State of California
Regional Water Quality Control Board
San Diego Region

EXECUTIVE OFFICER SUMMARY REPORT
February 10, 2010

ITEM: 6

SUBJECT: Revised Total Maximum Daily Loads (TMDLs) for Indicator Bacteria Project I – Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek). (Tentative Resolution No. R9-2010-0001) *(Wayne Chiu)*

PURPOSE: The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) will deliberate and consider adopting the amendment to incorporate the Revised Total Maximum Daily Loads for Indicator Bacteria, Project I – Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek) into the Water Quality Control Plan for the San Diego Basin (9) (Basin Plan).

PUBLIC NOTICE: Notice of Public Hearing for this Basin Plan amendment, including filing of the written technical report, tentative resolution and draft Basin Plan amendment, was provided by newspaper publication in the Riverside Press-Enterprise, the Orange County Register, and the San Diego Union-Tribune on November 25, 2009 (Supporting Document 1). The Notices were also distributed to interested persons by U.S. mail and email and made available on the San Diego Water Board's website on November 25, 2009. These notifications satisfy applicable requirements of Clean Water Act regulations [Code of Federal Regulations Title 40 section 25.5] and State Water Resources Control Board (State Water Board) California Environmental Quality Act (CEQA) implementation regulations [California Code of Regulations Title 23 section 3777].

DISCUSSION: Tentative Resolution No. R9-2010-0001 (Supporting Document 2) is a proposed amendment to incorporate the revised indicator bacteria TMDLs into the Basin Plan. The tentative Resolution and draft Basin Plan amendment, if adopted, would establish indicator bacteria TMDLs for twenty (20) beaches and creeks (including Tecolote Creek) that were listed as impaired by indicator bacteria on the 2002 Clean Water Act Section 303(d) List of Water Quality Limited Segments (303(d) List).

It is important to point out that adoption of Resolution No. R9-2010-0001 is largely a re-adoption of the bacteria TMDLs previously adopted by this Board to address 19 bacteria impaired beaches and creeks. In summary, the three-fold purpose of the revised Basin Plan amendment is to:

1) Fulfill the San Diego Water Board's commitment to re-adopt bacteria TMDLs after making revisions to account for natural sources of bacteria (e.g., birds, wildlife, soil, etc.). The original adoption of bacteria TMDLs was made contingent on the subsequent consideration of a "Reference System and Antidegradation Approach" (RSAA) Basin Plan amendment authorizing the Board to develop bacteria TMDLs that allow exceedances of water quality objectives (WQOs) due to natural sources. Because that RSAA Basin Plan amendment has recently received all required state approvals, adoption of this resolution can now fulfill the Board's re-adoption commitment;

2) Provide specific guidance on the implementation of, and compliance with, the TMDLs, WLAs, and LAs; and,

3) Establish indicator bacteria TMDLs for one additional bacteria impaired creek, Tecolote Creek

Project Background

Clean Water Act section 303(d) requires each state to establish TMDLs for all waters within its boundaries which fail to meet water quality standards and are therefore designated as impaired on the 303(d) List. (Eventually TMDLs must be developed for all waters regardless of 303(d) listing). Upon establishment of TMDLs, the state is required to incorporate TMDLs into the state water quality management plan. The Basin Plan and applicable statewide plans serve as the water quality management plan for the watersheds under the jurisdiction of the San Diego Water Board. Incorporating TMDLs into the Basin Plan requires that the San Diego Water Board adopt an amendment to the Basin Plan.

In late 2003, when the project to develop indicator bacteria TMDLs was first initiated, the 2002 303(d) List indicated that the single greatest cause of impairment to waters in the San Diego Region was elevated bacteria levels. Accordingly at that time, the San Diego Water Board identified waterbodies with bacteria impairments as one of its highest regional

priorities for the development of TMDLs. This project known as the Total Maximum Daily Loads for Indicator Bacteria, Project I – Beaches and Creeks in the San Diego Region (hereinafter *Bacteria TMDLs Project I),* was the first of several TMDL projects developed to address the bacteria impaired waterbodies throughout the San Diego Region as listed on the 2002 303(d) List.

On December 12, 2007, the San Diego Water Board adopted Resolution No. R9-2007-0044 to amend the Basin Plan to incorporate *Bacteria TMDLs Project I*. *Bacteria TMDLs Project I* was developed to establish TMDLs for nineteen (19) bacteria impaired beaches and creeks in the San Diego Region that were listed on the 2002 303(d) List. Resolution No. R9-2007-0044 was transmitted to the State Water Board on March 21, 2008 to begin the State Water Board, Office of Administrative Law (OAL), and USEPA approval processes.

