

Levee Geotechnical Exploration

August 2013

SAN JOAQUIN RIVER
RESTORATION PROGRAM



San Joaquin Levee Evaluations Project (SJLE Project) (2013 MAP Study 13)

The SJLE Project is led by a DWR Team from the Division of Flood Management, Flood Projects Office. The project goal is to assist SJRRP in assessing flood risks and identify potential mitigation strategies to maintain acceptable flood risk management associated with actions of the SJRRP with respect to levee seepage and stability. The technical evaluations for this project are being performed by DWR Non-Urban Levee Evaluations Program technical staff.

Project Status

DWR has prioritized levee segments within the SJRRP study area for geotechnical evaluation based on flow rates and potential channel use for Restoration flows. DWR is currently performing geotechnical explorations of the highest priority levee segments located in Reach 2A, the Eastside Bypass between Sand Slough and Mariposa Bypass, and the lower portion of Reach 4A. The SJLE Project will be performing levee seepage and stability analyses using this exploration data. DWR Division of Integrated Regional Water Management/ South Central Region Office (DIRWM/SCRO) will use this information to assist the SJRRP estimate then-existing channel capacities to inform Reclamation on the release of Restoration flows (as defined in the PEIS/R). Exploration of the remaining levee segments will be considered based on future Reclamation decisions regarding the Reach 2B and Reach 4B projects and funding availability.

Summary of the Data Collected

First Phase of Explorations has been completed and the summary of the data is shown in the table below. The Cone Penetration Tests (CPT) and the borings were performed on the levee crests with occasional explorations on the levee toe. The data will be available with the Draft Geotechnical Evaluation Report later in the summer of 2013.

SJLE Geotechnical Field Explorations						
Reach	Bank	NULE Segment(s)	CPT		Borings	
			#	footage	#	footage
Reach 2A - San Joaquin River	Left	220	18	720	8	201
Eastside Bypass Canal between Washington Road and Mariposa Bypass	Right	182	58	2560	12	525
	Left	252/253	59	2900	12	565
Reach 4A - San Joaquin River	Right	183	11	440	2	80
	Left	355/5028	10	400	3	120
Totals			156	7020	37	1491

Summary of Results and Reports

With collection of the field data complete the team will continue the preparation of the data report for the geotechnical explorations. The current schedule is:

Geotechnical Evaluation Report (GDR) will be finished August 2013

Geotechnical Overview Report (GOR) will be finished March 2014

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