

VENTURA COUNTY



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June 4, 2010

Ms. Renee Purdy, Section Chief Regional Program
California Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013

**Subject: COMMENTS ON DRAFT STAFF REPORT AND PROPOSED RESOLUTION
BASIN PLAN AMENDMENT FOR THE TOTAL MAXIMUM DAILY LOAD
FOR INDICATOR BACTERIA IN THE SANTA CLARA RIVER ESTUARY
AND REACHES 3, 5, 6, AND 7**

Dear Ms. Purdy:

The County of Ventura Public Works Agency (VCPWA) and the Ventura County Watershed Protection District (VCWPD) appreciate the opportunity to provide comments on the Draft Staff Report for the Total Maximum Daily Load (TMDL) for Indicator Bacteria in Santa Clara River (SCR) Estuary and Reaches 3, 5, 6, and 7 (Staff Report) and the Proposed Amendments to the Water Quality Control Plan – Los Angeles Region for the SCR TMDL Basin Plan Amendments (Tentative BPA). Additionally, we appreciate the Los Angeles Regional Water Quality Control Board (Regional Board) staff's participation in discussing concerns we have on the development of the draft Indicator Bacteria TMDL for the SCR.

The following comments presented in this letter refer to both the Staff Report and the Tentative BPA. Additionally, on February 17, 2010, we submitted a comment letter highlighting, discussing, and summarizing a general approach of the key issues that we had identified as concerns with the development of the bacteria TMDL in the SCR (Attachment 1).

General Comments

1. Enforcement of Exceedances

We have identified a very serious general concern in this review process. It has become questionable how the Regional Board will address any exceedances day violations once compliance deadlines are in place for both dry and wet weather. If we were to address all possible bacteria sources originating from County owned lands, we would like to better understand how the Regional Board would separate exceedances per responsible party.

We are very concerned that once the controllable urban sources are addressed, we may still be deemed responsible for a non-compliance situation. We were not able to identify any language that explains what policy or mechanism the Regional Board has in place to address this possible situation.

Requested Action: A revision of both the Staff Report and Tentative BPA to include language that clearly states how the Regional Board will address this possible scenario.

2. Nonpoint Source Program

Both the Staff Report and Tentative BPA, reference a "Nonpoint Source Program" for addressing load allocations (LAs) originating from natural landscapes, wildlife, golf courses, and horses and livestock. At this time, we are unclear how this program will work or when the program will be started. Nor could we identify references to the program structure. We are greatly concerned that this program will not be created in time to address other nonpoint sources not currently addressed via some regulatory permit or waiver by the first compliance deadline of the SCR Bacteria TMDL. As stated in the Staff Report, the SCR watershed is dominated by open space and rural lands most likely falling under the jurisdiction of the nonpoint source program.

Requested Action: We request Regional Board staff elaborate on the program, including a general approach to the structure of the program, types of dischargers and/or land use types covered, and a tentative schedule when the program will be initiated. In addition, we would like to suggest language that further clarifies and clearly identifies the nonpoint sources.

Requested Action: Add the following to the Staff Report page 53 Section 6.4 "LAs" and Tentative BPA page 5 under implementation: *LAs for natural landscapes, wildlife, golf courses, horses and livestock, and other unidentified nonpoint sources will be implemented through the Nonpoint Source Enforcement Policy.*

3. Regional Bacteria Studies and Research Efforts

While we appreciate the references to the work completed during the Los Angeles River Bacteria TMDL effort, we would request that further language be incorporated in the Tentative BPA that allows for updates and revisions based upon results as on-going efforts are completed. While not a traditional approach in this region, we feel this component would be vital to successfully addressing the true sources of impairment to the SCR.

Requested Action: A TMDL reopener three years after the effective date to be included in the Tentative BPA implementation schedule.

4. Water Quality Objectives Update

Section 2.1.2 Water Quality Objectives (WQO) state “...*The revised objectives include geometric mean limits and single sample limits for total coliform, fecal coliform, E. Coli, and Entrococcus*” (page 19). The WQO should be consistent with the proposed update of bacteria objectives for fresh waters. The update replaces the fecal and total coliform objectives with *E. Coli* objective as the sole indicator for REC-1 in fresh waters. In the Staff Report the indicator information is inconsistent between the WQO statement and the Numeric Targets listed in Table 3-1 (page 33).

Requested Action: Language be added to Section 2.1.2 to clarify the applicable WQOs for marine and freshwater environments and revise the Table 2-2 (page 20) to remove fecal coliform for Reaches 3, 5, 6, and 7 (freshwater REC-1). This revision would ensure consistency with the proposed update and avoid any confusion in the Staff Report.

