# Monitoring Methodology

Sediment data collection was a joint effort among the California Department of Water Resources (DWR); U.S. Department of the Interior, Bureau of Reclamation (Reclamation), both the local field office and the Technical Service Center; and the U.S. Geological Survey (USGS). Data were collected in Reach 1 of the main stem of the San Joaquin River between Friant Dam and Gravelly Ford. Acquired sediment data will be used in the numerical modeling, gravel mobilization studies, and monitoring of bed material throughout Reach 1.

## Suspended-Sediment, Bedload, and Bed Gradation Data

During 2012Interim Flows, USGS monitored suspended-sediment and bedload at six sites:

* Highway 41
* Skaggs Bridge
* Gravelly Ford
* 1.3 miles west of Napa Ave (Above Bifurcation)
* Below the Chowchilla Bypass Bifurcation Structure (Below Bifurcation)
* Near Mendota Dam

During each site visit, USGS collected suspended sediment samples, bedload samples, bed gradation samples, and at least one streamflow measurement. USGS analyzed suspended sediment samples for the sand/fine split.

All suspended sediment and bedload sampling was conducted according to USGS protocols.

USGS tested instrumentation for suspended sediment and particle size distribution at the Gravelly Ford gage. The LISST-Streamside package manufactured by Sequoia Scientific consists of a laser-diffraction instrument on shore connected to a pumping system. Continuous records of concentration and particle size allow for a more detailed assessment of changes in sediment supply, especially during high-flow releases from Friant Dam.

Sample analysis is conducted at the USGS Marina Sediment Laboratory. Preliminary data are presented in this appendix.