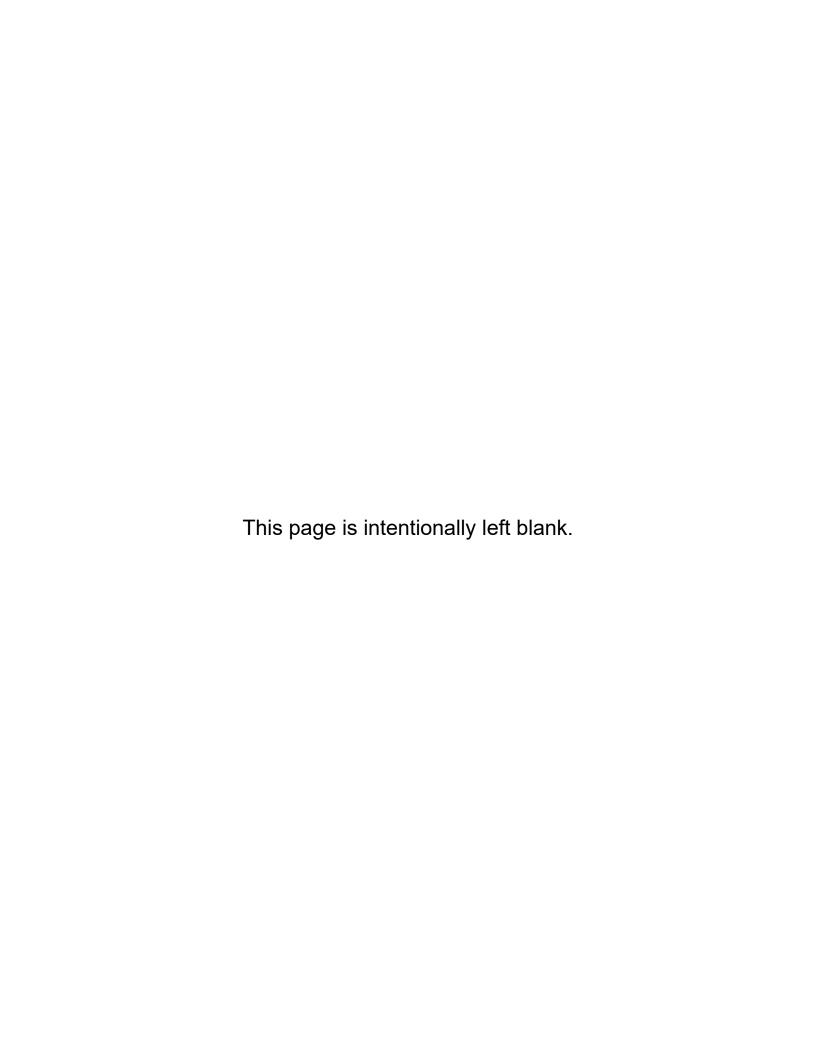
Inspection at Upper San Leandro WTP - Electrical Subcontractor: On June 18, 2025, a Cal/OSHA inspector visited the Upper San Leandro Chlorine Contact Basin Project after receiving a serious injury report from the contractor's electrical sub-contractor, Helix. A Helix employee dislocated five toes after suffering a fall on June 10, 2025. A document request was also issued to the District following the inspection. The District responded to Cal/OSHA on June 25, 2025.

SECURITY AND EMERGENCY PREPAREDNESS

<u>Workplace Violence Investigations</u>: Staff conducted and completed 10 workplace violence investigations during this reporting period. The investigations involved over 40 interviews, hundreds of hours of investigative time, and substantial security camera footage review.

The security team also assists with investigations into theft involving District resources. In a significant case from May 2025, the team recovered a stolen excavator valued at approximately \$150,000. Suspects stole the excavator using a semi-truck with a flatbed trailer. The excavator was recovered through collaboration with the Oakland Police Department, the California Highway Patrol, and the Alameda County Auto Theft Task Force.

Emergency Preparedness: The annual Emergency Operations Team (EOT) exercise was held in March 2025, incorporating a field exercise and EOT activation. The exercise consisted of the North Area Service Center staff installing a temporary bypass hose across an earthquake fault and was designed to test the District's response after a major seismic event. The installation of temporary bypass hoses is a critical near-term action necessary to restore function to the water distribution system following a major earthquake.



EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: August 7, 2025

MEMO TO: Board of Directors

THROUGH: Clifford C. Chan, General Manager

FROM: Serge V. Terentieff, Director of Engineering and Construction

SUBJECT: Dam Safety Program Annual Report

SUMMARY

This report is provided in accordance with Policy 9.07 – Dam Safety Program, whereby the District's Chief Dam Safety Engineer (CDSE) provides an annual update on dam safety issues and actions from the previous year related to safety, upcoming activities, and an assessment of the adequacy of the budget to cover dam safety needs. The attached report covers the period from July 1, 2024 to June 30, 2025. This item will be presented at the August 12, 2025 Planning Committee meeting.

DISCUSSION

The Dam Safety Program is overseen by the District's CDSE, Serge Terentieff, in collaboration with the District's Dam Safety Steering Committee (DSSC), to ensure dam safety, structural integrity, and operational security for the protection of life, property and the environment. Staff in the Engineering and Construction, Operations and Maintenance, and Water and Natural Resources departments are tasked with carrying out a wide range of duties to ensure the safety of the District's dams, following the District's Dam Safety Program Guide. Staff also recommends and implements dam safety policy updates and capital improvements.

The District's Dam Safety Program covers 23 dams. The California Division of Safety of Dams (DSOD) provides regulatory oversight of 18 dams. The Federal Energy Regulatory Commission (FERC) has joint jurisdiction over two dams, Pardee and Camanche, as they generate hydroelectric power. Five District dams are not regulated by DSOD due to their small size. The District's program meets or exceeds the requirements of DSOD and FERC, as well as the damrelated emergency preparedness requirements of California's Office of Emergency Services (CalOES). Based on this past year's dam-safety related activities and inspections, the District's dams are considered safe for continued operation.

Dam Safety Program Annual Report Planning Committee August 7, 2025 Page 2

NEXT STEPS

Progress will continue on all dam-safety-related capital improvements and the DSSC will continue to meet quarterly to ensure continued safe operations of all District dams. Dam inspections will continue monthly, annual inspections will be conducted with DSOD and FERC, and Emergency Action Planning and Response activities will be scheduled. Updates will be reported in the next annual report.

CCC:SVT/EZB

Attachment: Dam Safety Program Annual Report – July 1, 2024 to June 30, 2025

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DAM SAFETY PROGRAM ANNUAL REPORT July 1, 2024 to June 30, 2025

HIGHLIGHTS

The District's dams are considered safe for continued operation based on the Chief Dam Safety Engineer's (CDSE) knowledge and review of dam-safety-related reports and activities including regular inspections of all facilities and specific engineering studies that were completed by trained engineers, technicians, and inspectors throughout the year, which has been confirmed by the California Division of Safety of Dams (DSOD) and additionally by the Federal Energy Regulatory Commission (FERC) for Pardee and Camanche. Highlights include:

- The design of the safety upgrade to Lafayette Reservoir Tower was finalized with the
 award of a construction contract scheduled for fall 2025. The District expects to receive
 final project approval from DSOD in August 2025. Staff continued its coordination and
 outreach with the City of Lafayette and will update the community on the status of the
 project.
- DSOD accepted the upgrade to Briones Tower in October 2024.
- The California Office of Emergency Services (CalOES) approved the Emergency Action Plans (EAPs) for the remaining four DSOD-regulated open-cut reservoirs. The District issued all DSOD-regulated EAPs to plan holders.
- CalOES approved the EAP for Pardee and Camanche.
- The District performed inspections, concrete repairs, and non-destructive testing at San Pablo and Briones spillways.
- The District continued planning instrumentation upgrades, data acquisition systems, and data communication systems at Pardee, Camanche, Briones, and Lafayette reservoirs.
- The District conducted the annual emergency preparedness drills and seminars for Pardee and Camanche Dams as required by the FERC EAP program with internal and external stakeholders, including emergency response personnel, on October 3, 2024 and November 6, 2024, respectively.

