

Water Quality Report Card		Bacteria in the Middle Santa Ana River Watershed	
Regional Water Board:	Santa Ana, Region 8	<b>STATUS</b>	<input checked="" type="checkbox"/> Conditions Improving
Beneficial Uses Affected:	REC1, REC2		<input type="checkbox"/> Data Inconclusive
Implemented Through:	MS4 Permits, CBRPs		<input type="checkbox"/> Improvement Needed
Effective Date:	May 2007		<input type="checkbox"/> Targets Achieved/Water Body Delisted
Attainment Date:	Dry Season (Apr-Oct) by Dec 2015 Wet Season (Nov-Mar) by Dec 2025	<b>Pollutant Type:</b>	<input checked="" type="checkbox"/> Point Source <input checked="" type="checkbox"/> Nonpoint Source <input type="checkbox"/> Legacy

### Water Quality Improvement Strategy

The Middle Santa Ana River (MSAR) Watershed is located in San Bernadino and Riverside counties. Water bodies within the 488 square-mile MSAR Watershed, including Santa Ana River Reach 3 and its tributaries (Chino Creek, Cucamonga Creek, Mill Creek, and Prado Park Lake), are impaired due to high densities of bacterial indicators. [TMDLs for the Middle Santa Ana River](#) were approved by the USEPA in May 2007, and are implemented through MS4 permits for the two counties and the cities of Claremont and Pomona. Actions include the implementation of Comprehensive Bacterial Reduction Plans (CBRPs) that utilize adaptive management approaches, and innovative source tracking with *Bacteroides* to identify sources of *E. coli*, and develop and implement structural and non-structural Best Management Practices to control sources of bacteria and dry weather runoff. The load allocations for point and non-point sources of bacteria are based on a 4-sample/30-day log mean of less than 113 *E. coli* organisms per 100 ml. No more than 10% of the samples may exceed 212 *E. coli* organisms per 100 ml for any 30-day period. The graph at the bottom shows the concentrations of *E. coli* bacteria in the MSAR collected at the Pedley Avenue compliance monitoring site.

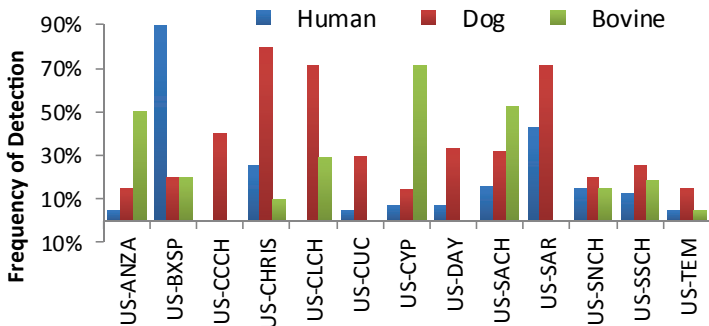
### Middle Santa Ana River Watershed



### Water Quality Outcomes

- Prado Park Lake is meeting the water quality objective (WQO) for *E. coli* 50% of the time, and the MSAR at Pedley Avenue is meeting the WQO for *E. coli* 56% of the time. Chino Creek and the MSAR at MWD Crossing are still exceeding the WQO for *E. coli* 100% of the time.
- There has been a significant reduction in urban runoff, and related human sources of bacteria, due to the drought and water conservation, construction of detention basins, and the removal of water from the creeks for reclamation.
- Next steps are to continue scheduled implementation actions, new/revised MS4 permits, modify the implementation action plan, continue water quality monitoring and source identification, and continue source controls.

### Sources of Impairment



*Bacteroides* results for source evaluation monitoring locations in MSAR Watershed. Red Bar = % samples with human *bacteroides*; Green Bar = % samples with canine *bacteroides*; Purple Bar = % samples with bovine *bacteroides*.

### *E. coli* Concentrations in the Middle Santa River at Pedley Avenue

