

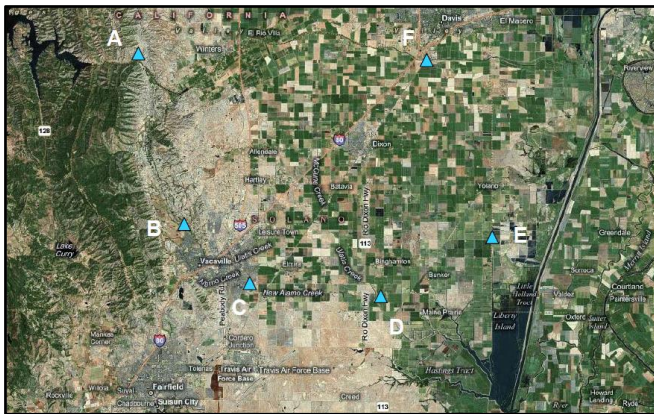
Surface-Water-Quality Monitoring Program Design and Implementation, Cache Slough Watershed

Solano County Water Agency, Solano County, California



stormwater sampling
data review and analysis
water quality database development
watershed management
watershed stakeholder coordination

Terraphase manages and implements a multi-year watershed-wide wet-weather stormwater sampling and data analysis program for Solano County Water Agency (SCWA). Terraphase compiles relevant water quality data from existing sources and collects targeted surface-water-quality samples at designated Solano County locations representative of key tributary areas throughout the Cache Slough contributing watershed. Terraphase staff identified data gaps that limit current understanding of the extent of impacts from a wide range of non-point-source stormwater contaminants (physical parameters, sediment, metals, nutrients, pesticides, bacteria) within the larger watershed study area. Terraphase conducts surface-water quality sampling activities throughout the watershed and also compiles an inventory of other existing data sources and monitoring locations to expand the current water quality data set.



A: Upper Putah C: Alamo E: Z Drain Area
B: Upper Ulatis D: Lower Ulatis F: Lower Putah

Terraphase staff worked with SCWA and local stakeholders to develop a sampling approach and determine the study-area boundaries and specific objectives for the augmented water quality monitoring program.

Coordination and meetings with local stakeholders (City of Vacaville, Solano Irrigation District, City of Dixon, etc.) were conducted to identify additional data collection and potential water quality sampling approaches, opportunities, analytes, locations, and strategies. Based on compiled information and associated analyses, as well as a demonstration sampling plan that was presented and approved by the watershed stakeholders, Terraphase staff developed the Cache Slough Watershed Water Quality Monitoring Program and field/lab data QA/QC protocol.



Terraphase staff provide ongoing wet-weather water-quality-sampling services for SCWA. We provide a summary of the data collection efforts/sampling results in the form of a technical memorandum to SCWA and other watershed stakeholders including technical presentations at the Bay-Delta Science Conference. Terraphase staff interpret the data with respect to the stated monitoring program purposes to support future water quality management decisions.