The bacteria TMDLs adopted under Resolution No. R9-2007-0044 included "interim" and "final" wet weather TMDLs. The "interim" wet weather TMDLs were calculated to include an allowance for exceedances of water contact recreation (REC-1) WQOs due to bacteria loads from natural sources (e.g., birds, wildlife, soil, etc.) based on the exceedances observed in a reference system (i.e., a watershed and beach that is minimally impacted by anthropogenic activities). The "final" wet weather TMDLs did not allow for exceedances of REC-1 WQOs due to bacteria loads from natural sources.

Since the San Diego Water Board recognized that exceedances of the bacteria WQOs during wet weather are likely to occur and the exceedances may be due in part to bacteria loads contributed by natural sources, adoption of Resolution No. R9-2007-0044 was made contingent upon the future consideration of a separate RSAA Basin Plan amendment. Upon the subsequent adoption of the RSAA Basin Plan amendment, *Bacteria TMDLs Project I* would be appropriately revised and brought back to the San Diego Water Board for re-adoption. The key revision would include incorporation of the reference system approach as a part of the final and only wet weather TMDLs.

On May 14, 2008, the San Diego Water Board adopted Resolution No. R9-2008-0028, *Implementation Provisions for Indicator Bacteria Water Quality Objectives to Account for Loading from Natural Uncontrollable Sources Within the Context of a TMDL* (hereinafter RSAA Basin Plan

amendment). Resolution No. R9-2008-0028 was approved by the State Water Board on March 17, 2009, approved by OAL on June 25, 2009, and approved by USEPA on September 16, 2009. Approval of Resolution No. R9-2008-0028 allows the San Diego Water Board to revise the *Bacteria TMDLs Project I* Basin Plan amendment adopted under Resolution No. R9-2007-0044.

Anticipating a relatively quick approval of Resolution No. R9-2008-0028 by the State Water Board, OAL and USEPA, the San Diego Water Board submitted a request to withdraw *Bacteria TMDLs Project I* (Resolution No. R9-2007-0044) from State Water Board consideration for approval by letter dated December 17, 2008 (Supporting Document 3). The withdrawal was requested so revisions that had been committed to upon adoption and approval of the RSAA Basin Plan amendment could be made. In addition, the withdrawal request was made in order to address concerns expressed by the State Water Board that 1) the adoption of *Bacteria TMDLs Project I* was contingent upon the adoption of a subsequent Basin Plan amendment, and 2) *Bacteria TMDLs Project I* did not include sufficient guidance on how compliance with the TMDLs, WLAs, and LAs would be evaluated.

Summary of Proposed Revisions

The December 12, 2007 *Bacteria TMDLs Project I* technical report adopted with Resolution No. R9-2007-0044 served as the basis for the draft technical report for Revised total Maximum Daily Loads for Indicator Bacteria, Project I, Twenty Beaches and Creeks (Including Tecolote Creek)(hereinafter *Revised Bacteria TMDLs Project I*). The materials for this agenda item include an underline/strikeout version of the original technical report and appendices showing the proposed revisions, which are provided on a CD as Supporting Document 4 (hard copies of the underline/strikeout version are available upon request). A clean version of the draft technical report (without the appendices) is also provided as Supporting Document 5. Tentative Resolution No. R9-2010-0001 and draft Basin Plan amendment were also based on the original documents adopted on December 12, 2007; however, because the revisions were so extensive, only a clean version of those documents is provided here (Supporting Document 2).

The revisions under consideration achieve the three-fold purpose previously mentioned above. The proposed revisions are summarized below and are generally related to:

1) *The commitment to revise the bacteria TMDLs for beaches and creeks upon adoption and approval of the RSAA Basin Plan amendment under Resolution No. R9-2008-0028.* The "final" wet weather TMDLs, which do not include the reference system approach, were removed. The "interim" wet weather TMDLs, which incorporate a reference system approach, are now the only wet weather TMDLs included in the Basin Plan amendment. There were no changes made to the methodology for calculating the mass-load based wet weather TMDLs. The dry weather TMDLs were not changed in any respect. There were no changes made to the allowable exceedance frequencies for either wet weather or dry weather.

2) *Providing specific guidance on the implementation of, and compliance with, the TMDLs, WLAs, and LAs.* The Implementation Plan was revised to include more description on potential actions that may be taken by the San Diego Water Board, responsible parties, and/or other entities to implement the TMDLs. The Implementation Plan also describes the minimum monitoring that will be required to assess the progress of TMDL implementation and compliance.

   Most importantly, the methodology that the San Diego Water Board will use to determine ultimate discharger compliance is provided. Dischargers will be deemed "in compliance" when the applicable WQOs and allowable exceedance frequencies are achieved in the receiving waters. Determining compliance in the original bacteria TMDL project was not explicitly specified, but was based on meeting allowable WLAs or LAs in discharge streams and WQOs in receiving waters. WLAs and LAs were provided in *mass* (expressed as the number of bacteria colonies per year). Unlike mass, concentration can be easily and directly measured in the field.

