| Total Maximum Daily Load Progress Report |   | Watsonville Slough Pathogens TMDL |   |
|--|---|-----------------------------------|---|
| Regional Water Board                     | Central Coast, Region 3                 | STATUS                            | <ul> <li>Conditions Improving</li> <li>Data Inconclusive</li> <li>Improvement Needed</li> <li>TMDL Achieved/Waterbody Delisted</li> </ul> |
| <b>Beneficial uses</b> affected          | REC-1, REC-2                            |                                   |   |
| Pollutant(s) addressed:                  | Fecal Coliform                          |                                   |   |
| Implemented through:                     | Regulatory and non-regulatory<br>Action |                                   |   |
| Approval date:                           | November 20, 2006                       |                                   |   |

## **TMDL** summary:

Watsonville Slough is on the 2010 Clean Water Act section 303(d) list of impaired waters for pathogens. Fecal coliform bacteria levels exceed Basin Plan objectives for the protection of water contact recreation (REC-1) and non-contact water recreation (REC-2). Urban stormwater and agriculture were identified as the primary sources of pathogens. The Central Coast Regional Water Quality Control Board developed a <u>TMDL for pathogens</u> that was approved by the Office of Administrative Law in November 2006.

The TMDL established an implementation plan, primarily through the use of National Pollutant Discharge Elimination System (NPDES) permits, Waste Discharge Requirements (WDRs), and a basin plan prohibition (Watsonville Slough Livestock Waste Discharge Prohibition). The TMDL implementation schedule calls for achieving pathogen levels in the Watsonville Sloughs by 2016.

## TMDL Waste Load Allocations/Load Allocations

| WASTE LOAD ALLOCATIONS   | Receiving Water Fecal<br>Coliform (MPN/100mL) <sup>1</sup> |  |
|--|--|--|
| Santa Cruz County, City of<br>Watsonville, Santa Cruz Co. Freedom<br>Sanitation District, City of Watsonville  | ≤200   |  |
| LOAD ALLOCATIONS   |  |  |
| Operators or owners of irrigated lands<br>who land-apply non-sterile manure<br>and/or operators and owners of<br>livestock facilities and animals  | ≤200   |  |
| <sup>1</sup> As geometric mean (geomean) of five (5) samples taken in a 30-day period, nor shall more than ten percent of total samples collected during any 30-day period exceed 400 MPN per 100mL. |  |  |



Watsonville Slough and Sub-watersheds (Source: Hagar, et al., 2004)

305HAR

305STI

- Available water quality data implies that Watsonville Slough conditions have not improved over a period of 8 years.
- Water quality data suggest urban areas (305STL) have lower fecal coliform levels than agriculture areas (305WSA, 305HAR).
- Water quality data show no evidence to suggest that the TMDL target will be achieved by 2016.
- More regulatory effort is required to implement the TMDL implementation plan.

