

STATE WATER RESOURCES CONTROL BOARD
BOARD MEETING SESSION--DIVISION OF WATER QUALITY
JUNE 21, 2006

ITEM 8

SUBJECT

CONSIDERATION OF A RESOLUTION APPROVING AN AMENDMENT TO THE WATER QUALITY CONTROL PLAN FOR THE CENTRAL COAST REGION (BASIN PLAN) TO ESTABLISH A TOTAL MAXIMUM DAILY LOAD (TMDL) FOR NITRATE-NITROGEN (NO₃-N) IN SAN LUIS OBISPO CREEK

DISCUSSION

San Luis Obispo Creek (Creek) was placed on the federal Clean Water Act 303(d) list for nutrients in 1994. On September 9, 2005, the Central Coast Regional Water Quality Control Board (Central Coast Water Board) adopted Resolution No. R3-2005-0106 ([Attachment](#)) amending the Basin Plan to establish a TMDL for NO₃-N in the Creek. The TMDL addresses impairment of the Creek due to the nutrient, NO₃-N. Current NO₃-N concentrations in the Creek are impairing the beneficial use of the municipal and domestic supply of water. Significant sources of the NO₃-N loading in the watershed are from irrigated agricultural activities on croplands and discharges from the San Luis Obispo Water Reclamation Facility (WRF). Less significant causes of NO₃-N loading in the watershed include residential, background, and reservoir sources.

TMDL targets are set at the Maximum Contaminant Level for nitrate (NO₃) adopted as objectives in the Basin Plan where nitrate expressed as nitrate (NO₃- NO₃) is 45 milligrams per liter (mg/L), which is equivalent to NO₃-N of 10 mg/L-N. The use of NO₃ as NO₃-N is a more current and more commonly referenced unit of measure. Scientific analysis is identical, but NO₃-N is more widely cited by laboratories and agencies such as the U.S. Environmental Protection Agency (USEPA). The wasteload allocation for the WRF point source is that the monthly mean NO₃-N concentration shall not exceed 10 mg/L-N. The load allocation for background will be a NO₃-N concentration of 0.1 mg/L-N. The load allocation for reservoirs will be that their discharge shall not cause an increase in receiving water NO₃-N concentration greater than the current increase in NO₃-N concentration resulting from the discharge. The load allocation for croplands in the Prefumo Creek watershed is that they shall not cause NO₃-N concentration in the receiving waters to exceed 10 mg/L-N. For this TMDL, there is a margin of safety of 2.2 mg/L-N from dilution. The margin of safety is calculated based on the difference between the TMDL and the allocated load. The allocations will result in an expected in-stream NO₃-N concentration of no more than of 7.8 mg/L-N.

This TMDL underwent scientific peer review by David Jenkins, Professor in the Graduate School, University of California at Berkeley. The majority of concerns expressed by Professor Jenkins were over areas that seemed unclear in the TMDL. The Central Coast Water Board staff, in most cases, added language to clarify the concerns or changed the language based on the peer reviewer's suggestions.

The TMDL's implementation measures will include the addition of an effluent limit for the WRF discharge to the National Pollutant Discharge Elimination System permit regulating this

discharge when it is renewed in 2007. Also at this time, the Central Coast Water Board intends to issue the WRF a Cease and Desist Order that includes a time schedule to meet the effluent limit.

Parties engaged in irrigated cropland activities are required to meet the conditions set forth in the Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands. If dischargers meet the requirements of the Conditional Waiver, they should achieve the allocations to the cropland source. Cropland allocation should be achieved by the year 2012.

Other less significant sources of NO₃-N in the watershed will be monitored to ensure that current NO₃-N loading levels do not increase. Specifically, the City of San Luis Obispo, the County of San Luis Obispo, and Cal Poly State University will implement management practices consistent with and required by Small Municipal Separate Storm Sewer System Permits and will submit annual reports as required by such permits. Central Coast Water Board staff will utilize these annual reports to verify that measures are taken to reduce, or hold at current levels, NO₃-N loading to receiving waters. If implementation actions are insufficient to achieve the TMDL, additional implementation measures will be required.

