



MEMORANDUM

TO: SLDMWA O&M Technical Committee

FROM: Paul Stearns, O&M Manager, SLDMWA

DATE: October 11, 2018

RE: O&M Cost and Budgeting Consideration for the Delta-Mendota Canal (DMC)
Tile Drain Sumps and Drainage Management

BACKGROUND

In 1953, in the effort to mitigate for drainage issues along the western side of the Lower DMC, a tile drain system was installed by Reclamation along an 11.5-mile stretch from the end of the lined section of the DMC (milepost 98.64) to Washoe Avenue (milepost 110.12). This tile drain system collects the subsurface drainage and carries it to a lateral tile drain system that parallels the DMC. The water was pumped from six collection sumps (A-B, C, D-E, F-G, H-J, K) into the DMC. These sumps were installed under a long-term commitment by Reclamation to mitigate for drainage impacts in the unlined portion of the Delta-Mendota Canal resulting from its construction and operation.

In 1988, the California Regional Water Quality Control Board imposed monitoring requirements on Reclamation's sumps. Since, concerns by U.S Fish & Wildlife Service (USF&WS) over the poor water quality entering the DMC from these tile drains were raised over the years. In 2009, it was the desire of Reclamation and the USF&WS to incorporate these sumps into the Grassland Bypass Project's San Joaquin River Improvement Project to eliminate the discharge from the freshwater deliveries to the managed wetland areas. This desire was incorporated into the 2010-2019 Grassland Bypass Project's San Luis Drain Use Agreement and Biological Opinion. In 2014, Reclamation entered into a license agreement with Panoche Drainage District to install new facilities to redirect the discharge from the six tile drain pumps to SJRIP and to O&M the new facilities, the DMC Sumps, and associated pumps on Reclamation's right-of-way. Reclamation also provided approximately \$500k of funding for the design and construction of the new facilities.

Prior to PDD assuming the responsibility for O&M, the Water Authority performed the work as part of the overall DMC O&M. The license contemplated the Authority, and Panoche entering into a separate agreement(s) for O&M of the facility. Unfortunately, that agreement was not completed. The license provided that PDD assume the O&M responsibility but was silent on who

was responsible for the cost related to the O&M work. However, since 2014 PDD assumed all the cost associated with the O&M of the pumps and motors including the cost to power the pumps and management of the redirected flow. In 2017, PDD informed Reclamation and the Authority that the O&M costs of the tile drain pumps as well as the cost of the drainage management should be more appropriately borne by Reclamation/SLDMWA under the Transfer Agreement. After several meetings with Reclamation, Reclamation informed the Authority in early October that they agree that the O&M costs at issue should now be part of the overall Delta-Mendota Canal O&M costs and should be included as part of the Authority's O&M rates. The Water Authority is awaiting a formal written notification from Reclamation on this requirement.

O&M COST

Prior to 2014, the Water Authority's average costs per year to O&M the tile drain pumps were \$22,000.00.

PDD has provided the Authority the estimated FY19 O&M costs associated with the sump pump and drainage management (see attached). The cost includes the direct costs associated with O&M of the sump pumps/motors and 12% of the costs related to the O&M of the SJRIP. The twelve percent is based on the DMC flows constitutes 12% of the total SJRIP flows.

ISSUE FOR DECISION

Whether to amend the FY19 and include in the FY20 O&M budget to accommodate these unanticipated costs associated for the O&M of the tile drain pumps and drainage management by PDD.

RECOMMENDATION

We recommend following Reclamations decision and include the appropriate related O&M costs and in addition, enter into an agreement with PDD for the O&M for the DMC sump pumps and drainage management of the DMC subsurface drainage flows.

**Reclamation's DMC Sump Water Management
SLDMWA Fiscal-Year Mar 2018 - Feb 2019**

Premise		
	1,300	Avg. Metered Sump Discharge (af/yr)
	12%	of SJRIP annual inflow
	\$2,648,724	2018-19 SJRIP Annualized O&M Budget
	\$788,701	2018-19 SJRIP Non-Participant Fee Revenue
DMC Sump Operation	Budget	Forum
100% Share Operation	\$16,000	PDD
100% Share Maintenance	\$6,500	PDD
Sub-Total:	\$22,500	
SJRIP Discharge Management		
12% Share of 2018-19 SJRIP NPF Revenue	-\$94,644	SJRIP
12% Share of 2018-19 SJRIP Cost	\$317,847	SJRIP
Sub-Total:	\$223,203	
Discharge Management Monitoring and Mitigation		
6% Share of Water Quality Monitoring	\$12,300	GBD
12% Share of Biological Monitoring and Habitat Mitigation	\$1,200	GBD
12% Share of Egg Monitoring	\$13,200	GBD
Sub-Total:	\$26,700	
TOTAL:	\$272,403	2018-19 Fiscal-Year

PDD = Panoche Drainage District

SJRIP = San Joaquin River Improvement Project

GBD = Grassland Basin Drainage