

MEMORANDUM

April 24, 2024

TO: Reclamation District No. 2028

FROM: Nathan Hershey, Brian Janowiak

SUBJECT: April 2024 Engineer's Report

Described below are the engineering items to be discussed at your April 24, 2024 meeting.

Subventions 2022-23 – The District submitted an application for participation in the Program in the amount of \$541,000. 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 \$325,967.61.

Subventions 2023-24 – The District submitted an application for participation in the Program in the amount of \$541,000. 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 – The District submitted an application for participation in the Program in the amount of \$541,000.

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.

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 \$52,398.36.

Special Projects – The enhancement component of the Old River multi-benefit levee rehabilitation project (BN-15-1-SP) is in-progress. Maintenance activities will be on-going to promote plant health and longevity.

Year two construction for Teichert is set to begin on April 29, 2024. Teichert began dewatering pumping in the borrow sites in early April. Stillwater is in the process of performing preconstruction surveys and coordinating with CDFW regarding results. PG&E has provided the approved overhead utility line relocation construction drawings. Coordination with PG&E regarding environmental restrictions and construction schedule is ongoing. San Joaquin County has been notified that work on Bacon Island Road will be taking place this summer.

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).

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 the near future 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 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. In coordination with the Delta Watermaster's Office, MWD also filed additional annual reports through the Delta Alternative Compliance Plan platform.

MBK and MWD continue to participate in the Delta Consortium; the next Delta Consortium meeting has not yet been announced. MBK is currently preparing a summary technical report on the 2023 OpenET and measured diversion comparison.

RD 2028 - Bacon Island

Issue Tracking Summary

April 19, 2024

Issue ID	Priority	Report Date	Reporter	Location	Issue Type	Description	Action	Field Notes
006	Medium	October 20, 2016 5:00 PM	RalphHeringer	Station 275 @ Pump Station	Broken Equipment	Trash racks in need of maintenance/repair	Investigate	TBD
036	Low	February 23, 2017 5:00 PM	Nate Hershey	Station 712	Seepage	Seepage exiting at toe of slope near retaining wall structure.	Monitor	12/4/17 - Area dried up after winter; continue to monitor
043	Medium	April 3, 2017 5:00 PM	Brian Janowiak	Station 92-93	Seepage	Seepage existing at toe of slope, running across county road		
073	Medium	October 20, 2016 5:00 PM	RalphHeringer	Station 465 @ Pump Station	Broken Equipment	Trash racks in need of maintenance/repair	Investigate	TBD
101	Medium	September 17, 2020 4:25 PM	Nate Hershey	Station 704	Erosion	Field verified erosion site detected by drone footage. Site is approximately 100 feet long, adjacent to willows and vegetation is covering steep slopes.	Repair	
101.1		January 8, 2021 1:00 AM	Nate Hershey					Site is in future Special Projects work area. Recommend monitoring and repairing during levee rehabilitation project.
102	Medium	May 5, 2021 11:13 AM	Dave Forkel	Sta 107+19	Erosion	Erosion at toe of levee at siphon discharge.	Repair	Dino and Son to fill erosion site
103	Medium	May 5, 2021 11:22 AM	Dave Forkel	Sta 175+15	Erosion	Erosion at toe of levee at siphon discharge.	Repair	Dino and Son to fill erosion site
104	Low	May 5, 2021 11:23 AM	Dave Forkel	Junior's House	Sloughing	Rock placed at waterside of new fill settling.	Monitor	
106	Medium	November 4, 2021 4:43 PM	Dave Forkel	Sta 170+00	Seepage	Seepage at toe of levee.	Monitor	
107	Medium	December 15, 2022 4:44 PM	Dave Forkel	Sta 704+00	Erosion	Levee experienced minor waterside erosion during last weeks storm.	Repair	District forces to repair.
108	Medium	January 10, 2023 10:33 AM	Michael Nishimura	13+50 waterside hinge on road	Sinkhole, Other	6" diameter sink hole on ws road hinge. Probed for 5' deep going towards the water. Identical size hole on landside road hinge just across crown, probed about 2.5' into levee crest. The landside has multiple animal burrows 7" to 1' diameter in size. Probed 5' feet into levee towards levee center. Ground	Repair	

						is very soft on landside slope and steep. Approximately 1.5:1 to 2:1 slope. There is a bulge at the lower landside toe. It appears either a low spot is ponding or potential seepage is occurring on the landside toe for approximately 150' adjacent to rodent activity and sinkholes.		
109	Medium	January 10, 2023 11:02 AM	Michael Nishimura	13+50 landside toe	Seepage	Potential sheet flow Seepage at landside toe. Adjacent to levee with several large rodent holes. Approximately 150-200' total site length.	Monitor	
111	Medium	January 10, 2023 11:42 AM	Michael Nishimura	98+90 to	Erosion, Sloughing	Sloughing of ws slope. In the adjacent areas the slope is steep as well and it starts right at the water side hinge. This sloughing is occurring in a thick patch of ws slope and is still approximately in the same condition as it's adjacent slopes. Grading could help further damage from surface runoff.	Monitor	
113	Medium	January 10, 2023 12:10 PM	Michael Nishimura	203+50 to 204+25 waterside slope	Erosion, Sloughing	Erosion and sloughing 75' on waterside slope. Scarping mid slope. Likely caused by oversteepened slope and surface run off.	Monitor	
114	Medium	January 10, 2023 12:57 PM	Michael Nishimura	666+15 to 666+90 waterside slope	Erosion, Sloughing	Erosion on waterside slope. Top of erosion is at mid slope. Water side slope is approximately 8' slope distance from waterside hinge to waters edge. 75' length. Rodent holes observed on waterside hinge/slope	Monitor	
115	Medium	January 10, 2023 1:15 PM	Michael Nishimura	671+10 to 674+50	Erosion, Sloughing	Erosion and sloughing broken up sites within stations listed above. Gaps are approximately 10-20' before erosion picks up again. Cracks and rodent holes observed on waterside hinge. Water side slope is very soft. (Approximately 275 feet total erosion is estimated to be within stationing provided above)	Monitor	
116	Medium	January 10, 2023 1:33 PM	Michael Nishimura	681+80 to 685+10	Erosion, Sloughing	Vertical erosion, sloughing and waterside hinge cracking. The majority of this	Monitor	

						section has a steepened waterside slope. Cracking is on the waterside hinge and the slope is sloughing into the water. Rodent holes observed on the ws hinge.		
119	Low	May 31, 2023 6:38 PM	Dave Forkel	Sta 756+00	Crack	Mel reported crack and sloughing of riprap just south of bridge.	Monitor	Not much obvious sloughing.
120	High	February 15, 2024 12:00 PM	Dave Forkel	Sta 733+00	Boil	Boil in toe ditch	Investigate	
120.1		February 22, 2024 1:00 AM	Nate Hershey					Investigations indicate the water is coming from the field side. A trench was excavated in the field, and the direction of flow was coming from the field (flowing west to east). Recommend sandbagging around the boil to manage the pressure. When conditions permit, next steps are to excavate an exploratory trench east of the toe ditch to see if there is flow is coming through the levee. If so, an exploratory trench in the levee crown is recommended.