

Water Quality Report Card	
Regional Water Board:	San Francisco Bay, Region 2
Beneficial Uses Affected:	REC-1, REC-2
Implemented Through:	NPDES Permits, CAF WDR, Grazing WDR, Sanitary Sewer Overflow, Stormwater Phase II Permit, OWTS
Effective Date:	December 6, 2007
Attainment Date:	N/A

Pathogens in the Napa River Watershed		
STATUS	<input type="checkbox"/> Conditions Improving	
	<input type="checkbox"/> Data Inconclusive	
	<input checked="" type="checkbox"/> Improvement Needed	
	<input type="checkbox"/> Targets Achieved/Water Body Delisted	
Pollutant Type:	<input checked="" type="checkbox"/> Point Source	<input checked="" type="checkbox"/> Nonpoint Source
Pollutant Source:	Municipal wastewater treatment discharge	Onsite wastewater treatment systems
	Sanitary sewer lines	Confined animal facilities
	Grazing	Urban storm runoff

Water Quality Improvement Strategy

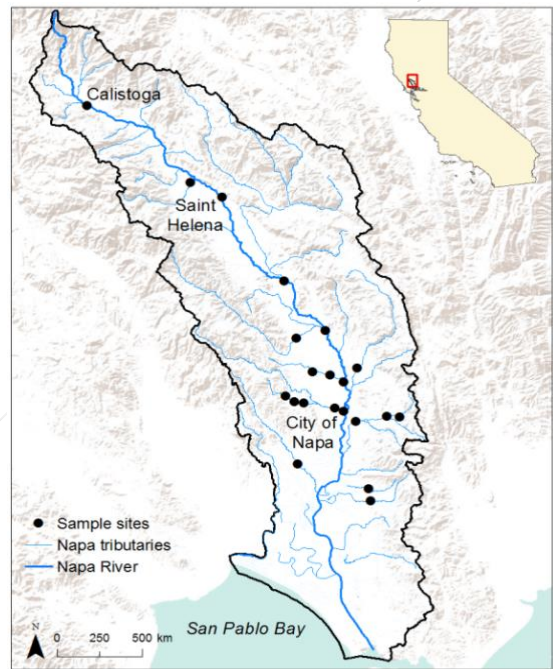
The Napa River Watershed is located in the California Coast Range to the north of San Francisco Bay. In 2006, the San Francisco Bay Regional Water Board adopted the [Napa River Pathogen TMDL](#) to address pathogen impairments in the watershed. The primary sources of pathogens identified in the TMDL included septic systems, municipal stormwater runoff, sewer discharge, grazing, and Confined Animal Facilities (CAFs). Multiple actions have been taken to implement the TMDL including: 1) adopting the statewide Onsite Wastewater Treatment Systems (OWTS) Policy to reduce pathogens from septic systems; 2) adopting statewide Waste Discharge Requirements (WDRs) for Sanitary Sewer Systems in 2006; 3) incorporating TMDL loads into the small municipal stormwater NPDES permit to regulate urban runoff; 4) adopting the Confined Animal Facility (CAF) WDRs in 2016; and 5) adopting the Grazing Operations WDRs in the Napa and Sonoma Watersheds in 2011.

Future implementation actions include reissuance of Grazing WDRs, approval of the Napa County OWTS management plan, regulation of horse boarding facilities and other CAFs, and continued monitoring.

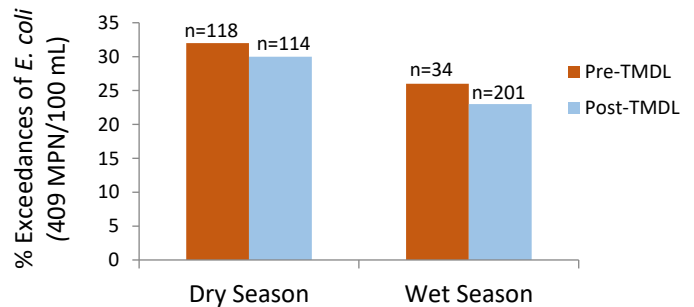
Water Quality Outcomes

- Water quality data (top graph) did not show significant differences in exceedances of the single sample maximum *E. coli* TMDL target (409 MPN/100) in samples collected pre- and post-TMDL implementation. This suggests that pathogen conditions have not improved in the watershed when considering all of the sample sites.
- Water quality improvements include decreases in exceedances during the summer dry season along the mainstem of the Napa River (bottom graph), where the most recreation occurs.
- Increases in exceedances along the mainstem of the Napa River (bottom graph) during post-TMDL wet season resulted from increased runoff during heavy rain events in winter and spring of 2017.

Napa River Watershed



% Exceedances of *E. coli* for all Napa River and tributary sites



% Exceedances of *E. coli* for Napa River mainstem sites