Technical Comments

1. Open Space and Source Assessment

The Staff Report states on page 47, 4.3 Summary of Source Assessment that “...*Limited data from natural landscapes indicate that open space is not likely a source of bacteria.*” This statement is repeated in the Tentative BPA on page 3, Source Analysis. Open space accounts for about 90.5% of the SCR – the largest river system in Southern California. We are concerned about Municipal Separate Storm Sewer System (MS4) dischargers being required to achieve receiving water bacteria concentrations when data on the sources of bacteria to the SCR are limited and contribution from natural sources may be significant. There are too many complex factors and variables contributing to bacterial presence in the SCR watershed to require MS4 dischargers to be solely responsible for levels of indicator species in the receiving water. Although we recognize that the reference reach approach is designed to address natural sources, we are concerned that the approach may not address all of the natural sources of bacteria in the waterbody such as regrowth, natural bacteria in in-stream sediment, and others. Without sufficient information on open space bacteria contributions, it will not be possible to assess whether controlling urban sources of bacteria will result in the achievement of water quality objectives in the river.

The Regional Board staff conclusions are contradictory to the scientific results found in the Southern California Coastal Water Research Project (SCCWRP) Technical Report No. 542 titled “Fecal Indicator Bacteria (FBI) Levels During Dry Weather from Southern California Reference Streams” January 2008, which indicates that “*Natural areas can also be a source of bacteria originating from wildlife, including birds and mammals,*

pets, and livestock". The Technical Report also referenced other studies and recognized that natural sources could be significant contributors to total bacteria level in urban storm water in Southern California. Additionally, the SCCWRP study concludes that "*Fecal indicator bacteria in natural streams are most likely of non-human origin*". The study goes further concluding that "*Dry weather fecal indicator bacteria levels were one to two orders of magnitude lower than those observed in natural streams during storm conditions*".

Requested Action: We request Regional Board staff re-assess open space and source assessment to adequately include background and natural sources of bacteria.

2. Source Analysis

The Tentative BPA states on page 3, Source Analysis that "*The major contributors of bacteria loading to the SCR and Estuary are dry and wet-weather urban runoff discharges from the storm water conveyance system[...] Based on this information, staff concludes that runoff from urban areas served by the storm drain system is most likely the largest source of bacteria*". We believe these conclusions inaccurate, and not supported by the existing data. We recognize that collected urban runoff data showed some exceedances of bacterial concentrations, and might provide evidence of MS4's as potential contributor to bacterial presence in the SCR. However, the evidence does not support the statement that MS4's are the largest source of bacteria simply due to no data or limited data being available.

The data presented in the Table 2.5 of the Staff Report (page 26), *Summary of single statistics for coliform bacteria at VCWPD Mass Emissions Station in Reach 3*, were collected from an **in-stream** Mass Emissions Station located at the Freeman Diversion (station ID: ME-SCR). The monitoring results from this VCWPD station represent indicator concentrations in the receiving water **originating from a variety of sources**, and not only MS4's discharges. When analyzing in-stream concentrations, it is important to remember that the land use within the SCR Watershed is only about 8% urban and limited data exist on bacteria concentrations from open space in the watershed. Secondly, point source and nonpoint source runoff from open space, agriculture, urban, and other sources contribute to indicator loads detected at the in-stream ME-SCR sampling location. Therefore, we do not agree with the Regional Board staff's conclusion that only MS4's are responsible for elevated concentrations measured at the VCWPD station and consequently MS4's discharges are the largest source of bacteria to SCR Reach 3.

Requested Action: We request Regional Board staff re-analyze the ME-SCR data to include all possible point and nonpoint sources of bacteria.

3. Inclusion of Reach 3

It is our understanding that the SCR Reach 3 is being listed as impaired for bacteria concentrations concurrently with the development of the SCR TMDL based upon the analysis of the ME-SCR data per Section 1.1 *Regulatory Background* (page 9). We believe this was based upon incorrect assumptions and conclusions previously explained above in the Technical Comment No. 2. Consequently, we believe it is premature to include SCR Reach 3 in this TMDL at this time since no clear understanding of the sources of bacteria is presented.

