

May 2, 2006

STATE WATER RESOURCES CONTROL BOARD
BOARD MEETING SESSION – DIVISION OF WATER QUALITY
MAY 15, 2006

ITEM #7

SUBJECT

CONSIDERATION OF A RESOLUTION APPROVING AN AMENDMENT TO THE WATER QUALITY CONTROL PLAN FOR THE SANTA ANA REGION (BASIN PLAN) TO INCORPORATE A TOTAL MAXIMUM DAILY LOAD FOR BACTERIAL INDICATORS FOR MIDDLE SANTA ANA RIVER WATERSHED WATER BODIES

DISCUSSION

The Santa Ana Regional Water Quality Control Board (Santa Ana Water Board) adopted the Basin Plan under Resolution No. 94-1 on March 11, 1994. The Basin Plan was approved by the State Water Resources Control Board (State Water Board) on July 21, 1994 and by the Office of Administrative Law (OAL) on January 24, 1995.

The Basin Plan sets standards to protect all waters in the Santa Ana Region and describes programs to implement these standards. The standards consist of the designated beneficial uses of the waters, objectives to protect these uses, and the State's Antidegradation Policy.

The Middle Santa Ana River was identified as not meeting water quality standards for bacterial contamination under section 303(d) of the federal Clean Water Act (CWA). The Total Maximum Daily Load (TMDL) addresses *fecal coliform* contamination of Middle Santa Ana River Watershed. The Santa Ana Water Board has determined that the numeric *fecal coliform* water quality objectives are not being met in Santa Ana River, Reach 3; Chino Creek, Reaches 1 and 2; Mill Creek (Prado Area); Cucamonga Creek, Reach 1; and Prado Park Lake (Middle Santa Ana River Watershed water bodies).

The Basin Plan specifies the following numeric objectives for *fecal coliform* indicator bacteria for the protection of contact recreation (REC1) beneficial uses of inland surface waters: log mean less than 200 organisms/100 per milliliter (mL) based on five or more samples per 30-day period and not more than 10 percent of the samples exceed 400 organisms/100 mL for any 30-day period.

Because the water bodies are listed as not meeting water quality standards, CWA section 303(d) requires that a TMDL be established for the water bodies. A TMDL specifies load allocations (LAs) for nonpoint sources and wasteload allocations (WLAs) for point sources that, when implemented, are expected to result in attainment of applicable water quality standards. State law requires an implementation plan and schedule to ensure that the TMDL is met. On August 26, 2005, the Santa Ana Water Board adopted Resolution No. RB8-2005-0001 ([Attachment](#)) amending the Basin Plan by establishing a TMDL for *fecal coliform* bacteria in Middle Santa Ana River Watershed.

The Basin Plan REC1 *fecal coliform* objective is proposed as the numeric target since compliance with this objective would assure the protection of the most sensitive use. In addition, the U.S. Environmental Protection Agency (USEPA) has required the states to evaluate and incorporate updated bacterial objectives, including *Escherichia coliform (E. coli)* as water quality standards based on its "Ambient Water Quality Criteria for Bacteria" (1986). The TMDL specifies alternative numeric targets for *E. coli* to be achieved in all Middle Santa Ana River Watershed water bodies. The *E. coli* targets are based on USEPA *E. coli* criteria that roughly correspond to the health risk level associated with the existing Basin Plan fecal coliform objectives. The TMDL will be revised if new objectives are adopted by the State Water Board or the Santa Ana Water Board.

The TMDL is expressed in terms of density, since it is the number of organisms in a given volume of water (i.e., their density) and not mass that is significant for protection of public health and beneficial uses. Similarly, the WLAs and LAs are also based on density. To achieve the density-based TMDL, each WLA and LA must meet the density-based TMDL.

Storm water runoff has been determined to be the major source of bacteria to the watershed. Significant sources of bacteria in Middle Santa Ana River Watershed water bodies are from confined animal feeding operations and urban storm water. Storm events transport runoff from urban, agricultural, and open space areas.

During dry weather, the water bodies receive "nuisance runoff" from urban areas. Nuisance runoff may include lawn irrigation runoff, automobile wash waters, washing of vehicles, and equipment or construction / industrial / commercial sites. The TMDL specifies that compliance with the dry season WLAs and LAs is to be achieved as soon as possible, but no later than December 31, 2015. Compliance with wet season WLAs and LAs, accounting for the difficulties associated with controlling storm water discharges, is to be achieved as soon as possible, but no later than December 31, 2025. WLAs are specified for urban storm water discharges and confined animal feeding operations. LAs are specified for runoff from other types of agriculture and from natural sources (open space/undeveloped forest land). To account for unknowns, such as bacterial re-growth, die-off, and dilution, the TMDL includes an explicit margin of safety of 10 percent.

