State of California
Regional Water Quality Control Board
San Diego Region

EXECUTIVE OFFICER SUMMARY REPORT
May 14, 2008

ITEM: 8

SUBJECT: **PUBLIC HEARING:** Amendment to the Water Quality Control Plan for the San Diego Basin to incorporate Implementation Provisions for Indicator Bacteria Water Quality Objectives to Account for Loading from Natural Uncontrollable Sources Within the Context of a Total Maximum Daily Load. The San Diego Water Board will hear testimony and comments on the proposed Basin Plan amendment. The San Diego Water Board may deliberate on and consider adoption of the Basin Plan amendment at the close of this public hearing. (Tentative Resolution No. R9-2008-0028) (Amy Mecklenborg)

PURPOSE: To hear testimony, deliberate on, and consider adoption of the subject tentative Basin Plan amendment. Adoption of this Resolution and Basin Plan amendment is necessary to make effective the Basin Plan amendment adopted by this Board on December 12, 2007 pursuant to Resolution R9-2007-004 which established TMDLs for indicator bacteria at impaired beaches and creeks in the San Diego Region, (Total Maximum Daily Loads for Indicator Bacteria Project I – Beaches and Creeks in the San Diego Region, Resolution R9-2007-004).

PUBLIC NOTICE: All state and federal public noticing requirements have been fully satisfied as described below. All public notices were provided 75 days in advance of today's public hearing and all draft documents have been available for public review and comment for 75 days in advance of today's hearing.

The Federal Clean Water Act regulations [40 CFR 25.5] require the San Diego Water Board to provide notice of a proposed Basin Plan amendment to all interested parties at least 45 days in advance of the public hearing. The State Water Board's California Environmental Quality Act (CEQA) implementation regulations [23 CCR 3777] require the San Diego Water Board to provide to the public a Notice of Filing of a written report on any standard, rule, regulation, or plan proposed for board approval or adoption at least 45 days prior to board action. The Notice of Filing of the written

technical report and Notice of Public Hearing for this Basin Plan amendment (Supporting Document 3) were provided by newspaper publication in the San Diego Union Tribune, Orange County Register, and the Riverside Press-Enterprise on February 29, 2008. The Notices were also distributed to interested persons by email on February 29, 2008. The Notices and the draft Technical Report, including the tentative Resolution and draft Basin Plan amendment (Supporting Document 7), were also available to the public on our website on February 29, 2008.

DISCUSSION:

Overview

This Basin Plan amendment authorizes the Regional Board to develop and adopt bacteria TMDLs that allow bacteria water quality objectives (WQOs) to be exceeded in receiving waters during both storm flows and dry weather flows to the extent that the exceedances are caused by natural, uncontrollable sources in the watershed. This amendment does not change the water quality objectives for indicator bacteria, but rather adds implementation provisions to the Basin Plan that allow the Regional Board to implement the indicator bacteria water quality objectives for the contact water recreation (REC-1) and non-contact water recreation (REC-2) beneficial uses within the context of a TMDL.

Specifically this Basin Plan amendment allows the Regional Board to implement the water quality objectives by using a reference system and antidegradation approach (RSAA) or a natural sources exclusion approach (NSEA), in the context of a TMDL. These two approaches recognize that there are natural (non-human) sources of bacteria which can cause or contribute to exceedances of water quality objectives for indicator bacteria. The purpose of Basin Plan water quality objectives for indicator bacteria and associated TMDLs is to prevent or reduce human illness due to human pathogens (disease causing agents in humans). These two approaches make clear that dischargers are only required to control bacteria from anthropogenic (i.e., human) sources, which are most likely to be associated with human pathogens. The approaches further acknowledge that it is not the intent of the Regional Board to require dischargers to control bacteria from natural sources, which are not generally associated with human pathogens.

Need for Draft Basin Plan Amendment

The Basin Plan amendment before you today is needed for a number of important reasons:

1. The requirement to control natural sources, if imposed by the Regional Board, could adversely affect valuable aquatic life and wildlife beneficial uses throughout the Region. Since control of natural sources is generally infeasible, possibly detrimental to important beneficial uses, and impactful to other resources during construction of treatment works, an allowance in the Basin Plan for exceedances of indicator bacteria water quality objectives caused by natural uncontrollable sources is needed.

2. In December 2007, this Regional Board adopted a Basin Plan amendment establishing TMDLs for indicator bacteria at impaired beaches and creeks in the San Diego Region, (Total Maximum Daily Loads for Indicator Bacteria Project I – Beaches and Creeks in the San Diego Region) pursuant to Resolution R9-2007-004. Adoption of the December 2007 Basin Plan amendment was made *contingent* upon the adoption of the Basin Plan amendment before you today authorizing the use of the Reference System Approach and Natural Sources Exclusion Approach for TMDLs. The December 2007 amendment will only become effective upon adoption of the Tentative Resolution and draft Basin Plan amendment you will consider today.

3. This Basin Plan amendment is issue No. 7 in the Regional Board's 2004 Triennial Review. This means that incorporation of the RSSA and NSEA approaches into our Basin Plan is a high priority (priority seven) in the Regional Board's 2004 Basin Plan Triennial Review.

