

**STATE WATER RESOURCES CONTROL BOARD  
BOARD MEETING SESSION – DIVISION OF WATER QUALITY  
JULY 15, 2008**

**ITEM 10**

**SUBJECT**

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

**DISCUSSION**

On June 13, 2007, the San Diego Regional Water Quality Control Board (San Diego Water Board) adopted Resolution No. R9-2007-0043 ([Attachment](#)) amending the Basin Plan to incorporate Total Maximum Daily Loads (TMDLs) for dissolved copper, lead, and zinc in Chollas Creek, which is tributary to San Diego Bay. The purpose of this TMDL project is to attain water quality criteria for copper, lead, and zinc, and restore and protect the beneficial uses of Chollas Creek. Urban runoff conveyed through municipal separate storm sewer systems (MS4s) is the primary source of metals to Chollas Creek. Thus, operators of MS4s that discharge to Chollas Creek are primarily responsible for implementation of these TMDLs. Stormwater discharges to the MS4s from certain industrial facilities and construction sites also contribute metals to Chollas Creek. The most reasonably foreseeable method of compliance with the TMDLs is for dischargers of urban runoff to and from the MS4s to initiate a program of structural and non-structural best management practices (BMPs) to reduce metals concentrations in urban runoff.

Chollas Creek is listed because it does not meet water quality standards for copper, lead, and zinc. As a result, Clean Water Act section 303(d) requires that TMDLs be established. A TMDL specifies load allocations for nonpoint sources and waste load allocations for point sources that, when implemented, are expected to result in attainment of applicable water quality standards. State law requires the TMDL to include an implementation plan and schedule to ensure that a TMDL is achieved. The TMDLs address the copper, lead, and zinc impairments to ensure that water quality standards will be achieved.

Two beneficial uses exist in Chollas Creek that are sensitive to, and impaired by elevated concentrations of dissolved metals in the water column. Warm Freshwater Habitat (WARM) and Wildlife Habitat (WILD) require water quality suitable for the protection of aquatic life and aquatic dependent wildlife. Concentrations of dissolved metals in Chollas Creek exceed the levels necessary to support the WARM and WILD beneficial uses of Chollas Creek.

The TMDLs are equal to the assimilative or loading capacity of Chollas Creek for dissolved copper, lead, and zinc and are defined as the maximum amount of each pollutant that Chollas Creek can assimilate and still attain the applicable federal water quality criteria needed for the protection of designated beneficial uses. The TMDLs for dissolved copper, lead, and zinc are equal to the waste load allocations, which are 90 percent of the California Toxics Rule (CTR) criteria for each pollutant. This reserves ten percent of the loading capacity as an explicit margin of safety. The numeric targets for the Chollas Creek TMDLs

were established utilizing the CTR criteria as the basis. Specifically, the numeric targets for the Chollas Creek TMDLs were set equal to the CTR's criteria, which are comprised of hardness-based equations for dissolved copper, lead, and zinc. Equations, rather than numbers, comprise the water quality criteria because the toxicity of dissolved copper, lead, and zinc varies significantly depending on the hardness of the water. The CTR was chosen as the basis for these numeric targets because it has the most current, defensible water quality criteria for dissolved copper, lead, and zinc concentrations in fresh water. Additionally, the CTR is legally applicable in inland surface waters (e.g., Chollas Creek), enclosed bays and estuaries of California for all purposes and programs under the Clean Water Act.

## **IMPLEMENTATION**

Implementation will be through permit revisions to statewide and San Diego Water Board orders for point source discharges to Chollas Creek to require urban runoff from MS4s to meet the waste load allocations. To meet these objectives, a phased approach will be taken. The phases require incremental loading reductions through the use of expanded or better tailored BMPs to achieve the compliance with copper, lead, and zinc water quality criteria. The first ten years will require the bulk of the metal load reduction. The remaining ten years provide for adequate construction and implementation time for potential structural BMPs, to achieve the full metal load reduction. Compliance monitoring will be required in the creek itself to measure the progress of BMP implementation effectiveness and finally to ensure that the water quality objectives for copper, lead, and zinc are being achieved.

## **POLICY ISSUE**

Should the State Water Resources Control Board (State Water Board) approve the amendment to incorporate TMDLs for dissolved copper, lead, and zinc in Chollas Creek, which is tributary to San Diego Bay, as adopted under San Diego Water Board Resolution No. R9-2007-0043?

