

**MEMORANDUM**

May 21, 2025

**TO:** Reclamation District No. 756

**FROM:** Nathan Hershey, Mike Kynett

**SUBJECT:** May 2025 Engineer's Report

Described below are the engineering items to be discussed at your May 21, 2025 meeting.

**Subventions 2023-24** – The District submitted an application for participation in the Program in the amount of \$631,000. A total of \$15.5 million has been approved by the Central Valley Flood Protection Board for the Program for FY 2023-24. A final claim was submitted in the amount of \$362,485.49.

**Subventions 2024-25** – The District submitted an application for participation in the Program in the amount of \$631,000. A total of \$14 million has been approved by the Central Valley Flood Protection Board for the Program, with an additional \$2 million expected to be approved in June for FY 2024-25.

**Subventions 2025-26** – The District submitted an application for participation in the Program in the amount of \$750,000. A total of \$16 million will be requested for the Program for FY 2025-26.

**Annual Maintenance** – Attached are the current maintenance items we are tracking.

**Emergency Response Grant (Round 3)** – The District's emergency operations plan and flood contingency map has been updated and finalized. The final version has been accepted by the county and the invoice has been paid.

**Regional Flood Fight Supply Depot** – No updates this month. Our last communication with Sacramento County indicated flood fight materials would be received sometime around April.

**FEMA** – A Recovery Transition Meeting between FEMA, CalOES, and MBK was held on 2/21/25. This meeting is part of the process of handing the claim over to CalOES from FEMA. We have submitted a project completion and certification report to CalOES. The remaining closeout documentation is being compiled and will be submitted soon.

The FEMA reimbursement rate is 100% for eligible costs incurred between 12/27/22 and 2/25/23 and 75% for eligible costs incurred between 2/26/23 and 7/14/23. The total claim amount for 100% FEMA reimbursement is \$11,441.42. The total claim amount for 75% FEMA reimbursement is \$18,738.10. CalOES will reimburse 75% of the 25% not reimbursed by FEMA (\$3,513.39). The approximate total combined reimbursement amount is expected to be \$29,008. The eligible costs in the claim are PG&E bills for electricity for the pump stations.

**Special Projects** – Construction of the Directed Action project to rehabilitate the north levee (BO-19-1-SP) is complete. We are working with DWR and CDFW on satisfying mitigation requirements. The funding agreement has been extended to December 31, 2027.

The design team is working on the final phase of the BO-17-1-SP project, which includes setting the levee back in the project area (Stations 500-550), creating a habitat bench, and relocating the pump station. Our goal is to submit drawings for permits in 2025 and be ready for construction in 2026. Our recent activities include setting up reoccurring project team meetings, preparing preliminary plans for the levee setback and habitat bench, engaging with our subconsultants, and meeting with the District regarding preferences and features of the new pump station.

DWR has provided a funding agreement in the amount of \$900,000 for planning, permitting and design of a multi-benefit project from Stations 415-500 with a State cost share of 90%. The agreement (BO-24-1-SP) has been fully executed, and advance funding has been received. We have acquired topographic survey data and are working on a design configuration.

**SB 88** – Phase 5 flow meter installations have been completed on Bouldin Island and Webb Tract. A separate request for proposals is being created at a later date for Bacon Island and Holland Tract. The installation of Phase 5 Wildeye telemetry equipment has been completed on Bouldin Island and Webb Tract, but we are waiting on Webb Tract units to be added to the Wildeye website. Wildeye also fixed or replaced broken units on Bouldin and Webb. Wildeye is sending invoices as they complete work on each island. Two invoices are being prepared for each island: (1) for the Phase 5 equipment and (2) for the Phase 5 labor, replacement equipment, replacement labor, and labor to move the Wildeye units to the steel poles welded to the siphons.

Across all four islands, 62 siphons have measurement equipment. However, 4 of those siphons need new meters and 7 of those siphons have meters with dead batteries. Both Gornto and Wildeye are providing quotes for replacing the 4 broken meters. MWD has placed an order with TechnoFlo for 15 batteries and MBK will conduct the replacements once shipped. MBK will continue to monitor all sites weekly via Wildeye's website and will conduct site visits as needed to replace batteries and check on equipment. In March, 3 flow meter batteries were replaced. In April, 2 flow meter batteries were replaced. In May, 1 flow meter battery has been replaced so far. The flow meter batteries have about a 3 year life, so any flow meter installed in 2022 or earlier has either had or is going to soon need a replacement battery installed.

All Wildeye units are currently working, with the exception of:

- (1) Bouldin Island Siphon 24: The data collected is not being recorded correctly in Wildeye, which we believe is due to a configuration issue. Wildeye worked on this meter during Phase 5 installations, but MBK needs to confirm that it is working.

All flow meters are currently working, with the exception of:

- (1) Bouldin Island Siphon 2: This meter can be replaced with the complimentary 12" meter and 14" conversion kit provided by TechnoFlo. A contract is needed with either Gornto or Wildeye to install the equipment.
- (2) Bouldin Island Siphon 26: This meter can be replaced with one of the surplus 12" meters purchased by MWD during the Phase 5 equipment purchase. The extra 14" conversion kit no longer needed for Bouldin Island Siphon 9, can be used. A contract is needed with either Gornto or Wildeye to install the equipment.
- (3) Bacon Island Siphon 25: This meter can be replaced with one of the surplus 12" meters purchased by MWD during the Phase 5 equipment purchase. A contract is needed with either Gornto or Wildeye to install the equipment.

