Bed Sampling (2013 MAP Study #25) 2013 ATR Summary

Introduction

Data discussed in this report were collected as a part of the Channel Capacity Management study Monitoring Cross Sections Re-surveys. This monitoring task includes collecting and analyzing river bed samples in the sand-bed reach of the San Joaquin River in order to improve understanding of the sediment transport behavior of the river.

Methods

The riverbed sampling sites are located between River Mile 212 and River Mile 235. The sampling locations selected within the selected topographic monitoring sections are shown in Figure 1. Sampling and analysis methodologies were described in 2010 and 2011 ATRs in detail.

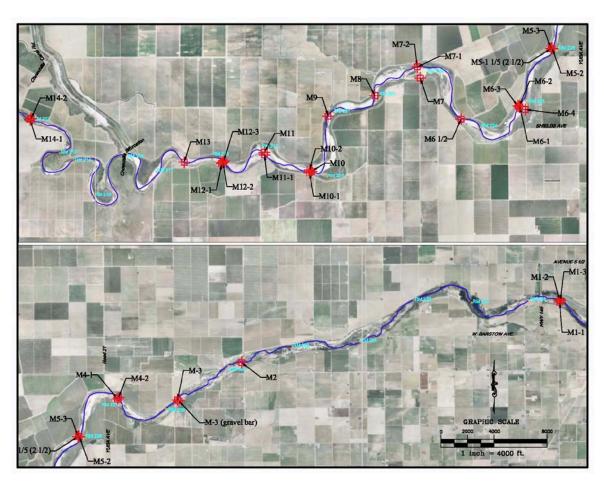


Figure 1. Sampling Location Map

Results

Channel bed samples from the topographic survey sites in Reaches 1B, 2A, and 2B were collected again in March 2013 during the cross-section surveys to evaluate the changes in the substrate characteristics after the 2012 winter flow release from Friant Dam. Bed samples were not collected in a few locations due to either high water level or human error. Samples are analyzed and results are reported in the attached spreadsheet along with past data for comparison purposes. No significant changes were observed in particle sizes of collected samples except at locations M6 and M6.5. A slight increase in particle size was observed at M6 and M6.5 after the 2012 winter flow.