MEMORANDUM

July 10, 2019

TO: Reclamation District No. 2028

FROM: Nathan Hershey, Mike Kynett

SUBJECT: July 2019 Engineer's Report

Described below are the engineering items to be discussed at your July 10, 2019 meeting.

Subventions 2016-17 – The District submitted an application for participation in the Program in the amount of \$396,000. \$12 million has been approved for Program funding for FY 2016-17. The District submitted a final claim in the amount of \$320,706.82. We have been notified that CDFW has approved the release of funds for FY 2016-17.

Subventions 2017-18 – The District submitted an application for participation in the Program in the amount of \$565,000. \$14.5 million has been approved for Program funding for FY 2017-18. The District's final claim has been submitted in the amount of \$315,922.67.

Subventions 2018-19 – The District submitted an application for participation in the Program in the amount of \$500,000. \$12 million has been approved for Program funding for FY 2018-19, consistent with recent previous years.

Subventions 2019-20 – The District submitted an application for participation in the Program in the amount of \$615,000. DWR has lowered the Program funding amount to \$10 million for FY 2018-19. We believe \$10 million is likely not sufficient to fully fund the Program and have expressed our concerns to DWR and the Central Valley Flood Protection Board.

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

Special Projects – Construction of the Old River multi-benefit levee rehabilitation project has restarted with Teichert mobilizing to the site on May 1, 2019. Teichert has completed trenching the levee crest, dewatering the on-island borrow site, stripping peat from the borrow site, and has begun placing both on-island borrow and imported material on the levee slope. Approval of off-site import material sources required additional quality control measures to ensure material which meets project requirements. We have been coordinating with Teichert, the District, and D&L Farms on dust control, access, haul truck speed, and the schedule of construction activities including siphon/pipe replacement. Details of siphon replacement is still being worked on between MBK and Teichert to ensure proper location and sizing of the pipes. The project is on schedule and the levee rehabilitation component will be complete by the end of 2019.

We have submitted a Full Proposal for a Directed Action project to rehabilitate the north and south levees. DWR is currently reviewing the proposal and has indicated that sufficient funding for the project may not be available at this time.

RD 2028
Engineer's Report

July 10, 2019
Page 2

Five Year Plan – We have received a fully executed funding agreement for the Five-Year Plan (FYP). We have started work on the Plan update and have received an advance of funds in the amount of \$26,250.00.

SB 88 – Work under Phase 2 of the measurement experiment (work plan for 2019) is progressing and coordination with the Delta Measurement Experimentation Consortium continues. Eight of the nine existing test sites appear to be functioning properly and collecting flow data.

Siphon logs for calendar year 2018 have been summarized and were used for water right reporting calculations. 2019 siphon logs have been received for the month of May and collection of June logs is in progress. Site visits were limited during the month due to non-use of siphons. Portable meter testing is scheduled to continue during the irrigation season.

Site visits were conducted on Bacon Island on 6/14/19 and 6/27/19 to troubleshoot and replace various sensors. Site visits were conducted on Bouldin Island on 6/6/19 and 6/21/19 to continue troubleshooting various sensor related issues including loss of power, corrosion, and communications related issues. The new flow meters recently ordered are in the process of being delivered and installed.

Reclamation District No. 2028 Bacon Island Issue Tracking Summary

7/3/2019

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
						Eucalyptus trees present a		
8	Low	11/2/2016	Dave Forkel	Station 668-702	Encroachment	hazard	Investigate	Review, explore removal
						Seepage exiting at toe of		
						slope near retaining wall		12/4/17 - Area dried up after
36	Low	2/24/2017	Nate Hershey	Station 712	Seepage	structure.	Monitor	winter; continue to monitor
						Seepage existing at toe of		
						slope, running across		
43	Medium	4/4/2017	Brian Janowiak	Station 92-93	Seepage	county road		
						CDFW mitigation site		
						shows evidence of arundo		Discuss mitigation
48	Low	6/14/2017	Dave Forkel	Station 190+00	Vegetation control	mowing.	Investigate	requirements.
						Rip rap sliding down slope		
						causing exposure to		Monitor for right now, repair
67	Medium	6/21/2018	Andrew Reece	Station 596+50	Sloughing	waterside slope	Monitor	in the near future.
67.1		6/27/2019						Rip rap placed in issue area.
						Few sinkholes on ws slope		
						approximately 200ft north		
70	Medium	8/2/2018	Andrew Reece	Station 336	Rodent Activity	of siphon.	Monitor	
								Burrows chased, re-
70.1		6/27/2019						compacted, and filled with AB.
				Around Station				
				700 near South				Just down station of Juniors
				east corner of				place, mix of rodent burrow
71	Medium	8/30/2018	Michael Nishimura	island	Rodent Activity	2 large size burrow dens	Investigate	and erosion
							Monitor all boil sites;	
							containment berms	Continue to monitor; flows
				West and North		Numerous locations along	built on two most	seem to have receeded or
72	Medium	1/17/2017	Junior	levees	Boil	west and north levees	severe boils	stopped with lower tides
				Station 465 @		Trash racks in need of		
73	Medium	10/21/2016	Ralph Heringer	Pump Station	Broken Equipment	maintenance/repair	Investigate	TBD

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7/3/2019

IssueID	Priority	Report Date	Reporter	Location	Issue Type	Description	Action	Field Notes
						W/s sloughing into crest,		
				Old River Levee @		1.5-foot tall head scarp,		
75	Medium	2/15/2019	Mike Kynett	473+00	Erosion	existing rock slipped	Monitor	
								Rip rap placed in issue area.
								Site within Special Projects
75.1		6/27/2019						Area.
				Old River Levee		W/s sloughing into crest, 3-		
76	Medium	2/15/2019	Mike Kynett	@ ~524+00	Erosion	foot tall head scarp	Repair	
						W/s sloughing, 3-foot tall		
				Old River Levee @		vert head scarp, not yet		
77	Medium	2/15/2019	Mike Kynett	~530+00	Erosion	into crest	Monitor	
				Sante Fe Cut @		W/s sloughing and		
78	Medium	2/15/2019	Mike Kynett	~678+00	Erosion	cracking into crest	Monitor	
				Connection		W/s sloughing into crest, 2-		
				Slough Levee @		foot tall head scarp,		
79	Medium	2/15/2019	Mike Kynett	~204+00	Erosion	existing rock slipped	Repair	
79.1		6/27/2019						Rip rap placed in issue area.
				Connection				
				Slough Levee @ ~				
80	Medium	2/15/2019	Mike Kynett	262+00	Erosion	W/s sloughing	Monitor	
80.1		6/27/2019						Rip rap placed in issue area.
				Old River Levee @		Report of water exiting		
81	Medium	2/15/2019	Mike Kynett	~332+00	Seepage	levee during high tide	Investigate	
				Old River Levee @		W/s sloughing into levee		
82	Medium	2/15/2019	Mike Kynett	~364+00	Erosion	crest, 1.5-foot tall scarp	Repair	
								Rip rap placed in issue area.
								Site within Special Projects
82.1		6/27/2019						Area.

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						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	
89		6/27/2019	Michael Nishimura	Station 531+00	Sloughing	4 foot vert scarp, 3-4 feet from crown	Monitor	
					<u> </u>	4 foot vert scarp about 4		
90		6/27/2019	Michael Nishimura	~Station 528+00	Sloughing	feet from crown	Monitor	
				North of Siphon near Statiojn				
91		6/27/2019	Michael Nishimura	530+00	Crack	Cracking along WS hinge	Monitor	