3) *Incorporation of the Tecolote Creek bacteria TMDLs into this TMDL project.* Because the resources available for the development of TMDLs have become more limited, and the same modeling approaches can be used, the bacteria TMDLs for Tecolote Creek that were being

developed under a separate project were incorporated into these bacteria TMDLs for beaches and creeks in the San Diego Region.

While there were significant revisions made to the text (draft technical report, tentative resolution and draft Basin Plan amendment), the underlying technical approach, scientific basis, and assumptions remain unchanged (i.e., are the same as used in the original *Bacteria TMDLs Project I*).

Public Participation

A formal public review and comment period of 78 days was provided for this project (45 days is required under statute). The *Revised Bacteria TMDLs Project I* draft Technical Report and Basin Plan amendment were released for formal public comment on November 25, 2009, 78 days before the February 10, 2010 public hearing. Available documents included the underline/strikeout version of the original *Bacteria TMDLs Project I* Technical Report showing all the proposed revisions.

Prior to releasing the revised documents for public comment, the San Diego Water Board met with the Stakeholder Advisory Group (SAG) on June 3, 2009 to provide an update on the project and an outline of revisions that were expected to be made. After the release of the revised documents for public comment, the San Diego Water Board met with the SAG two additional times (on December 16, 2009 and January 7, 2010) to discuss and answer questions that the SAG members had about the revisions.

Written responses to all written public comments received on or before January 25, 2010 will be provided to the San Diego Water Board in advance of the February 10 public hearing (responses will be included with the Supplemental Executive Officer Summary Report). Written comments received on or before January 25, 2010 were submitted by the California Department of Transportation (Caltrans), the City of Carlsbad, the City of Dana Point, the City of Del Mar, the City of Encinitas, the City of La Mesa, the City of Laguna Niguel, the City of Oceanside, the City of San Diego, the City of Santee, the City of Vista, the County of Orange, the County of San Diego, Heal the Bay, San Diego Coastkeeper, the San Diego Chapter of the Sierra Club, and the U.S. Environmental Protection Agency (USEPA) (Supporting Document 6).

In addition to the recent public process provided for *Revised Bacteria TMDLs Project I*, an extensive public participation process was also provided prior to the adoption of the original *Bacteria TMDLs Project I.* The earlier public process was relevant and devoted to 19 of the 20 impaired waterbodies addressed in today's action. Finally, extensive responses to public comments were also prepared for the original *Bacteria TMDLs Project I*.

KEY ISSUES: Based upon review of written comments submitted on or before January 25, 2010, the following key issues raised by the commenters are identified:

1. Delisted Beaches –Several municipalities are opposed to including certain beaches in these TMDLs that were recently delisted from the 2008 303(d) List. Similar concerns were raised and addressed in the previously adopted *Bacteria TMDLs Project I*.

2. Definition of Wet Days – Several commenters noted that the allowable exceedance frequency for the wet weather TMDLs should be based on wet weather days defined as days with 0.1-inches of rainfall and the following 72 hours, instead of 0.2-inches and the following 72 hours, as defined in these TMDLs. The 0.2-inch definition of wet days was included in the previously adopted *Bacteria TMDLs Project I* and has not been changed.

3. Allowable Exceedances for Dry Weather – Several municipalities indicated that the dry weather TMDLs should include an allowable exceedance frequency. There was no allowable exceedance frequency included in the dry weather TMDLs in the previously adopted *Bacteria TMDLs Project I*.

4. Dry Weather Surface Runoff Assumption – Several municipalities believe the assumption that surface runoff during dry weather conditions is generated only by anthropogenic activities is inaccurate. This assumption was included and the concerns addressed in the previously adopted *Bacteria TMDLs Project I.*

5. Water Code Section 13241 – Several municipalities believe that this TMDL Basin Plan amendment should be subject to the requirements of Water Code section 13241. Similar concerns were raised and addressed in the previously adopted *Bacteria TMDLs Project I*.

6. Re-opener – Several municipalities believe that there should be a commitment and a specific timeline for re-opening the TMDLs for revisions. Similar concerns were raised and addressed in the previously adopted *Bacteria TMDLs Project I*.

LEGAL CONCERNS: None.

SUPPORTING DOCUMENTS:

1. Notice of Public Hearing and Notice of Filing, dated November 25, 2009.
2. Tentative Resolution No. R9-2010-0001 and Attachment A, Draft Basin Plan Amendment.
3. Request to Withdraw Resolution No. R9-2007-0044.
4. Revised Draft Final Technical Report and Appendices A through V, dated November 25, 2009 (underline/strikeout version) (CD only, but hard copy available upon request).
5. Revised Draft Final Technical Report, without appendices, dated November 25, 2009 (clean version).
6. Comment letters received on or before January 25, 2010.

RECOMMENDATION(S): Adoption of Tentative Resolution No. R9-2010-0001 is recommended.