The Central Coast Water Board adopted an updated Basin Plan on February 11, 1994 under Resolution No. 94-44. The adopted Basin Plan was approved by the State Water Resources Control Board (State Water Board) on May 18, 1994 and by the Office of Administrative Law (OAL) on September 7, 1994.

The Basin Plan sets standards to protect all waters in the Central Coast Region and prescribes programs to implement these standards. The standards consist of the designated beneficial uses of the waters, narrative and numeric objectives to protect these uses, and the State's Antidegradation Policy.

POLICY ISSUE

Should the State Water Board approve the amendment to the Basin Plan to establish a TMDL for NO₃-N in the Creek as adopted under the Central Coast Water Board Resolution R3-2005-0106?

FISCAL IMPACT

Central Coast Water Board and State Water Board staff work associated with or resulting from this action will be addressed with existing and future budgeted resources.

REGIONAL WATER BOARD IMPACT

Yes, adoption of this Resolution will amend the Central Coast Water Board's Basin Plan.

STAFF RECOMMENDATION

That the State Water Board:

1. Approves the amendment to the Basin Plan to establish a TMDL for NO₃-N in the Creek as adopted under Central Coast Water Board Resolution No. R3-2005-0106.

June 2, 2006

2. Authorizes the Executive Director or designee to submit the amendment adopted under Central Coast Water Board Resolution No. R3-2005-0106, as approved, and the administrative record for this action to OAL and the TMDL to USEPA for approval.

**STATE WATER RESOURCES CONTROL BOARD
RESOLUTION NO. 2006-**

**APPROVING AN AMENDMENT TO THE WATER QUALITY CONTROL PLAN
FOR THE CENTRAL COAST REGION (BASIN PLAN) TO ESTABLISH A
TOTAL MAXIMUM DAILY LOAD (TMDL) FOR
NITRATE-NITROGEN (NO₃-N) IN SAN LUIS OBISPO CREEK**

WHEREAS:

1. The Central Coast Regional Water Quality Control Board (Central Coast Water Board) adopted a revised Basin Plan on February 11, 1994, which was approved by the State Water Resources Control Board (State Water Board) on May 18, 1994 and by the Office of Administrative Law (OAL) on September 7, 1994.
2. On September 9, 2005, the Central Coast Water Board adopted Resolution No. R3-2005-0106 (**Attachment**) amending the Basin Plan to establish a TMDL for NO₃-N in San Luis Obispo Creek.
3. Central Coast Water Board staff prepared documents and followed procedures satisfying the requirements of the California Environmental Quality Act.
4. The Central Coast Water Board found that this amendment would result in no adverse effect on wildlife, and the amendment would be consistent with the State Antidegradation Policy (State Water Board Resolution No. 68-16) and federal antidegradation requirements.
5. The State Water Board finds that the Basin Plan amendment is in conformance with Water Code section 13240, which specifies that Regional Water Quality Control Boards may revise Basin Plans, and section 13242, which requires a program of implementation of water quality objectives. The State Water Board also finds that the TMDL as reflected in the Basin Plan amendment is consistent with the requirements of federal Clean Water Act section 303(d).
6. A Basin Plan amendment does not become effective until approved by the State Water Board and until the regulatory provisions are approved by OAL. The TMDL must also be approved by the U.S. Environmental Protection Agency (USEPA).

THEREFORE BE IT RESOLVED THAT:

The State Water Board:

1. Approves the amendment to the Basin Plan to establish a TMDL for NO₃-N in San Luis Obispo Creek as adopted under Central Coast Water Board Resolution No. R3-2005-0106.

2. Authorizes the Executive Director or designee to submit the amendment adopted under Central Coast Water Board Resolution No. R3-2005-0106, as approved, and the administrative record for this action to OAL and the TMDL to USEPA for approval.

CERTIFICATION

The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on June 21, 2006.

Song Her
Clerk to the Board