

MEMORANDUM

August 21, 2024

TO: Reclamation District No. 756

FROM: Nathan Hershey, Mike Kynett

SUBJECT: August 2024 Engineer's Report

Described below are the engineering items to be discussed at your August 21, 2024 meeting.

Subventions 2022-23 – The District submitted an application for participation in the Program in the amount of \$631,000. A total of \$12.5 million has been approved by the Central Valley Flood Protection Board for the Program for FY 2022-23. A final claim was submitted in the amount of \$427,567.65.

Subventions 2023-24 – 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 for FY 2023-24.

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 for FY 2024-25.

Future Subventions Funding – DWR has indicated that funding has not been secured yet for fiscal years 2025-26 and beyond. Delta advocates, including the California Central Valley Flood Control Association and others, are considering ways to increase awareness and gain support for securing funding for this highly successful and vital program. We have prepared a draft funding request letter for the RD to consider and possibly submit to state legislators.

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

Emergency Response Grant (Round 3) – San Joaquin County transmitted a memo to reclamation districts regarding grant funds that are available to update the District's emergency operations plan and flood contingency map. Up to \$15,000 per district is available. Our recommendation is to participate in the process and use this funding to update the documents.

FEMA – The District's claim is currently under review at FEMA. MBK will continue to check in with FEMA personnel regarding status updates. The total claim amount is \$29,962.24.

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 and project closeout.

The first phase of work on the levee setback project (BO-17-1-SP) near the Camp 5 pump station (west levee) is complete. The geotechnical engineer has recommended placement of the previously planned fill that was temporarily deferred due to stability concerns as well as placement of an additional lift of fill to support

the levee. We have executed an additional work order with Wood Bros. to place 125,000 cubic yards of fill on the toe berm this year. A preconstruction meeting was held on August 1. Wood Bros has mobilized to the site and begun initial ground disturbing activities.

DWR has provided a revised funding agreement for up to \$900,000 for planning, permitting and design of a multi-benefit project from Stations 415-500 at a State cost share of 90%. The agreement has been fully executed. Work will commence upon receipt of advance funding.

SB 88 – All Phase 4 meters have been installed and certified by MBK Engineers. Data is currently being collected at 37 sites across all four islands. MBK will continue to monitor all sites monthly during the winter season and weekly during the irrigation season via Wildeye's website. All Wildeye units are currently working with the exception of Bouldin Island Siphon No. 30, which was damaged by driftwood (equipment will be reinstalled when Phase 5 installations occur at nearby siphons). All meters are currently working, with the exception of (1) Bouldin Island Siphon No. 2, (2) Bouldin Island Siphon No. 26, and (3) Bacon Island No. 25. See additional details below.

All Phase 5 flow meters were delivered and inventoried on Bacon Island. MWD has posted a bid package and will be requesting bids until September 19th for the installation of the Phase 5 meters. The Phase 5 telemetry equipment has been purchased, and will be delivered at the time of installation, following flow meter installations at each site.

On August 15th, MBK conducted a site visit to test and verify the accuracy of three meters across Bouldin and Bacon Islands which were due for recalibration. Bouldin Island Siphon Nos. 24 and 26 and Bacon Island Siphon No. 25 were all tested. Bouldin Island Siphon No. 24 did not present any issues and is pending final analysis of the measurement data prior to being recertified. Bouldin Island Siphon No. 26 and Bacon Island Siphon No. 25 both appeared to not be functioning and require further investigation; the meters were installed as a part of Phase 3 in 2020 and Phase 1 in 2017, respectively. Both meters are remnants of MWDs testing of different types of meters, with Bouldin Island Siphon No. 26 being an external ultrasonic meter and Bacon Island Siphon No. 25 being a saddle magnetic meter. It is recommended that both of these meters be replaced with the surplus meters purchased during the Phase 5 installation. In this case, a 14-inch conversion kit will need to be purchased for Bouldin No. 26.

MBK attended the Delta Drought Response Pilot Program (DDRPP) Forum on June 20th. At this forum the results of the 2023 DDRPP were presented and discussed. The Delta Conservancy has published the final report for the 2023 DDRPP on their website in July 2024. MBK will be reviewing the 2023 DDRPP report for any information pertinent to the MWD properties.

RD 756 - Bouldin Island

Issue Tracking Summary

August 19, 2024

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	Monitor	See photos taken on site.

						prior to any rain this season during dry period.		
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	