

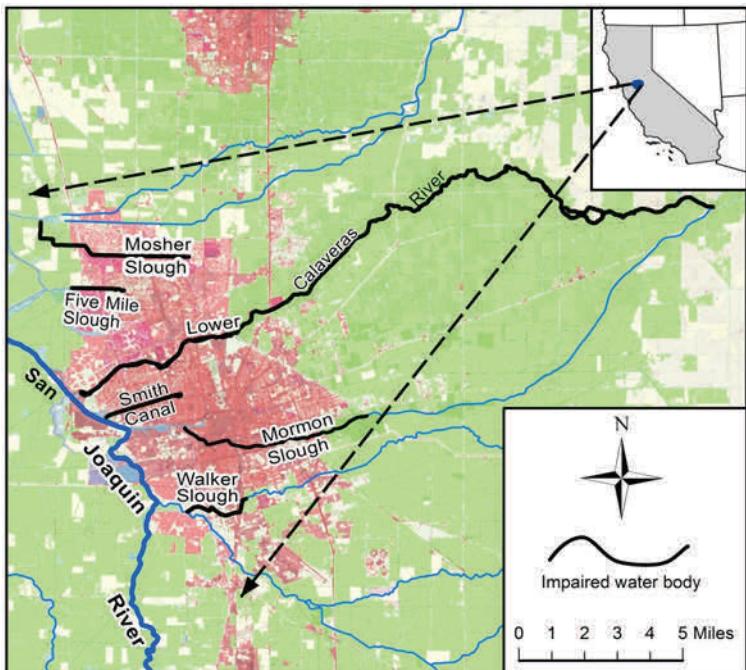
Water Quality Report Card		Pathogens in Stockton Urban Water Bodies	
Regional Water Board:	Central Valley, Region 5	STATUS	<input type="checkbox"/> Conditions Improving
Beneficial Uses Affected:	REC-1		<input type="checkbox"/> Data Inconclusive
Implemented Through:	MS4 Storm Water Permit		<input checked="" type="checkbox"/> Improvement Needed
Effective Date:	March 2008		<input type="checkbox"/> Targets Achieved/Water Body Delisted
Attainment Date:	None assigned	Pollutant Type:	<input checked="" type="checkbox"/> Point Source <input type="checkbox"/> Nonpoint Source <input type="checkbox"/> Legacy

## Water Quality Improvement Strategy

The [Stockton Urban Waterbodies Pathogen TMDL](#) for Five Mile Slough, Lower Calaveras River, Mosher Slough, Smith Canal, Mormon Slough, and Walker Slough was adopted by the Regional Water Board in March 2008, and approved by the USEPA in May 2008. The TMDL addresses pathogen impairments in urban water bodies in the City of Stockton utilizing the bacterial indicators fecal coliform and *E. coli*.

The TMDL is being implemented through the City of Stockton and County of San Joaquin [MS4 storm water permit](#). To comply with the TMDL, the permittees submitted a Pathogen Plan in 2004, which was subsequently updated in 2009. The Plan outlined a three-phased approach that included characterization monitoring, source identification studies, and the development and implementation of Best Management Practices (BMP) with effectiveness monitoring. Monitoring is scheduled to occur between 2004 and 2018. BMP implementation has included public education and outreach regarding proper disposal of pet waste, and inspections of facilities containing potential sources of livestock contamination.

## Stockton Urban Water Bodies



## TMDL Waste Load Allocations

Parameter	Waste Load Allocation (MPN/100ml)
Fecal Coliform	200 Geometric Mean <sup>1</sup> 400 for 10% of samples <sup>2</sup>
<i>E. Coli</i>	126 Geometric Mean <sup>3</sup> 235 single sample max

<sup>1</sup> Geometric mean concentration of not less than five samples for any 30-day period

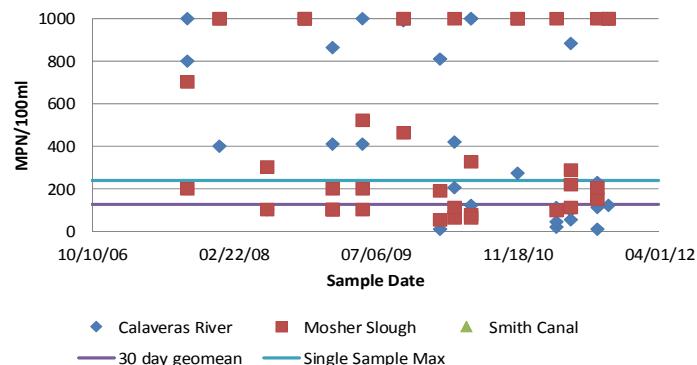
<sup>2</sup> During any 30-day period

<sup>3</sup> Geometric mean concentration of a statistically sufficient number of samples (generally not less than five samples equally spaced over a 30-day period)

## Water Quality Outcomes

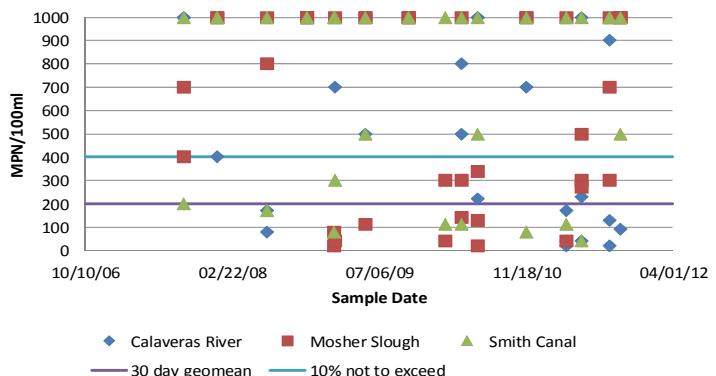
- Exceedances of pathogen water quality objectives continue to occur in listed water bodies.
- Implementation of BMPs is ongoing by the permittees.
- Monitoring conducted by the permittees to date has identified pathogen contamination from sources associated with humans, dogs, and livestock.
- Phased monitoring by permittees continues. The location and frequency may change to incorporate participation in the [Delta Regional Monitoring Program](#) by permittees.

## *E. Coli* in Stockton Watershed\*



\* 57 samples were greater than 1000 MPN/100ml. These samples have been plotted at 1000 MPN/100ml.

## Fecal Coliform in Stockton Watershed\*\*



\*\* 77 samples were greater than 1000 MPN/100ml. These samples have been plotted as 1000 MPN/100ml.