EMERGENCY RESPONSE AND PREPAREDNESS

District Policy 7.03 – Emergency Preparedness/Business Continuity requires an active Emergency Preparedness Program that includes an Emergency Operations Plan (EOP) to manage the District's response during an emergency and protect people, property, and the environment. Dam-specific EAPs are hazard-specific response plan annexes of the EOP and contain more detailed information to support staff response. The dam-specific EAPs are overseen by the CalOES and DSOD. FERC also oversees the EAP for Pardee and Camanche. The District regularly updates the EPAs and conducts emergency preparedness drills.

Dam Safety Program Annual Report July 1, 2024 to June 30, 2025 Page 2 of 9

The following emergency response and preparedness activities took place during the current reporting period:

- In October 2024, the Earthquake Response Annex to the EOP was finalized. This is a Hazard Specific Annex to the EOP and includes information on the District's response and recovery from potential damage to its facilities, including dam safety emergencies. The Annex is renewed on a five-year cycle.
- In October 2024, the District conducted its Annual Notification Drill for the Pardee and Camanche EAP via video conference for internal and external EAP holders.
- In November 2024, CalOES approved EAPs for the Dunsmuir, Central, Moraga, and Danville reservoirs. EAPs for all DSOD-jurisdictional local reservoirs are now approved and have been issued internally as updates to dam-specific response annexes under the District's EOP. They have also been issued to external plan holders including: DSOD, the DWR Flood Operations Center, CalTrans, CHP, National Weather Service, CalOES and emergency management agencies for each specific dam, including the appropriate County Office of Emergency Services, Sherrif's Office, and police department.
- In November 2024, the District co-hosted its annual seminar for the Pardee and Camanche EAP with Jackson Valley Irrigation District, Calaveras Public Utility District, and Pacific Gas & Electric Company (PG&E). The seminar included an overview of each agency's dam facilities, highlights of the updated EAP content, guest speaker presentations on emergency preparedness, and group discussions on emergency processes.
- In December 2024, the District updated the Pardee and Camanche EAP. The revisions included updates to the notification chart, incorporation of CalOES comments, and expanded narratives to clarify current notification protocols. The revised EAP was distributed to all stakeholders by December 31 2024. In February 2025, CalOES approved the Pardee and Camanche EAP.
- In December 2024 and May 2025, the District provided edits to the City of Piedmont Local Hazard Mitigation Plan to update the status of District dams. The City of Piedmont is not within any District dam breach inundation area because Piedmont Reservoir was removed from service in 2003 due to seismic safety concerns about the dam.
- In January 2025, the District submitted the annual Status Report to FERC summarizing the outcomes and lessons learned from the 2024 Pardee and Camanche EAP drill and seminar. The District submitted revisions to the Status Report in April 2025 to address FERC's comments.
- In May 2025, the District reviewed the City of Oakland's Local Hazard Mitigation Plan to update the status of District dams.

DAM SAFETY STUDIES AND IMPROVEMENTS

The following are key highlights from the District's current and upcoming dam safety capital projects and studies.

Lower Mokelumne River Dam Breach Inundation Maps. As reported in the August 2021 Dam Safety Program Annual Report, DSOD accepted the District's fair-weather dam breach inundation maps for Camanche and Pardee reservoirs in May 2021. These maps were updated to meet FERC guidelines and transmitted to FERC in June 2024 and DSOD in July 2024. FERC's review is pending. DSOD requested that the District re-analyze Camanche Dike 3 with refined breach elevations. The District will submit the edits to DSOD and FERC in September 2025.

Briones Tower Modifications. The modifications to prevent damage to the tower in the event of an earthquake were completed in 2024 as described in the August 8, 2024 Dam Safety Program Annual Report. The District submitted the as-built drawings to DSOD in October 2024, and DSOD approved the completion of the project.

Lafayette Tower Safety Upgrade. As reported in previous years, the existing tower presents dam safety concerns, which are not acceptable to the District and DSOD. These include:

- Earthquake damage to the tower could obstruct the outlet or prevent the District's ability to open the valves, which would prevent lowering of the reservoir following an earthquake.
- Damage to the tower below the water surface level that could drain the reservoir through the spillway, causing an uncontrolled high-flow release into Lafayette Creek.
- Damage to the spillway conduit that could allow water to flow into the embankment, washing out soil, leading to a potential dam failure.

