



San Joaquin River Basin Rotational Sub-basin Monitoring: Eastside Basin Report (Central Valley Region)

What is it?

The San Joaquin River Basin Rotational Sub-basin Monitoring Project was a program to monitor the tributaries of the San Joaquin River watershed. The watershed was divided into five sub-basins, each of which was intensively monitored for one year on a rotational basis. The objectives of the project were to coordinate with other monitoring efforts, evaluate spatial and temporal trends both within and between sub-basins, identify beneficial use concerns and generate recommendations for future studies.

The eastside basin covers approximately one third of the entire San Joaquin River basin and includes the Stanislaus, Tuolumne, and Merced River watersheds as well as the Farmington and valley floor drainage areas. The basin is made up of two distinctly different hydrologic regimes: river watersheds, originating in the Sierra Nevada mountains and the drainage areas originating at the head of the lower watersheds by seepage and diversions from the rivers. Both types have been subject to intense hydrological modification; for example numerous storage reservoirs have been constructed in the upper river watersheds including Hetch Hetchy, New Melones, Don Pedro and Lake McClure. The drainage areas are made up primarily of networks of constructed – or highly modified natural – channels carrying supply and waste water generally related to agricultural and urban uses.

As part of the San Joaquin River Basin Rotational Sub-basin Monitoring Project, the eastside sub-basin was intensively sampled from January 2003 to April 2004. Sampling sites were selected to complement monitoring already occurring in the watershed, such as flow and precipitation gages maintained by the California Department of Water Resources (CDWR) and United States Geological Survey (USGS), and targeted water quality monitoring conducted by USGS and Modesto Irrigation District. In 2010 SWAMP staff published a report which assessed attainment of key beneficial uses – drinking water, aquatic life, recreation and irrigation supply – of the eastside sub-basin waterbodies.

Why is it important to the State?

The San Joaquin River watershed covers 17,720 square miles and is one of the two major rivers which drain California's central valley (the other being the Sacramento River to the north). The waterbodies of the San Joaquin watershed provide multiple beneficial uses for agricultural, urban, recreational and environmental interests.

The eastside sub-basin is one of the five sub-basins that are tributary to the San Joaquin river and is an integral part of this important watershed. The upper watershed areas supported gold mining activities in the mid 1800's. More common now are timber harvest activities, as well as developed areas and recreation. The lower watershed area is dominated by orchards and row crops, as well as urban and rural communities.

Why is it important to me?

Monitoring efforts in the eastside sub-basin were focused on local concerns including watershed characterization, flood control, evaluating potential impacts from agriculture and rural/urban development. This report provides information about the condition of eastside sub-basin waterbodies that can be utilized by local water quality managers, interested stakeholders, and the public.

How will this information be used?

Data collected as part of this study provided background water quality information for inflows to the San Joaquin river and was assessed in combination with other available data during the development of the Clean Water Act Sections 305(b) and 303(d) Integrated Report for the Central Valley Region (CVRWQCB, 2009), which assessed overall water quality within the central valley of California and also identified impaired waterbodies (waterbodies not meeting their beneficial uses designations). The finding within this report also can be used determine future program design by focusing resources toward identified concerns.

For more information go to: http://www.swrcb.ca.gov/rwqcb5/water_issues/swamp/water_quality_reports/index.shtml#sjrivbasin