The implementation of this TMDL contains four major tasks: (1) the Santa Ana Water Board will review and revise existing waste discharge requirements including National Pollutant Discharge Elimination System (NPDES) storm water permits to implement WLAs, including compliance schedules and/or monitoring program requirements; (2) the requirement of storm water dischargers, including those from the cities, unincorporated communities, and the agricultural operators in the watershed, to submit as a group to the Santa Ana Water Board for approval a proposed watershed-wide monitoring program that will provide data necessary to review and update the TMDL; (3) the Santa Ana Water Board will develop a list of all known agricultural operators in the Middle Santa Ana River Watershed that will be responsible for implementing requirements of the TMDL; and (4) the agricultural operators will develop Bacterial Indicator Agricultural Source Plans and Bacterial Indicator Agricultural Source Management Plans for agricultural discharges.

The TMDL will be reevaluated at least once every three years to determine the need for modifying the LAs, WLAs, and numeric targets. The Santa Ana Water Board will use its Water Code authority to implement the requirements of the TMDL on nonpoint source discharges as necessary. This could include issuance of waste discharge requirements, waivers, or other orders as appropriate.

Affected parties include the Cities of Pomona, Chino Hills, Upland, Montclair, Claremont, Ontario, Rancho Cucamonga, Rialto, Chino, Norco, Fontana, Corona, Riverside, and San Bernardino; the Counties of San Bernardino and Riverside; and the U.S Forest Service.

POLICY ISSUE

Should the State Water Board approve the amendment to the Basin Plan in accordance with the Staff Recommendation below?

FISCAL IMPACT

Santa Ana Water Board and State Water Board staff work associated with or resulting from this action can be accomplished within budgeted resources.

REGIONAL WATER QUALITY CONTROL BOARD IMPACT

Yes, Santa Ana Water Board.

STAFF RECOMMENDATION

That the State Water Board:

1. Approves the amendment to the Basin Plan to incorporate a TMDL for Bacterial Indicators in the Middle Santa Ana River Watershed water bodies as adopted in Santa Ana Water Board Resolution No. RB8-2005-0001.
2. Authorizes the Executive Director or designee to transmit the amendment adopted under Santa Ana Water Board Resolution No. RB8-2005-0001, 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 SANTA ANA REGION (BASIN PLAN) TO INCORPORATE
A TOTAL MAXIMUM DAILY LOAD FOR BACTERIAL INDICATORS
FOR MIDDLE SANTA ANA RIVER WATERSHED WATER BODIES

WHEREAS:

1. The Santa Ana Regional Water Quality Control Board (Santa Ana Water Board) adopted the revised Basin Plan under Resolution No. 94-1 on March 11, 1994. The revised Basin Plan was approved by the State Water Resources Control Board (State Water Board) on July 21, 1994 and by the Office of Administrative Law (OAL) on January 24, 1995.
2. The State Water Board finds that the Santa Ana Water Board staff prepared documents and followed procedures satisfying environmental documentation requirements in accordance with the California Environmental Quality Act and all other applicable State laws and regulations.
3. The Santa Ana Water Board found that the additions of 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.
4. The State Water Board finds that the amendment is in conformance with the requirements for Total Maximum Daily Load (TMDL) development specified in section 303(d) of the federal Clean Water Act and Santa Ana Water Board Resolution No. RB8-2005-0001.
5. The State Water Board finds that the Basin Plan amendment is in conformance with the requirements of Water Code section 13240, which specifies that Regional Water Quality Control Boards shall periodically review and may revise Basin Plans, and section 13242, which requires a program of implementation of water quality standards.
6. Basin Plan amendments do 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 incorporate a TMDL for Bacterial Indicators in the Middle Santa Ana River Watershed water bodies as adopted in Santa Ana Water Board Resolution No. RB8-2005-0001.

2. Authorizes the Executive Director or designee to transmit the amendment adopted under Santa Ana Water Board Resolution No. RB8-2005-0001, 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 May 15, 2006.

Song Her
Clerk to the Board