Over the course of three decades, the District performed extensive analyses of the Lafayette Tower and evaluated several retrofit alternatives, including some that would maintain the original height of the tower. Those tall tower alternatives were not able to meet the seismic loads. The seismic deficiencies were identified in a comprehensive structural evaluation of the tower and conduit system using state-of-the-practice finite element numerical modeling and dynamic response-spectrum analysis. Based on these results, and after conducting an alternatives analysis, the District and DSOD agreed that the safest and most reliable way to address the seismic risk is to shorten the tower by 40 feet. This result is consistent with the DSOD's independent analysis of the tower

Since 2015, EBMUD has engaged with the Lafayette City Council, Lafayette City staff, and members of the community to discuss the project. The current design incorporates the community's input on the aesthetics of the shortened tower. The tower will feature a lightweight metal operating house, which is reminiscent of the current top of the tower. EBMUD will continue its public engagement and has submitted the final project design and construction documents to DSOD for their approval before bidding in 2025.

Dam Safety Program Annual Report July 1, 2024 to June 30, 2025 Page 4 of 9

The project is scheduled for Board consideration in October 2025. The total construction cost, including engineering services during construction and construction management services, is estimated to be approximately \$14 million. Construction planning is underway, and will be followed by site preparation in fall 2025, tower demolition/reconstruction in summer 2026, and project completion by fall 2027. An informational public meeting is planned once the project is awarded and a contractor is brought on board.

Upcountry Probable Maximum Flood Studies. The District and PG&E entered a project partnership agreement in January 2025 to commission a site-specific probable maximum precipitation (SS-PMP) study for the Mokelumne River watershed and perform a probable maximum flood (PMF) analysis based on the SS-PMP. Staff are coordinating with PG&E in preparing a work plan for the scope and timeline of the probability-based PMP analysis, which will be reviewed and approved by FERC and DSOD. Upon approval, the District and PG&E will issue a joint request for proposals.

USL and Chabot Watershed Flood Studies and Spillway Evaluations. The District began developing a comprehensive hydrologic model of the San Leandro Creek Watershed. As reported last year, the District will use this model to perform an SS-PMP study, which will then be used to compute the PMF. The District will also perform a climate change impact study as a component of the probabilistic flood hazard analysis. The PMF and varying probabilistic flood loading levels will be used to assess the hydraulic adequacy of the spillways at the USL and Chabot reservoirs.

Camanche and Pardee Stability Study. The District made progress in completing the seismic and flood loading studies for Pardee and Camanche dams and spillways in compliance with the requirements that were developed as part of the FERC Eighth and Ninth FERC Part 12D reports. The facilities at Camanche and Pardee were evaluated for static, flood, and seismic loading conditions, and were documented in three reports: (1) Camanche Dam and Spillway, (2) Pardee Dam, (3) Pardee Spillway.

The study for Camanche, which was submitted to FERC and DSOD in July 2025, found that the earthquake loading may damage the valve house floor and therefore recommended retrofitting the floor and adding means to actuate the valves remotely from the Pardee Area Control Center. The report also found that the bridge at the Camanche spillway, although unlikely to collapse in a major earthquake, would not be suitable for vehicles or pedestrians to cross and should be retrofitted to meet modern seismic design standards. All other structures at Camanche were considered to have adequate strength and stability for the static, flood, and seismic loading conditions.

The reports for the Pardee Dam and Spillway were submitted to FERC and DSOD in 2025, and concluded that the dam and spillway are stable and safe from overstressing in all loading conditions. These reports, including the findings and recommendations, will be reviewed by FERC and DSOD. The District will finalize the reports to address any regulatory comments, plan project scopes and budgets for the recommendations for the Camanche valve house and spillway bridge, and include these projects in the next CIP.

