

MEMORANDUM

March 16, 2022

TO: Reclamation District No. 2028

FROM: Nathan Hershey

SUBJECT: March 2022 Engineer's Report

Described below are the engineering items to be discussed at your March 16, 2022 meeting.

Subventions 2020-21 – The District submitted an application for participation in the Program in the amount of \$615,000. \$12 million has been approved for Program funding for FY 2020-21. A final claim in the amount of \$301,108.19 was submitted.

Subventions 2021-22 – The District submitted an application for participation in the Program in the amount of \$541,000. \$10 million has been approved for the Program for FY 2021-22.

Subventions 2022-23 – 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.

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

Flood Fight Supplies – The District received reimbursement for the flood fight supplies recently purchased.

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.

The District received an advance of funds for design of the Directed Action project to rehabilitate the north and south levees (BN-19-1-SP). We have submitted the draft Scope of Work to DWR for approval which includes draft environmental documents and 90% plans. The next step is to circulate the environmental documents for public review and comment. Our recommendation is to circulate the public draft and post the document to the State clearinghouse.

Five Year Plan – Work on the Five-Year Plan is currently in progress. A draft of the plan has been distributed via email and we have incorporated the comments received to date. We have also sent a draft to DWR staff for review and comment. DWR has extended the expiration date of the funding agreements to December 31, 2022. At DWR's request, we submitted the anticipated total cost of improvements for their planning purposes.

SB 88 – Work under Phase 3 of the measurement experiment has been completed. MBK has visited the sites and certified that the installed flow meters have all been installed to manufacturer's specifications.

Work under Phase 4 of the measurement experiment is expected to begin in the near future. MWD purchased 25 flow meters along with telemetry units to be installed on all four islands. The flow meters, flanges, bolts, and job boxes were delivered by Technoflo during January to a secure site on Bacon Island. MWD has

scheduled the pre-bid walkthrough with the potential contractors for March 15th. After this walkthrough and the bids from the contractors are submitted, MWD will select one of the bids and installations will begin shortly thereafter. The installations are estimated to be completed before the end of 2022. MBK has conducted visits to the proposed sites to identify work that needs to be completed prior to installing the flow meters. MBK will work with MWD and the selected contractor to complete these preparations.

After reviewing the notes and photos from MBK's visits to the Phase 4 sites, 4 siphons were identified as potentially having asbestos or had a tar coating on the pipe exterior. MWD contracted with W.C. Maloney to remove the hazardous materials in the area where the flow meter would be installed. MBK inspected the sites afterward to verify the hazardous materials were removed from the correct siphons in the location where the meter would be installed.

MWD and the RDs are in compliance for calendar year 2022 under an approved extension of time. The extension was approved by the Delta Watermaster on January 13th, 2022 and will expire on January 1st, 2024. The extension of time included a Plan for Compliance which provides details regarding the methods to estimate diversions on siphons without flow meters and provides a measurement equipment installation schedule. MWD currently anticipates that installing all the flow meters will take five years. Therefore, MBK has provided cost estimates for flange magnetic meters with telemetry equipment installed on the water side of all active siphons.

Development of the Delta-wide ACP by the Delta Measurement Experiment Consortium to utilize Open ET for measuring and reporting diversions continues. RD staff are currently in the process of creating place of use polygons for each of the islands. MBK and MWD continue to participate in the Consortium.