Additionally, with the adoption of the new Ventura County National Pollutant Discharge Elimination System (NPDES) Permit in May 2009, we are instituting a number of new requirements on urban stormwater discharges countywide. Implementation of the Permit requirements within the following Permit programs is likely to reduce the bacteria concentrations originating from the MS4's:

- a. Public Information and Participation Program,
- b. Industrial/Commercial Business Program,
- c. Planning and Land Development Program,
- d. Development of Construction Program, and
- e. Illicit Connections and Illicit Discharges Elimination Program

The implementation of programs and Best Management Practices may be sufficient to address bacteria concentrations through other mechanisms, such as a Category 4B listing.

Requested Action: We respectfully request the Regional Board not list the SCR Reach 3 in the SCR TMDL for the reasons and rationale described above.

4. Numeric Targets

The *E. coli* is the preferred indicator for freshwater as identified in the 1986 *USEPA Ambient Water Quality Criteria for Bacteria*, which is the basis of the Basin Plan WQOs. According to the 1986 *USEPA* guidance, WQOs established for *E. coli* provide equivalent protection to recreational uses as do WQOs for fecal coliform and could, therefore be used as the sole target in the TMDL. Additionally, the use of *E. coli* objectives only and the removal of fecal coliform objectives are listed as one of the issues to be considered by Regional Board staff during the Triennial Review.

Requested Action: We support the Regional Board staff recommendation not to include targets for fecal, and total coliform and utilize targets for *E. coli* only.

5. Linkage Analysis

Although the analysis is consistent with the approach used in other Los Angeles Region Bacteria TMDLs as stated on page 48, Linkage Analysis; unfortunately, the critical conditions analyses do not reflect consistency. On page 48, 5.1 Critical Condition states that *“Unlike many TMDLs where the critical condition is during low-flow conditions or summer months, the critical condition for bacteria loading is during wet weather”*. Although it is stated by the Regional Board staff that wet weather is found to be a critical condition, the SCR TMDL does not include a high flow exemption. During certain high flow conditions, beneficial uses may be unattainable due to the risk of drowning and injury, at which time the designated use should be temporarily suspended and bacteria criteria would not apply. A high flow exemption is already in place for some Los Angeles County waterbodies and should be included for the SCR. In addition, the Santa Ana Regional Board is considering a suspension of REC1 and REC2 beneficial uses during wet weather (CEQA scoping meeting conducted on January 28, 2010), which can be a viable approach for the SCR (i.e. the exemption applies for storms greater than 0.5 inches that generate a specified amount of flow in the river). We believe that consideration of these issues should be included in the SCR TMDL.

Requested Action: We request Regional Board staff consider and include a high flow exemption for the SCR TMDL.

6. Implementation Plan and Schedule

As listed previously, the implementation plan should include clear reconsiderations to evaluate and consider new data and information, when available. Unfortunately, the Tentative BPA on page 8, Table 7-36.3 does not include a reopener in the implementation schedule. Furthermore, the TMDL reopener should allow for adjustments to targets, waste load allocations, and implementation schedule.

Requested Action: We request Regional Board staff include a reopener of the SCR TMDL **three years after the effective date**.

A TMDL implementation timeframe of 30 years similar to implementation schedule of the Los Angeles River Bacteria TMDL is absolutely necessary for the MS4 dischargers to raise the necessary funding and to successfully implement and monitor control measures, especially given the uncertainty in the data and sources for this TMDL and the difficulty in addressing bacteria discharges.

Requested Action: We request Regional Board staff consider a compliance timeframe based upon the resource necessary to achieve the load reductions specified in the TMDL.

Furthermore, a comprehensive monitoring plan is required to be submitted six months after the effective date of the SCR TMDL for Executive Officer's approval. Given the size of the watershed, multi-agency monitoring plan, extremely difficult economic climate, and complexity of the problem, we consider that **the allowed timeframe is insufficient** to generate a meaningful and comprehensive bacteria water quality monitoring plan for the SCR Watershed.

Requested Action: We request Regional Board staff reconsider and extend the timeframe allowed to one year for submittal of the water quality monitoring plan.

We would like to offer our time and resources to further discuss this matter. As always, Ventura County staff is willing to work cooperatively to clarify the items discussed in this letter.

Thank you for your time to consider this matter. If you have any additional questions or require further clarification, please contact Ewelina Mutkowska at (805) 645-1382.