Camanche and Pardee Surveillance Improvements Program. In 2022, the District prepared a Piezometer Evaluation Report and Programmatic Improvement Plan to abandon 121 piezometers, install new multi-level piezometers at 15 locations, and update existing standpipe piezometers with modern electronic probes. As part of this Program, the District is upgrading the automatic GPS surveillance systems with modern communication and data acquisition systems and is evaluating hydrologic surveillance upgrades. This work supports the FERC Part 12D recommendations and is based on collaborative efforts with FERC and DSOD. The regulatory agencies requested that the District prepare Drilling Program Plans for Camanche and Pardee to document the drilling means and methods, geologic cross sections, field logging, quality control and quality assurance, and measures taken to ensure safe dam drilling and instrumentation installation. The Camanche Drilling Program Plan was submitted to FERC and DSOD in May 2025, and the Pardee Drilling Program Plan is scheduled to be submitted later in 2025. Upon approval, the District will implement these projects.

Terminal Dam Spillway Condition Assessments. The Dam Spillway Condition Assessment program included a comprehensive evaluation of each dam's spillway in 2019, which was reviewed and approved by DSOD. The District prepared subsequent technical memoranda to provide more detail in 2022. Various assessment and improvement efforts have continued in accordance with the multi-year work plan that was approved by DSOD. During the reporting period, the District performed detailed surveying of the spillway floor and walls at San Pablo and Briones spillways using Light Detection and Ranging (LiDAR) equipment. These results will serve as the baseline conditions against which future LiDAR surveys will be compared after extreme events, such as large earthquakes or spills, to monitor for any changes. Visual inspections, concrete soundings, and non-destructive testing (such as slab impulse response, impact-echo testing, and surface-penetrating radar) were performed along the upper portion of the Briones spillway. The District also repaired select joints, floor slabs, and walls along the San Pablo spillway using various mortar and sealant products, with the intent of further utilizing the products that demonstrate the most effective, resilient, and economical performance over time.

Dam Safety Program Guide. The District annually updates the Dam Safety Program Guide developed under the District's Owner's Dam Safety Program (ODSP), as required by FERC. The June 2025 update incorporated FERC comments. Revisions included additional details on the District's dam safety program to reflect current practices, personnel changes, updates to the non-FERC jurisdictional dam inventory, and included minor text revisions to improve readability.

Local Dam Safety Reviews. At five-year intervals, the District performs safety reviews for the local dams, each year completing three to five dams. District engineers review and document each facility and its construction, repairs, upgrades and retrofits, inundation mapping, results of the inspection of the dam in certified status, and seismic analyses. These reports ensure that the seismic and other evaluations are current, and document upcoming tasks, including repairs, studies, and the need to add projects to the capital improvement plan. For Pardee and Camanche, safety reviews are also performed on a five-year interval, following the FERC Part 12D process. During the reporting period, safety reviews were completed for Moraga, Central, Argyle No. 2, Fay Hill, and Watson reservoirs. The reports confirmed that the seismic deformations that could be expected from the Maximum Considered Earthquake (MCE) are within acceptable tolerances

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and that the dams are safe.

DAM INSPECTIONS, SURVEILLANCE, AND REPORTING

Staff performs monthly dam inspections and collects monthly dam safety surveillance instrumentation data. District engineers review the inspections and issue maintenance work orders or develop capital projects, as necessary, and evaluate the instrumentation data to ensure there are no dam performance concerns. In addition, the District conducts annual inspections with FERC and DSOD inspectors and submits annual reports.

The dates for the latest DSOD inspections, valve exercises, and reports for the last year are shown in Table 1, and the dates for the FERC inspections and reports are shown in Table 2. No major problems were identified.

UPCOMING ACTIVITIES

In addition to continuing work on the projects described above, the upcoming dam safety activities for the next fiscal year will continue rehabilitation, repairs, and upgrades following recommendations from the Eighth and Ninth FERC Part 12D reports, and routine maintenance in response to FERC and DSOD inspection report comments. Specific items are upcountry dam spillways condition assessments and upgrades, local reservoirs surveillance improvements, USL dam blowoff improvements, dam safety training, Briones Reservoir isolation valve relocation, and San Pablo Dam seismic valve improvements as described below.

