

MEMORANDUM

November 12, 2024

TO: Reclamation District No. 2028

FROM: Nathan Hershey, Brian Janowiak

SUBJECT: November 2024 Engineer's Report

Described below are the engineering items to be discussed at your November 12, 2024 meeting.

Subventions 2023-24 – The District submitted an application for participation in the Program in the amount of \$541,000. A total of \$14 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 \$317,590.36.

Subventions 2024-25 – The District submitted an application for participation in the Program in the amount of \$541,000. 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.

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 \$52,398.36.

Special Projects – The enhancement component of the Old River multi-benefit levee rehabilitation project (BN-15-1-SP) is in-progress. The maintenance period is scheduled to expire at the end of the year. A final inspection with CDFW and DWR is being scheduled. Once the maintenance period is complete, we will prepare the project completion report and close out the funding agreement.

Work under BN-19-1-SP is in progress. Teichert has completed work on the south levee and is currently placing AB on the north levee, west of the bridge. AB work should be complete by the end of the week. Hydroseed is also scheduled to be complete by the end of the week. Work on the county road has been postponed until the spring.

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 weekly via Wildeye's

website. All Wildeye units are currently working with the exception of (1) Bouldin Island Siphon No. 30 and (2) Bouldin Island Siphon No. 24. Bouldin Island Siphon No. 30 was damaged by driftwood (equipment will be reinstalled when Phase 5 installations occur at nearby siphons). The data collected at Bouldin Island Siphon No. 24 is not being recorded correctly in Wildeye, which we believe is due to a configuration issue. MBK will reach out to Wildeye to try to resolve the issue. 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 Siphon No. 25. MBK worked with Technoflo to acquire a quote for a 14-inch conversion kit for Bouldin Island Siphon No. 26, which has been sent to MWD along with a request for further instruction on how to proceed. See August 2024 RD update for additional details.

All Phase 5 flow meters are staged for installation on Bacon Island. Phase 5 bidding has closed and MWD staff have selected a contractor with construction is set to begin after November 18 for Bouldin Island and Webb Tract. A separate request for proposals will be opened at a later date for Bacon Island and Holland Tract. 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 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 is currently preparing Water Year 2024 annual reports and will provide draft reports for review by MWD staff by the end of the year. On October 18th, MBK provided MWD staff draft language to be included in the 2024 annual reports for review. MWD staff will provide MBK crop acreages for each of the islands to be included in the annual reports.

RD 2028 - Bacon Island

Issue Tracking Summary

November 8, 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 | MichaelNishimura | 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 | |
| 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. |