

Central Valley Safe to Swim Study

What is it?

Since 2007, the Central Valley Water Board has monitored fecal indicator bacteria (FIB) at swimming holes and recreational rivers during the summer months. The goal of the project is to determine if there is evidence that recreational beneficial uses are not being met and, if so, identify potential sources of fecal pollution. The Central Valley Water Board has coordinated with local watershed groups to identify popular swimming areas and to conduct the sampling. Over the last seven years, SWAMP staff and their partners have monitored 172 sites and collected nearly 3,000 samples.



Sampling on the South Yuba River.

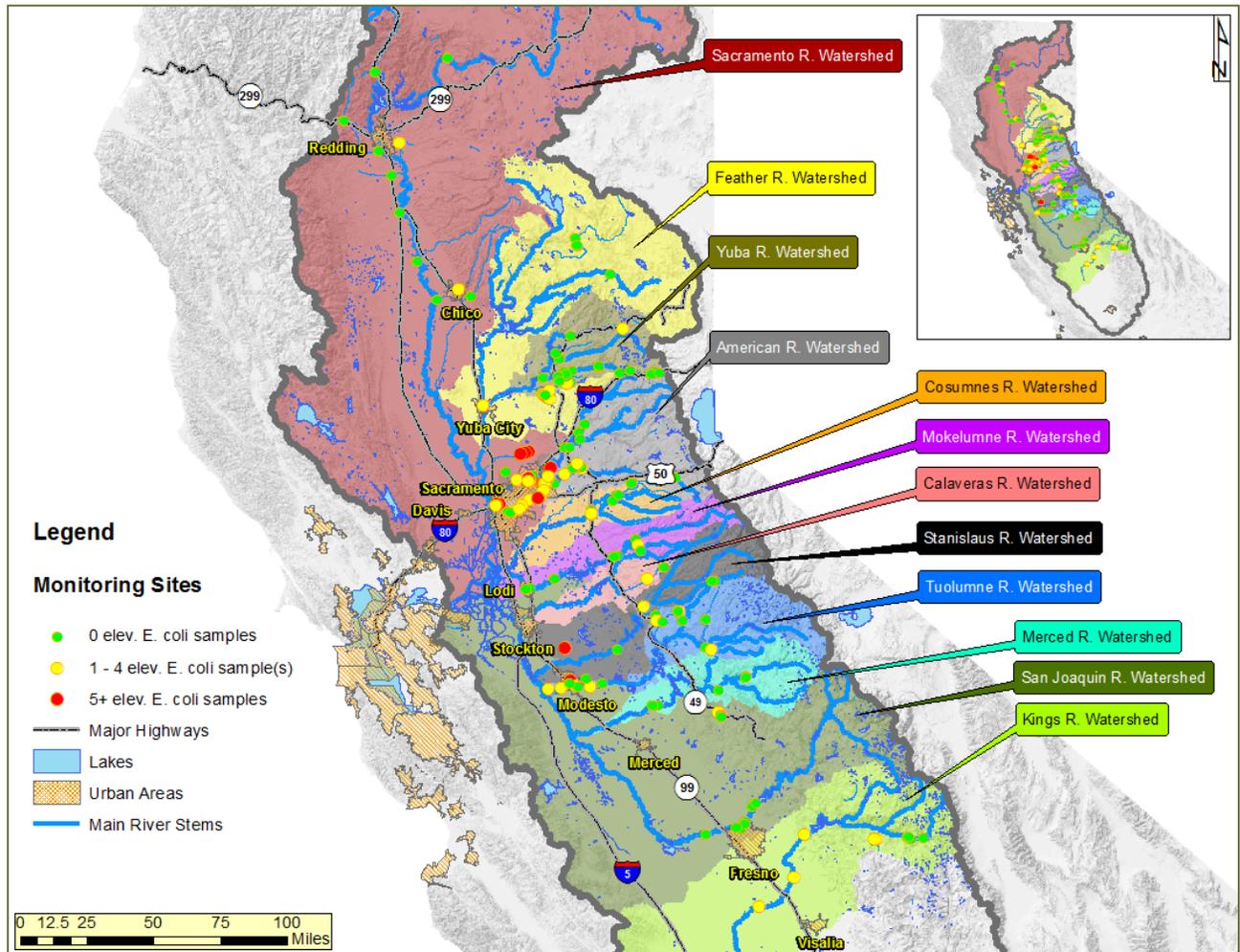
In 2012 and 2013, SWAMP worked with the University of California, Davis to analyze for specific pathogens at swimming holes with a history of elevated FIB. Pathogen analyses included *Cryptosporidium* spp., *Giardia* spp., *E. coli* O157:H7, and *Salmonella*.



Swimmers in Granite Bay at Folsom Lake.

Why is it important?

The Central Valley Region boasts numerous rivers, streams, and lakes that are popular with swimmers, rafters, kayakers, and other recreational users. Studies have shown a link between illness and fecal contamination in recreational waters. Fecal matter can be a major source of pathogens in ambient water. FIB are commonly monitored as a surrogate for potential pathogens and subsequent public health risk in both recreational and drinking waters.



Map of sites monitored under the Safe to Swim program from 2007 to 2014.

Currently over eighty water bodies in the Central Valley Region are listed as impaired due to pathogens or FIB, indicating this is a widespread concern. Prior to this study, limited information was available for many popular swimming areas and, in particular, water bodies in the foothills of the Sierra Nevada. In addition, SWAMP staff used this study as an opportunity to develop partnerships with local watershed groups, including sharing data and providing hands-on training.

How will this information be used?

Results from this study will be used by the Central Valley Water Board to identify watersheds impacted by fecal pollution, prioritize future microbial source tracking (MST) efforts, and determine additional monitoring needs. In 2015, SWAMP will initiate a MST pilot study in three watersheds with a history of

elevated FIB. This study will collect information to help determine the factors influencing FIB levels and identify the dominant sources of fecal pollution.

All monitoring data is made available through [CEDEN](#) and shared with local watershed groups. Data collected from this study provides background water quality information which will be used in combination with other available data to assess water quality impairment for the Clean Water Act Sections 305(b) and 303(d) Integrated Report.

For more information:

- [Final Report](#) on the 2012-2013 pathogen monitoring
- Central Valley Water Board [Safe to Swim](#): watershed summaries, reports, and additional information
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