Upcountry Dam Spillways Condition Assessments and Upgrades. The District is developing a Pardee Spillway Condition Assessment Program following the recommendations from the Ninth FERC Part 12D report, which noted evidence of delamination and deterioration of the concrete chute and rock erosion in the unlined channel. The District has taken proactive measures in performing spillway studies, and because the Pardee Spillway was upgraded in 2003, it is the final spillway to receive a formal condition assessment. The Pardee Spillway Condition Assessment Program will include detailed field assessments and mapping of delaminations and defects along the concrete-lined spillway; subdrain inspections and cleaning; non-destructive testing with option for concrete core holes for validation; instrumentation along the left abutment of the spillway to monitor for groundwater; and hydraulic modelling and evaluation of potential failure modes (including cavitation, abrasion, slab uplift, and overtopping of walls).

Work will begin on an innovative state-of-the-art study at the unlined channels at Camanche and Pardee spillways under Phase 2 of the District's partnership with the UC Berkeley Center for Smart Infrastructure. The study will identify rock erosion potential under a series of modeled flows that correspond to varying flood probabilities and will evaluate erosion prevention and protection measures based on the results of the modeling. The study includes (1) reviewing literature, owner practices, and research on rock spillway rock erosion, reviewing the state-of-the-art and state-of-the-practice numerical modeling of spillway rock erodibility, and comparing historical spillway flow data with historical erosion results; (2) deploying UAV-based LiDAR, optical, and infrared cameras to characterize the evolution of the unlined channel following major storms; and (3) developing predictive models for further erosion based on rock properties

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probabilistic spillway flows. The study is expected to identify the probability of future erosion based on a range of spillway flows, identify the extent of future erosion, and identify erosion prevention and protection measures.

In 2023 the District submitted the Camanche Spillway Phase 2 Condition Assessment Program Report to DSOD, which included a proposal to install flow deflectors to prevent spillway water from entering the subdrain system and provided documentation of the inspection of the underdrain system, a survey of the concrete joints in the floor, and the results from the concrete core samples that were collected from core holes through the spillway concrete into the underlying rock. In August 2024, DSOD requested that the District develop a work plan to clean obstructions from the underdrain system and concurred with the District's recommendations to install flow deflectors over the subdrain outfalls. In June 2025, the District submitted a work plan and is awaiting approval to use hydrojetting and vacuum methods to clean debris from the underdrain system, and to use a down-hole camera system to monitor the drain pipes for any potential damage. The District is also preparing a work plan to install flow deflectors at the subdrain outlets and plans to submit the work plan to FERC and DSOD in late 2025.

Underwater Inspections of Camanche Dam and Pardee Dam. The Ninth FERC Part12D report recommended that the District inspect the Camanche Outlet Works and the underwater face of Pardee Dam for concrete defects, spalls, cracks, or other signs of stress and degradation. In the fall of 2025, the District will issue a request for proposals for diving and remote-operated vehicle inspection services for the Camanche low-level outlet conduits, Camanche high-level outlet conduit, Pardee Dam underwater face, and Pardee Dam penstock and sluiceway gatewells. The District will evaluate the inspection records and assess the condition of the inspected items.

Local Reservoirs Surveillance Improvements. The District is planning rehabilitation and upgrades to surveillance and monitoring instruments at the local reservoirs, which will be designed in Fiscal Year (FY) 2026 to 2027. The identified improvements include Briones Dam piezometer upgrades (FY 2026-FY2028) and Lafayette Dam piezometer replacement (FY 2028). Beyond FY 2030, improvements include Briones left abutment drainage structure improvements (FY 2032) and Upper San Leandro survey benchmark access improvements (FY 2032).

Between FY 2026-FY 2028, the District will perform piezometer upgrades at Briones Dam. The District will abandon the existing pneumatic piezometers and replace them with new grouted-in-place vibrating wire piezometers, which are a widely used modern solution. The District is working with DSOD on approval for the overall project scope and approach, and will proceed after approval by DSOD. Piezometers at Lafayette Dam will be installed after construction is complete on the Lafayette Reservoir Tower Safety Upgrade, and include the replacement of two malfunctioning piezometers with grouted-in-place piezometers.