Reclamation District No. 2028 Bacon Island Issue Tracking Summary 3/12/2022

| IssueID | Priority | Report Date | Reporter | Location | Issue Type | Description | Action | Field Notes |
|---------|----------|-------------------|-----------------|-------------------------------|------------------|--|--------------|---------------------------------------|
| | | | • | Station 275 @ | | Trash racks in need of | | |
| 6 | Medium | 10/21/2016 | Ralph Heringer | Pump Station | Broken Equipment | maintenance/repair | Investigate | TBD |
| | | | | | | Seepage exiting at toe of | | |
| | | | | | | slope near retaining wall | | 12/4/17 - Area dried up after winter; |
| 36 | Low | 2/24/2017 | Nate Hershey | Station 712 | Seepage | structure. | Monitor | continue to monitor |
| | | | | | | Seepage existing at toe of | | |
| 42 | | 4/4/2047 | B. t I | C+-+: 02 02 | 6 | slope, running across county | | |
| 43 | Medium | 4/4/2017 | Brian Janowiak | Station 92-93 | Seepage | road Trash racks in need of | | |
| 73 | Medium | 10/21/2016 | Ralph Heringer | Station 465 @ Pump Station | Broken Equipment | maintenance/repair | Investigate | TBD |
| 73 | Medium | 10/21/2010 | Kaipii Heringei | Pullip Station | Broken Equipment | птаптепапсе/терап | ilivestigate | IBD |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | Lower tide now and I think | | |
| | | | | | | the roadway pothole (boil ??) | | |
| | | | | | | needs repair at some point. I | | |
| | | | | | | know it's a county road. We'll | | |
| | | | | | | have to figure since once the | | |
| | | | | | | (what I'm assuming) is a leak | | |
| | | | | | | of repaired then the road will | | |
| 84 | Medium | 4/4/2019 | RussRyan | 95+00 | Boil | need to also be repaired. | Repair | |
| | | | | | | | | |
| | | | | siphon north of | | possible beaver den under | | |
| 95 | Medium | 12/12/2019 | AndyReece | Mel's | RodentActivity | tree south of siphon | Investigate | |
| | | | | | | | | |
| | | | | | | Waterside slope is sloughing. | | |
| | | 0 / 1 = / 2 2 2 = | | 6 405 | | Starting to encroach into the | | |
| 100 | Medium | 9/17/2020 | NateHershey | Station 102 | Sloughing | county road. | Repair | |
| | | | | | | Field vesified and the art | | |
| | | | | | | Field verified erosion site | | |
| | | | | | | detected by drone footage. Site is approximately 100 | | |
| | | | | | | feet long, adjacent to willows | | |
| | | | | | | and vegetation is covering | | |
| 101 | Medium | 9/17/2020 | NateHershey | Station 704 | Erosion | steep slopes. | Repair | |
| 101 | MEGIGITI | 3/11/2020 | Naterierancy | 300001704 | LIUSIUII | этеер лорез. | ПСрин | |

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| IssueID | Priority | Report Date | Reporter | Location | Issue Type | Description | Action | Field Notes |
| | | | | | | Site is in future Special | | |
| | | | | | | Projects work area. | | |
| | | | | | | Recommend monitoring and | | |
| | | | | | | repairing during levee | | |
| 101.1 | Medium | 1/8/2021 | NateHershey | Station 704 | Erosion | rehabilitation project. | | |
| | | | | | | Erosion at toe of levee at | | |
| 102 | Medium | 5/5/2021 | DaveForkel | Sta 107+19 | Erosion | siphon discharge. | Repair | Dino and Son to fill erosion site |
| | | | | | | Erosion at toe of levee at | | |
| 103 | Medium | 5/5/2021 | DaveForkel | Sta 175+15 | Erosion | siphon discharge. | Repair | Dino and Son to fill erosion site |
| | | | | | | Rock placed at waterside of | | |
| 104 | Low | 5/5/2021 | DaveForkel | Junior's House | Sloughing | new fill settling. | Monitor | |
| | | | | | | | | |
| | | | | | | Three voids discovered near | | |
| | | | | | | utilities and in the existing | | |
| | | | | | | toe berm. Recommend | | |
| | | | | | | collapsing and compacting | | |
| 105 | Medium | 8/20/2021 | NateHershey | Station 694 | Sinkhole | when feasible. | Repair | |
| 106 | Medium | 11/4/2021 | DaveForkel | Sta 170+00 | Seepage | Seepage at toe of levee. | Monitor | |