

MEMORANDUM

February 28, 2024

TO: Reclamation District No. 756

FROM: Nathan Hershey, Mike Kynett

SUBJECT: February 2024 Engineer's Report

Described below are the engineering items to be discussed at your February 28, 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 \$13 million has been approved by the Central Valley Flood Protection Board for the Program for FY 2023-24.

Subventions 2024-25 – Applications for the Program are due April 1. Subject to Board approval, our intent is to submit an application similar to the submittal for the prior fiscal year.

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. Updated drone footage of the levees is available on the RD's YouTube channel and a link was distributed via email.

FEMA – The District 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. The contractor will soon be stockpiling riprap in strategic areas around the island, subject to weather and site conditions. These "pre-deployed" stockpiles will strengthen the District's emergency response capabilities. 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. Additional fill will be placed in select areas this summer.

A full application was submitted to DWR for the Projects Solicitation Package (PSP) for multi-benefit projects. The proposed project was selected for funding by DWR management. Funding will be provided up

to \$900,000 for planning, permitting and design at a State cost share of 90%. DWR will be sending the District a draft funding agreement for review.

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 Bouldin Island Siphon No. 2, which stopped functioning due to water damage (a new complimentary meter was provided by Technoflo and will be replaced during the Phase 5 installation). MBK was made aware that strong winds have displaced some Wildeye unit solar panels across the islands. A review of battery levels on Wildeye's website did not give indication of solar panel state, therefore MBK has coordinated with MWD, who will execute a visual inspection of the sites.

All Phase 5 flow meters were delivered and inventoried January 4th on Bacon Island. MWD is preparing a bid package and will be requesting bids in March for meter installations. The Phase 5 telemetry equipment has been purchased, and will be delivered at the time of installation, following flow meter installations at each site.

MBK prepared and submitted an updated Request for extensions of time for each island for measurement compliance through December 31, 2025, and received approval from the Delta Watermaster on November 9th, 2023. Therefore, MWD's and the RDs' water rights are in measurement compliance under an approved extension of time until the equipment installations and certifications are completed.

MBK prepared Water Year 2023 annual water right reports consistent with prior years, using a hybrid approach that included flow meter data when it was available and OpenET data when it was not. MWD reviewed and submitted the reports by the February 1, 2024 deadline.

MBK and MWD continue to participate in the Delta Consortium. The February 8th Consortium meeting focused on preliminary design of diversion and related consumptive use correlation research projects, including a presentation by MWD and MBK on their preliminary OpenET vs Siphon Diversion analysis. MBK will continue to support these efforts by preparing a summary technical report, and providing data and analysis as needed.

RD 756 - Bouldin Island

Issue Tracking Summary

February 23, 2024

Issue ID	Priority	Report Date	Reporter	Location	Issue Type	Description	Action	Field Notes
041	Medium	March 28, 2017 4:00 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 23, 2020 11:00 PM	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 12:00 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 10, 2017 11:00 PM	Nate Hershey	Station 324	Seepage	Seepage at toe of 3 to 1 slope	Monitor	Monitor
054	Medium	August 10, 2017 11:00 PM	Nate Hershey	Station 336	Seepage		Monitor	Monitor; The hole is shallow at about 1-2 inches deep.
074	Low	January 5, 2019 4:54 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 12:55 PM	Dave Forkel	Sta 382+00	Seepage	Seepage on side of levee.	Investigate	
094	Low	September 27, 2019 5:02 PM	Brian Janowiak	Lower toe	Other	Area along lower toe near seepage ditch by Florida tip appears to have settled.	Monitor	
096	Medium	April 21, 2020 11:00 PM	Russ Ryan	Between 630 and 640	Seepage	Appears to be seepage	Investigate	

107	Medium	December 17, 2020 1:05 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.
108	Medium	July 7, 2021 11:00 PM	Russ Ryan	Station 90	Crack	Cracking observed on landside slope. Unclear if this is a result of the earthquake event.	Monitor	
109	Medium	July 7, 2021 11:00 PM	Russ Ryan	Station 226	Sloughing	Potential landside settlement on toe berm. Unclear if this is earthquake related.	Monitor	
110	Medium	July 7, 2021 11:00 PM	Russ Ryan	Station 503	Sloughing	Landside disturbance. Unclear if earthquake related or due to sheep activity.	Monitor	
116	Medium	February 21, 2022 2:23 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 11:10 AM	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 13, 2022 11:00 PM	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	
123	High	January 4, 2023 12:00 AM	AndrewReece	Station 498	Erosion	Waterside slope eroding in several locations.	Repair	
124	Medium	January 4, 2023 12:00 AM	AndrewReece	Station 555	Erosion	Eroded slope	Repair	
126	Medium	February 17, 2023 11:12 AM	Dave Forkel	Camp 29 Pump Station	Erosion	Washout behind sump sheet piling	Repair	
143	Medium	August 8, 2023 12:58 PM	Other	Approximately station 490 to 510	Sloughing	The attached photos are from a boat on the water side. Unsure if RD is already working on this area.	Investigate	
144	Medium	October 18, 2023 12:27 PM	Other	East levee. See point, near Caution marker in water.	Sloughing	Sloughing, appears old. Likely not from earthquake.	Monitor	
145	Medium	October 18, 2023 12:31 PM	Other	See point.	Sloughing	Minor sloughing. Potentially from seismic event	Investigate	
146	Medium	October 19, 2023 9:09 AM	Other	Between station 490 and 500	Sloughing	Sloughing near area where 99' repairs were conducted previously.	Monitor	