## **FISCAL IMPACT**

San Diego 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, approval of this resolution will amend the San Diego Water Board Basin Plan.

## **STAFF RECOMMENDATION**

That the State Water Board:

1. Approves the amendment to the Basin Plan as adopted under San Diego Water Board Resolution No. R9-2007-0043.
2. Authorizes the Executive Director or designee to submit the amendment as adopted under San Diego Water Board Resolution No. R9-2007-0043, to the Office of Administrative Law for approval of the regulatory provisions and to the U.S. Environmental Protection Agency for approval of the TMDL.

# DRAFT

## STATE WATER RESOURCES CONTROL BOARD RESOLUTION NO. 2008-

APPROVING AN AMENDMENT TO THE WATER QUALITY CONTROL PLAN FOR  
THE SAN DIEGO BASIN (BASIN PLAN) TO INCORPORATE  
TOTAL MAXIMUM DAILY LOADS FOR DISSOLVED COPPER, LEAD, AND  
ZINC IN CHOLLAS CREEK, TRIBUTARY TO SAN DIEGO BAY

### WHEREAS:

1. On June 13, 2007, the San Diego Regional Water Quality Control Board (San Diego Water Board) adopted Resolution No. R9-2007-0043 ([Attachment](#)) amending the Basin Plan to establish Total Maximum Daily Loads (TMDLs) for dissolved copper, lead, and zinc in Chollas Creek.
2. The San Diego Water Board found that the analysis contained in the TMDL staff report, the California Environmental Quality Act (CEQA) checklist, notice of public hearing, and notice of filing prepared by San Diego Water Board staff comply with the requirements of the State Water Board's certified regulatory CEQA process, as set forth in the California Code of Regulations (CCR), Title 23, section 3775 et seq.
3. The San Diego Water Board found that the amendment is consistent with State Water Resources Control Board (State Water Board) [Resolution No. 68-16](#), in that the changes to water quality objectives (i) consider maximum benefit to the people of the state, (ii) will not unreasonably affect present and anticipated beneficial use of waters, and (iii) will not result in water quality less than that prescribed in policies. The amendment requires actions to be taken to implement management practices to ensure compliance with water quality criteria. Such actions are of maximum benefit to the people of the state. The amendment will not unreasonably affect present and anticipated beneficial uses nor result in water quality less than described in applicable policies because the amendment is intended to result in compliance with water quality criteria. The actions to be taken are not expected to cause other impacts on water quality.
4. 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; section 13242, which requires a program of implementation of water quality objectives; and section 13243 which authorizes Regional Water Quality Control Boards to specify certain conditions or areas where the discharges of certain types of waste will not be permitted. The State Water Board also finds that the three TMDLs, as reflected in the Basin Plan amendment, are consistent with the requirements of federal Clean Water Act section 303(d).
5. State Water Board staff determined that minor, non-substantive changes to the language of the Basin Plan amendment was necessary to refer to the California Toxics Rule (CTR) numbers as water quality criteria instead of water quality objectives since the CTR numbers have not been adopted as water quality objectives in California. The San Diego Water Board's Executive Officer made these minor changes in a memorandum dated March 26, 2008.

## **D R A F T**

6. The lowest 1.2 miles of Chollas Creek (from the mouth of Chollas Creek at San Diego Bay to 1.2 miles inland) were placed on the List of Water Quality-Limited Segments in 1996. This listing was required by Clean Water Act section 303(d) due to level of dissolved copper, lead and zinc (Metals) in the water column.
7. The amendment sets numeric water quality targets for Warm Freshwater Habitat (WARM) and Wildlife Habitat (WILD) equal to 90 percent of the CTR.
8. A Basin Plan amendment does not become effective until approved by the State Water Board and until the regulatory provisions are approved by the Office of Administrative Law (OAL). The TMDL must also be approved by the U.S. Environmental Protection Agency (U.S. EPA).

THEREFORE BE IT RESOLVED THAT:

The State Water Board:

1. Approves the amendment to the Basin Plan as adopted under San Diego Water Board Resolution No. R9-2007-0043.
2. Authorizes the Executive Director or designee to submit the amendment as adopted under San Diego Water Board Resolution R9-2007-0043 to OAL for approval of the regulatory provisions and to U.S. EPA for approval of the TMDL.

### **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 July 15, 2008.

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Jeanine Townsend  
Clerk to the Board