

**STATE WATER RESOURCES CONTROL BOARD  
BOARD MEETING SESSION--DIVISION OF WATER QUALITY  
MAY 2, 2006**

**ITEM 5**

**SUBJECT**

CONSIDERATION OF A RESOLUTION APPROVING AN AMENDMENT TO THE WATER QUALITY CONTROL PLAN FOR THE SAN DIEGO REGION TO INCORPORATE A TOTAL MAXIMUM DAILY LOAD (TMDL) FOR DISSOLVED COPPER, LEAD, AND ZINC IN CHOLLAS CREEK

**DISCUSSION**

The San Diego Regional Water Quality Control Board (San Diego Water Board) adopted an updated Water Quality Control Plan for the San Diego Region (Basin Plan) on September 8, 1994. The adopted Basin Plan was approved by the State Water Resources Control Board (State Water Board) on December 13, 1994 and by the Office of Administrative Law (OAL) on April 26, 1995.

On June 29, 2005, the San Diego Water Board adopted Resolution No. R9-2005-0111 ([Attachment](#)) amending the Basin Plan to incorporate a TMDL for dissolved copper, lead, and zinc in Chollas Creek, a tributary to San Diego Bay. Chollas Creek was placed on the federal Clean Water Act section 303(d) list of water quality limited segments in 1996 for these metals.

The existing and potential beneficial uses of Chollas Creek and San Diego Bay are described in the Basin Plan. They include warm freshwater habitat (WARM) and wildlife habitat (WILD). These beneficial uses are adversely affected by these exceedances of dissolved copper, lead, and zinc, and ambient water quality exceeds the criteria contained in the California Toxics Rule (CTR). Additionally, these exceedances violate the narrative water quality objectives for toxicity described in the Basin Plan, which states: "All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life...."

Numeric targets for the Chollas Creek TMDL are set to equal the criteria contained in the CTR and are comprised of hardness-based equations for dissolved copper, lead, and zinc. Equations, rather than numbers, comprise the criteria because the toxicity of dissolved copper, lead, and zinc varies significantly depending on hardness. Both acute and chronic conditions are addressed in the TMDL numeric targets.

The vast majority of metals loading to Chollas Creek is believed to come through the storm water conveyance system regulated through applicable municipal separate storm sewer system (MS4) permits. An analysis of source contributions reveals many land

uses and activities associated with urbanization to be potential sources of dissolved copper, lead, and zinc to Chollas Creek. Modeling indicates that freeways and commercial/industrial land uses are the major contributors (over 75 percent). Significant sources of the three metals in urban runoff are automobile operation (especially brake pads and tires) and industries with practices that may expose metals to storm water. Corrosion of water supply pipes, pesticide application, and atmospheric deposition are also among the identified sources.

Dischargers whose point sources contribute to exceedance of TMDL targets for dissolved copper, lead, and zinc will be required to meet wasteload allocations in their urban runoff before it is discharged to Chollas Creek. Actions to meet the wasteload allocations in discharges will be required in waste discharge requirements (WDRs) that regulate MS4 discharges, industrial and construction activity, storm water discharges, and ground water extraction discharges in the watershed. Applicable WDRs may be reissued or revised by the San Diego Water Board to include requirements to meet wasteload allocations, or new WDRs may be issued.

Dischargers will be required to monitor Chollas Creek and provide monitoring reports to the San Diego Water Board to assess the effectiveness of management practices implemented to meet TMDL allocations. Affected entities include the cities of San Diego, Lemon Grove, and La Mesa, the County of San Diego, the San Diego Unified Port District, and the California Department of Transportation. Wasteload allocations will be met over a ten-year period by a gradual decrease in metal concentrations beginning with the third year of implementation.

## **POLICY ISSUE**

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

## **FISCAL IMPACT**

The San Diego 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, San Diego Water Board.

## **STAFF RECOMMENDATION**

That the State Water Board:

1. Approves the amendment to the Basin Plan to incorporate a TMDL for dissolved copper, lead, and zinc in Chollas Creek as adopted in San Diego Water Board Resolution No. R9-2005-0111 and as corrected by the San Diego Water Board Executive Officer.
2. Authorizes the Executive Director or designee to transmit the amendment and administrative record for this action to OAL and the TMDL to the U.S. Environmental Protection Agency for approval.