- (4) Webb Tract Siphon 6: This meter can be replaced with one of the surplus 12" meters purchased by MWD during the Phase 5 equipment purchase. A contract is needed with either Gornto or Wildeye to install the equipment.
- (5) Bouldin Island Siphon 14: Dead battery. MBK to replace.
- (6) Bouldin Island Siphon 40: Dead battery. MBK to replace.
- (7) Bacon Island Siphon 14: Grounding cable disconnected and dead battery. MBK to fix cable and replace battery.
- (8) Bacon Island Siphon 18: Dead battery. MBK to replace.
- (9) Bacon Island Siphon 24: Low battery. MBK to replace.
- (10) Holland Tract Siphon 1: Dead battery. MBK to replace.
- (11) Holland Tract Siphon 2: Dead battery. MBK to replace.

MBK has provided MWD staff with a draft summary technical report on the 2023 OpenET and measured diversion comparison for review and is developing a similar comparison for 2024.

MBK prepared Water Year 2024 annual reports, and MWD staff submitted the reports prior to the February 1, 2025 deadline. Subsequent to those submissions, MWD staff prepared and submitted a second set of annual reports using the Delta ACP reporting platform. The Delta Watermaster requested the spreadsheets used to prepare the 2023 and 2024 annual reports, which MBK and MWD subsequently sent.

MBK met with MWD and Tetra Tech on March 6, 2025, to discuss the Bouldin Island Water Balance. Tetra Tech requested recommendation by MBK regarding the metering of the discharge pumps. MBK worked with TechnoFlo to obtain a quote for a clamp on flow meter, which Technoflo recommended for the pump stations on Bouldin. The quote is with MWD. Here are some of the key details of the recommended meter:

- Works for any size pipe
- Has a +/-2% accuracy
- Has a built-in data logger
- Much more cost effective than the mag meters
- Interference between meters should not be an issue
- Easy to install however, external power is required so an electrician will be needed

## RD 756 – Bouldin Island

### Issue Tracking Summary

May 19, 2025

Issue ID	Priority	Report Date	Reporter	Location	Issue Type	Description	Action	Field Notes
041	Medium	March 28, 2017 5:00 PM	RalphHeringer	Station 544-549	Crack	Cracking in LS Slope; seepage and cattails at toe	Monitor	Monitor and discuss repair; 10/23/17 Levee crown trenched; no encroachments located, Area to be graded and prepared for flood season; will proceed under Special Projects upon receipt of PFA. 12/4/17 - grading complete
41.1		April 24, 2020 12:00 AM	Nate Hershey					Reviewed the site area. Area appears to be moving again - not as dramatic as in 2017, but it appears to be along the same fault lines. Seepage observed exiting the surface. Recommend performing an updated survey and developing an action plan.
41.2		March 10, 2023 1:00 AM	Andrew Petrini					Visual observation suggests recent movement may have occurred. AECOM reports no significant movement detected by instrumentation at this time.
053	Medium	August 11, 2017 12:00 AM	Nate Hershey	Station 324	Seepage	Seepage at toe of 3 to 1 slope	Monitor	Monitor
054	Medium	August 11, 2017 12:00 AM	Nate Hershey	Station 336	Seepage		Monitor	Monitor; The hole is shallow at about 1-2 inches deep.
074	Low	January 5, 2019 5:54 PM	Russ Ryan	Land side within 150 foot Levee footprint. See attached photos. Low wet areas.	Sinkhole, Other	Bouldin Island - West stretch length adjacent to Mokelumne River. See attached photos for exact location.	Investigate	See notes above.
088	Low	June 7, 2019 1:55 PM	Dave Forkel	Sta 382+00	Seepage	Seepage on side of levee.	Investigate	

096	Medium	April 22, 2020 12:00 AM	Russ Ryan	Between 630 and 640	Seepage	Appears to be seepage	Investigate	
107	Medium	December 17, 2020 2:05 PM	Russ Ryan	Station 630	Seepage	Just inside levee footprint on land side of toe drain there water ponding. Was there prior to any rain this season during dry period.	Monitor	See photos taken on site.
116	Medium	February 21, 2022 3:23 PM	Russ Ryan	West levee north of camp 5 at pilot project instrumentation area.	Seepage	Noticeable standing water at toe of levee at the same 2017 slippage event.	Investigate	Need Geotech investigation and assessments.
117	Low	February 23, 2022 12:10 PM	Russ Ryan	Location is landside off west levee (Bouldin Island) and south of Hwy 12	Seepage	Landside water ponding presenting at toe of levee.	Investigate	Roughly an estimated 30 feet by 10 feet. Dimensions need to be verified in field investigation.
121	Medium	October 14, 2022 12:00 AM	Nate Hershey	Station 33	Seepage	Seepage observed periodically on toe of levee. Seems to come and go, sometimes difficult to tell if it is seepage or ponding water. Observations suggest it is likely seepage that periodically appears during times of high water.	Investigate	
126	Medium	February 17, 2023 12:12 PM	Dave Forkel	Camp 29 Pump Station	Erosion	Washout behind sump sheet piling	Repair	
144	Medium	October 18, 2023 1:27 PM	Jack Cronin	East levee. See point, near Caution marker in water.	Sloughing	Sloughing, appears old. Likely not from earthquake.	Monitor	
145	Medium	October 18, 2023 1:31 PM	Jack Cronin	See point.	Sloughing	Minor sloughing. Potentially from seismic event	Investigate	