<u>Implementation of RSAA and NSEA</u>

A reference system is a water body that is minimally impacted by anthropogenic activities that can affect bacterial densities in the water body. The concept of using a reference system approach involves the comparison of two waterbodies (a target waterbody is compared to a reference waterbody). Implementation of indicator bacteria water quality objectives using the reference system and antidegradation approach (RSAA) requires control of indicator bacteria from all anthropogenic sources so that bacteriological water quality in the targeted waterbody is consistent with that of a reference system. The reference system and antidegradation approach also requires that no degradation of existing bacteriological water quality in the targeted waterbody occurs when the existing bacteriological water quality is better than that of a

reference system waterbody. Using the reference system and antidegradation approach, a certain frequency of exceedances of the indicator bacteria water quality objectives is allowed. The allowed frequency of exceedances are either the observed frequency of exceedances in the selected reference system or targeted water body, whichever is less.

Under the natural sources exclusion approach (NSEA), all anthropogenic sources of indicator bacteria to the target water body must also be controlled such that they do not cause or contribute to exceedances of the indicator bacteria water quality objectives. In addition, dischargers must demonstrate that all anthropogenic sources have been controlled and that the residual indicator bacteria densities do not pose an elevated health risk beyond that allowable by indicator bacteria water quality objectives. Demonstration will typically be accomplished through the conduct of an epidemiological study. After all anthropogenic sources of indicator bacteria have been controlled such that they do not cause exceedances of the indicator bacteria water quality objectives, exceedances of the indicator bacteria water quality objectives may be allowed based on the residual exceedances in the target waterbody. The residual exceedances define the background level of exceedance due to natural sources.

The reference system and antidegration approach will typically be used during the initial calculation of TMDLs, wasteload allocations, and load allocation in order to account for indicator bacteria from natural uncontrollable sources. In the case of Total Maximum Daily Loads for Indicator Bacteria Project I - Beaches and Creeks, appropriate reference system waterbodies have been identified and will be used to calculate final TMDLs, pending adoption of the resolution before you today.

In contrast, the natural source exclusion approach will most likely be employed after initial TMDLs have been adopted and controls have been implemented to reduce natural sources of indicator bacteria. The natural source exclusion approach will typically be used at the back end of the process to recalculate existing TMDLs, if appropriate.

These implementation provisions may only be used within the context of a TMDL addressing municipal storm water or non-point source discharges. These implementation provisions do not apply to NPDES discharges other than

municipal storm water discharges (i.e., they are not applicable to individual industrial storm water NPDES discharges or general industrial and construction storm water NPDES discharges).

Public Process, Responses to Comments, Region 4's Experience

An extensive public process has been conducted with interested stakeholders which began with the conduct of the CEQA scoping meeting held on March 13, 2006. Since that time there have been several public workshops and stake holder advisory group (SAG) meetings specifically for this project, as well as numerous other closely related SAG meetings held in conjunction with Indicator Bacteria Project I for Beaches and Creeks TMDL.

Public notices and all supporting documents have been available to the public since February 29, 2008, creating a public review and comment period of approximately 75 days prior to today's public hearing. To date (May 2, 2008) staff has received a total of five written comment letters and has prepared written responses to four of the five commenting parties (Supporting Document 4). An Errata Sheet to the Draft Technical Report has also been prepared based on comments in the first four letters (Supporting Document 2). To date, none of the comments reviewed have warranted changes to the text of Tentative Resolution No. R9-2008-0028 or the Draft Basin Plan amendment. The fifth letter, from the San Diego Coastkeeper, was not received until close of business April 29, 2008. For that reason, written responses to Coastkeeper's letter will be included in the May 9 supplemental agenda packet. In order to allow time to develop written responses, written comments were requested no later than April 14, 2008. However consistent with the CEQA process for Basin Plan amendments, public comments may continue to be submitted through (and including) today's hearing.

Based on stakeholder input from the numerous SAG meetings, as well as from the comment letters reviewed to date, it is believed that the draft basin plan amendment before you today is generally supported by the key stakeholders. It is also worth noting that the Los Angeles Regional Board (Region 4) recently adopted an RSAA and NESA Basin Plan amendment similar to our tentative amendment.

KEY ISSUES:

1. Both the reference system and antidegradation approach as well as the natural sources exclusion approach are necessary for the improved accuracy of indicator bacteria TMDL calculations. The RSAA is typically used during the front end of the process to calculate initial TMDLs. The NSEA is typically used at the back end of the TMDL implementation process to revise previously adopted TMDLs, if appropriate.

2. The Basin Plan Amendment does not dictate any specific implementation method for applying these two approaches. Example implementation methods are discussed in the Technical Report. Other methods are likely to be developed by staff and stakeholders in the future.

LEGAL CONCERNS: None.

SUPPORTING DOCUMENTS:

1. Tentative Resolution No. R9-2008-0028 and Attachment A, Draft Basin Plan Amendment (redline strikeout of proposed changes to existing Basin Plan text) dated February 29, 2008.

2. Notice of Public Hearing and Notice of Filing dated February 29, 2008.

3. Errata Sheet to Draft Technical Report dated May 2, 2008

4. Responses to Comments dated May 2, 2008

5. Public Comment Letters received by May 2, 2008
   a. City of Dana Point dated April 21, 2008
   b. City of Laguna Niguel dated April 21, 2008
   c. County of Orange dated April 16, 2008
   d. County of Riverside dated April 24, 2008
   e. San Diego Coastkeeper dated April 29, 2008

6. Draft Technical Report dated February 29, 2008 & Appendices
   Appendix 1 *Environmental Analysis*
   Appendix 2 *Tentative Resolution and Basin Plan Amendment*
   Appendix 3 *Responses to Peer Review Comments*

RECOMMENDATION(S): Adoption of tentative Resolution No. R9-2008-0028 is recommended.