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

APPROVING AN AMENDMENT TO THE WATER QUALITY CONTROL PLAN FOR THE SAN DIEGO REGION TO INCORPORATE A TOTAL MAXIMUM DAILY LOAD (TMDL) FOR DISSOLVED COPPER, LEAD, AND ZINC IN CHOLLAS CREEK

### WHEREAS:

1. The San Diego Regional Water Quality Control Board (San Diego Water Board) adopted a revised Water Quality Control Plan for the San Diego Region (Basin Plan) on September 8, 1994. The adopted Basin Plan was approved by the State Water Resources Control Board (State Water Board) on December 13, 1994 and by the Office of Administrative Law (OAL) on April 26, 1995.
2. On June 29, 2005, the San Diego Water Board adopted Resolution No. R9-2005-0111 (Attachment) amending the Basin Plan to incorporate a TMDL for dissolved copper, lead, and zinc in Chollas Creek.
3. San Diego Water Board staff prepared documents and followed procedures satisfying environmental documentation requirements in accordance with the California Environmental Quality Act and other State laws and regulations.
4. The San Diego 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.
5. To the extent that pollutant loadings from indirect atmospheric deposition over land are being conveyed to storm water discharges, these loadings are included in the storm water waste load allocations. Atmospheric deposition of particulates containing trace metals in urban areas may be a substantial source of metals contaminants on land surfaces. The San Diego Water Board should meet with the San Diego County Air Pollution Control District (SDCAPCD) and the California Air Resources Board (CARB) to discuss the findings of any studies that support this assumption. It appears that larger particulates are responsible for the highest loadings of metals in atmospheric deposition and, therefore, pose the greatest risk to water quality. The two agencies should identify the need to (1) expand monitoring of larger particulates in atmospheric deposition to better gage the potential impact to water quality, and (2) investigate the sources of these metals in order to design a control strategy. The San Diego Water Board and the State Water Board should meet with the SDCAPCD and CARB to pursue these studies and to assist in developing control strategies.

6. The State Water Board encourages local municipalities within the urban watersheds in the San Diego Region also to work with the SDCAPCD and CARB to further the identification and control of sources of trace metals in atmospheric deposition.
7. The San Diego Water Board will work with municipalities and San Diego County to encourage building designs and best management practices that will retain pollutants on site and prevent the conveyance of pollutants from atmospheric deposition and other sources from being washed off into storm water and discharged to Chollas Creek and other urban water bodies.
8. During the implementation of this TMDL, the San Diego Water Board will re-assess the Chollas Creek metals TMDL to consider the results of special studies. These studies will include joint studies supported by the State Water Board, the San Diego Water Board, SDCAPCD, and CARB. Potential modifications to the TMDL may include re-assigning load allocations or waste load allocations to confirmed sources of metals from atmospheric deposition and modification of the implementation schedule. The State Water Board intends to reassess the TMDL, on its own motion, if the San Diego Water Board does not do so on a timely basis.
9. The State Water Board provided a 30-day period to receive public comment on the adequacy of the San Diego Water Board's California Environmental Quality Act (CEQA) process for this amendment. Comments were received from the City of San Diego stating that the San Diego Water Board's CEQA analysis was inadequate. The City argued that the San Diego Water Board did not fully analyze the impacts associated with the construction of detention facilities, which would result in the need to acquire and demolish hundreds of acres of residential and commercial uses, resulting in the displacement of 7,982 to 23,296 persons at a cost of over one billion dollars to serve a 50-acre area. The San Diego Water Board did not analyze these impacts because it did not find that these impacts were reasonably foreseeable. The San Diego Water Board instead analyzed impacts from numerous other methods of compliance that were more reasonable and cost-effective. It will be the responsibility of the individual dischargers to analyze project-specific impacts once the individual projects are chosen and implemented by each discharger. The State Water Board finds that the CEQA document adequately analyzed the potential impacts from reasonably foreseeable methods of compliance and that the substitute CEQA document prepared by the San Diego Water Board is adequate.
10. 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).

11. State Water Board staff determined that provisions of the amendment as adopted warranted minor, non-substantive clarification of the language of various provisions.
12. 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 incorporate a TMDL for dissolved copper, lead, and zinc in Chollas Creek as adopted in San Diego Water Board Resolution No. R9-2005-0111 and as corrected by the San Diego Water Board Executive Officer.
2. Authorizes the Executive Director or designee to transmit the amendment and administrative record for this action to OAL and the TMDL to USEPA for approval.

**CERTIFICATION**

The undersigned, Acting 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 2, 2006.

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Clerk to the Board