MBK ENGINEERS

Water Resources • Flood Control • Water Rights

MEMORANDUM

June 18, 2025

TO: Reclamation District No. 2026

FROM: Nathan Hershey

SUBJECT: **June 2025 Engineer's Report**

Described below are the engineering items to be discussed at your June 18, 2025 meeting.

Subventions 2023-24 – The District submitted an application for participation in the Program in the amount of $665,000. A total of $15.5 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 $256,853.01.

Subventions 2024-25 – The District submitted an application for participation in the Program in the amount of $665,000. A total of $14 million has been approved by the Central Valley Flood Protection Board for the Program, with an additional $2 million expected to be approved in June for FY 2024-25.

Subventions 2025-26 – The District submitted an application for participation in the Program in the amount of $700,000. A total of $16 million will be requested for the Program for FY 2025-26.

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

FEMA – The District's claim ($65,256.11) is nearing obligation. Once the projects are obligated, a Recovery Transition Meeting will occur between FEMA, CalOES, and MBK where the funds will be transferred from FEMA to CalOES. At that point, MBK will provide any required closeout documentation.

SB 88 – Phase 5 flow meter installations have been completed on Bouldin Island and Webb Tract. A separate request for proposals is being created at a later date for Bacon Island and Holland Tract. The installation of Phase 5 Wildeye telemetry equipment has been completed on Bouldin Island and Webb Tract. Wildeye also fixed or replaced broken units on Bouldin and Webb. Wildeye is sending invoices as they complete work on each island. Wildeye has prepared one invoice for the Bouldin and Webb Phase 5 equipment and two invoices, one for each island for the Phase 5 labor, replacement equipment, replacement labor, and labor to move the Wildeye units to the steel poles welded to the siphons.

Across all four islands, 62 siphons have measurement equipment. However, 4 of those siphons need new meters and 7 of those siphons have meters with dead batteries. 2 of the 4 broken meters are old saddle meters from the experimentation that took place starting in 2016 (these are the last 2 meters of this type). The other 2 of the 4 broken meters are Seametrics AG 3000 meters that were damaged by debris. Both Gornto and Wildeye have provided quotes for replacing the 4 broken meters; MWD will review the quotes and choose a contractor. MWD has placed an order with TechnoFlo for 15 batteries and MBK will conduct the replacements once shipped. MBK will continue to monitor all sites weekly via Wildeye's website and will conduct site visits as needed to replace batteries and check on equipment. In March, 3 flow meter batteries were replaced. In April, 2 flow meter batteries were replaced. In May, 1 flow meter was replaced. The flow

meter batteries have about a 3 year life, so any flow meter installed in 2022 or earlier has either had or is going to soon need a replacement battery installed.

All Wildeye units are currently working, with the exception of:

(1) Bouldin Island Siphon 24: The data collected is not being recorded correctly in Wildeye, which we believe is due to a configuration issue. Wildeye worked on this meter during Phase 5 installations, but MBK needs to confirm that it is working.

All flow meters are currently working, with the exception of:

(1) Bouldin Island Siphon 2: This is a Seametrics AG 3000 meter that was damaged by debris. It can be replaced with the complimentary Seametrics AG 3000 12" meter and 14" conversion kit provided by TechnoFlo. A contract is needed with either Gornto or Wildeye to install the equipment.
(2) Bouldin Island Siphon 26: This is a broken saddle meter that was installed during the experiment phase, which started in 2016. This meter can be replaced with one of the surplus Seametrics AG 3000 12" meters purchased by MWD during the Phase 5 equipment purchase. The extra 14" conversion kit no longer needed for Bouldin Island Siphon 9, can be used. A contract is needed with either Gornto or Wildeye to install the equipment.
(3) Bacon Island Siphon 25: This is a broken saddle meter that was installed during the experiment phase, which started in 2016. This meter can be replaced with one of the Seametrics AG 3000 surplus 12" meters purchased by MWD during the Phase 5 equipment purchase. A contract is needed with either Gornto or Wildeye to install the equipment.
(4) Webb Tract Siphon 6: This is a Seametrics AG 3000 meter that was damaged by debris. It can be replaced with one of the Seametrics AG 3000 surplus 12" meters purchased by MWD during the Phase 5 equipment purchase. A contract is needed with either Gornto or Wildeye to install the equipment.
(5) Bouldin Island Siphon 14: Dead battery. MBK to replace.
(6) Bouldin Island Siphon 40: Dead battery. MBK to replace.
(7) Bacon Island Siphon 14: Grounding cable disconnected and dead battery. MBK to fix cable and replace battery.
(8) Bacon Island Siphon 18: Dead battery. MBK to replace.
(9) Bacon Island Siphon 24: Low battery. MBK to replace.
(10) Holland Tract Siphon 1: Dead battery. MBK to replace.
(11) Holland Tract Siphon 2: Dead battery. MBK to replace.

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 prepared Water Year 2024 annual reports, and MWD staff submitted the reports prior to the February 1, 2025 deadline. Subsequent to those submissions, MWD staff prepared and submitted a second set of annual reports using the Delta ACP reporting platform. The Delta Watermaster requested the spreadsheets used to prepare the 2023 and 2024 annual reports, which MBK and MWD subsequently sent.

MBK met with MWD and Tetra Tech on March 6, 2025, to discuss the Bouldin Island Water Balance. Tetra Tech requested recommendation by MBK regarding the metering of the discharge pumps. MBK worked with TechnoFlo to obtain a quote for a clamp on flow meter, which Technoflo recommended for the pump

stations on Bouldin. The quote is with MWD. Here are some of the key details of the recommended meter:

- Works for any size pipe
- Has a +/-2% accuracy
- Has a built-in data logger
- Much more cost effective than the mag meters
- Interference between meters should not be an issue
- Easy to install however, external power is required so an electrician will be needed

RD 2026 – Webb Tract

Issue Tracking Summary

June 13, 2025

Issue ID	Priority	Report Date	Reporter	Location	Issue Type	Description	Action	Field Notes
003	Medium	October 3, 2016 5:00 PM	JaimeBarajas	Station 614	Broken Equipment	Pump station platform pile appears to have buckled.	Repair	Dino to investigate and repair; Schedule TBD. See photos.
019	Medium	January 31, 2017 5:00 PM	JaimeBarajas	Station 614	Boil	Boil located near pump station	Investigate	Jaime to monitor. On 3/22/17 District forces coretrenched levee and found no cause for seepage.
050	Low	July 20, 2017 5:00 PM	Russ Ryan	Station 180	Crack	Possible small crack between WS crown and AB splash berm	Monitor	
061	Medium	January 19, 2018 1:00 AM	Dave Forkel	Station 164+60 False River Pump	Seepage	Seepage under discharge pipes. Ongoing problem.	Monitor	Investigate problem; This has been a long-term issue. 6/9/18 Photos received from Jaime; MBK investigating options for remediation
61.1		June 10, 2019 12:00 AM						Seepage berm construction complete. RD forces placed 6,026 cy of material. Continue to monitor.
069		July 10, 2018 12:00 AM	AndrewReece	Station 408	Sloughing	Approx. 200ft of rip rap sloughing	Monitor	
105	Medium	December 10, 2020 11:31 AM	Dave Forkel	Sta 378+00	Crack	40 ft crack in center of levee	Monitor	
106	Medium	February 3, 2023 10:13 AM	Dave Forkel	Sta 445+00	Boil	Boil about halfway down slope, toe very wet. Sandbags installed.	Investigate	Sandbags
107	Medium	October 18, 2023 12:48 PM	Jack Cronin	Station marker just north of fisherman's cut. Just on water side of marker. Can't see marker from water.	Sloughing	Sloughing, appears old. Not likely from earthquake.	Monitor	