USL Dam Blowoff Improvements. The blowoff valve is used to lower the USL reservoir level by releasing water to San Leandro Creek. The valve is partially submerged, which has led to increased maintenance, including the need to remove and refurbish the valve in the spring and summer 2025. The District is developing plans to upgrade the USL Dam blowoff valve. The project will raise the level of the valve to improve access and reduce the need for maintenance, while still maintaining the ability to safely drain the reservoir. The work is under the jurisdiction

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of DSOD and is funded for planning and design starting in FY 2026.

Briones Reservoir Isolation Valve Relocation. The Briones Reservoir isolation valve is used to isolate the water in Briones Reservoir from the water in Briones Aqueduct. Although the valve does not present a dam safety issue, it is in a 250-foot-deep vault, which poses worker safety risks during maintenance activities. A preliminary site has been identified for relocation, which would reduce the valve depth to 30 feet or less. The design will be completed in FY 2026.

San Pablo Dam Seismic Valve Improvements. The San Pablo Dam seismic valve has controls that automatically shut the valve if the pipe unexpectedly loses pressure downstream due to an earthquake-induced break or other event. The controls for the automatic shutoff and the manual override are located in a tunnel, which is subject to flooding if the pipe breaks. Although the valve does not present a dam safety issue, in FY 2026, an upgrade will be designed to relocate the valve controls to a structure above the tunnel so the valve can be manually operated if the tunnel floods.

Dam Safety Training. Dam Safety Training will be provided in FY 2026 for new employees, with refresher training for current employees, in accordance with the training content and schedule in the District's Dam Safety Program Guide.

FISCAL IMPACT

Funds from ongoing capital and operating budgets have sufficiently supported the efforts of the Dam Safety Program during the reporting period, and upcoming work is funded as part of the FY 2026/2027 adopted capital budget. The Dam Safety Program Steering Committee reviews the budget as part of its ongoing work and will recommend adjustments as needed.

Table 1: Current DSOD Dam Inspections, Reports, and Valve Exercises

Dam Name	DSOD Inspection Date	DSOD Report Date(a)	DSOD Valve Exercise ^(b)
Almond	10/23/2024	05/23/2025	02/28/2024
Argyle #2	10/22/2024	05/23/2025	02/14/2024
Briones	10/24/2024	05/23/2025	05/15/2024
Camanche	11/12/2024	04/30/2025	09/10/24 & 09/26/24
Central	10/23/2024	05/23/2025	02/15/2024
Chabot	12/17/2024	05/23/2025	12/17/2024
Danville	10/24/2024	05/23/2025	02/29/2024
Dunsmuir	10/23/2024	05/23/2025	02/28/2024
Lafayette	02/20/2025	05/23/2025	02/20/2025
Leland	10/24/2024	05/23/2025	02/29/2024
Maloney	10/22/2024	05/23/2025	02/14/2024
Moraga	10/24/2024	05/23/2025	02/29/2024
North	10/22/2024	05/23/2025	02/14/2024
Pardee	11/12/2024	04/30/2025	11/12/2024
Piedmont	10/23/2024	05/23/2025	(c)
San Pablo	02/05/2025	05/23/2025	02/05/2025
Sobrante Clearwell	10/22/2024	05/23/2025	02/14/2024
Upper San Leandro	12/10/2024	05/23/2025	12/10/2024

Notes:

- a) The annual DSOD report for local dams is up to date with the next report planned for July 1, 2026.
- b) Valves are required to be exercised every three years. The valve exercise program is up to date.
- c) Piedmont Reservoir is out of service and is empty.

Table 2: Current FERC Dam Inspections and Reports

Dam Name	FERC Inspection Date	Report Date
Camanche (CY25)	05/05/2025 to 05/07/2025	05/23/2025
Pardee (CY25)	05/05/2025 to 05/07/2025	05/23/2025
Camanche (CY24)	09/11/2024 to 09/12/2024	03/28/2025
Pardee (CY24)	09/12/2024 to 09/13/2024	03/28/2025

Note: Two Annual FERC Dam Inspections occurred within Fiscal Year 2025 because the Calendar Year 2025 FERC Inspection was adjusted to occur in May instead of September to better meet schedule availability and safer outdoor weather conditions.