Sincerely,



Gerhardt Hubner
Deputy Director

Attachment 1: County of Ventura comment letter for development of the proposed Santa Clara River Bacteria TMDL submitted to the Regional Board on February 27, 2010.

cc: Mr. Yanjie Chu, Environmental Scientist TMDL Unit
Norma Camacho, VCWPD Director
Jeff Pratt, VCPWA Director
Ewelina Mutkowska, Engineer Manager I
Ricardo Moreno, Water Quality Planner III

February 17, 2010

Jenny Newman
Los Angeles Regional Water Quality Control Board
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SUBJECT: COMMENTS FOR DEVELOPMENT OF THE PROPOSED SANTA CLARA RIVER BACTERIA TOTAL MAXIMUM DAILY LOADS (TMDL)

Dear Ms. Newman:

The Ventura County Watershed Protection District (VCWPD) and Ventura County Unincorporated Stormwater Program (County) appreciate the opportunity to provide input to the Los Angeles Regional Water Quality Control Board (Regional Board) during development of the Santa Clara River Bacteria Total Maximum Daily Load (TMDL). As a Ventura County Municipal Stormwater Permittee under NPDES Permit No. CAS004002, the VCWPD has worked with the Regional Board to implement a Stormwater Management Program to address TMDLs within its watersheds. Through this process, the VCWPD and County have identified a number of issues that we would like Regional Board staff to consider during the development of the Santa Clara River Bacteria TMDL. We recognize the time and resource constraints associated with TMDL development, but hope that by providing a list of potential issues early in the process, Regional Board staff will be able to identify potential solutions within the TMDL prior to the release of a tentative Basin Plan Amendment.

The following letter summarizes the key issues that the VCWPD and County have identified as potential concerns with the development of a TMDL for bacteria in the Santa Clara River. The intent of the letter is to highlight the issues and discuss a general approach to addressing the issue, but not provide a detailed discussion. The VCWPD and County would be willing to discuss the issues in more depth with Regional Water Board staff and/or provide more detailed language recommendations if desired.

Issue #1 - TMDL Compliance Determination

The VCWPD and County are concerned about MS4 dischargers being required to achieve receiving water bacteria concentrations when data on the sources of bacteria to the Santa Clara River are limited and natural sources may be significant. The land use within the Santa Clara River Watershed is only about 10% urban and limited data exists on bacteria concentrations from open space in the watershed. Without sufficient information on open space bacteria contributions, it will not be possible to assess whether controlling urban sources of bacteria will result in the achievement of water quality objectives in the river. Additionally, the Santa Clara Estuary is a complex ecosystem full of productive vegetative and animal life that could contribute to natural bacteria loadings. There are too many complicating factors and variables contributing to bacterial presence in the Santa Clara River channel and Estuary to require dischargers to be solely responsible for levels of indicator species in the receiving water.

Although we recognize that the reference reach approach is designed to address natural sources, we are concerned that the approach may not address all of the natural sources in the waterbody (such as



regrowth, natural bacteria in in-stream sediment, estuarine animal sources, etc.) and the available reference reach information may not be fully representative of the unique conditions in the Santa Clara River. As a result, we recommend the following:

1. Compliance should be determined based on actions of dischargers through an iterative best management practice (BMP) approach rather than by meeting numeric targets within the river.
2. Bacteria are distinct from constituents covered under existing TMDLs in the Santa Clara River, in that natural sources and regrowth within the channel can be bacteria sources in addition to discharges by agriculture, stormwater or wastewater dischargers. Therefore, it will be more effective to develop a load reduction strategy that requires dischargers to reduce loading of bacteria by implementation of BMPs rather than solely by meeting targets within the receiving water.
3. A BMP iterative approach would specify that dischargers should implement BMPs to reduce loading of bacteria, and that if compliance is not achieved, BMPs should be re-evaluated and more effective BMPs implemented.
4. A clearly defined BMP iterative approach should be certified as "functionally equivalent" to meeting the wasteload allocations (similar to language in the Trash TMDL that installation of full capture devices equals compliance with the wasteload allocations).
5. Additionally, if a reference reach approach is used for setting allocations, the methods for calculating exceedances of geometric mean objectives should be clearly outlined to avoid confusion after data collection.

Issue #2 - Targets

In the recently released Triennial Review documents, several bacteria related issues are slated for possible consideration by Regional Board staff during the next three years. We feel that these issues should be included in the Santa Clara River Bacteria TMDL as follows:

1. Include a high flow exemption for the Santa Clara River. During certain high flow conditions, beneficial uses may be unattainable due to the risk of drowning and injury, at which time the designated use should be temporarily suspended and bacteria criteria would not apply. A high flow exemption is already in place for some Los Angeles County waterbodies and should be considered for the Santa Clara River. The Santa Ana Regional Board is preparing to consider a suspension of REC1 and REC2 beneficial uses during wet weather (CEQA scoping meeting conducted on 1/28/10) that contains approaches that could be viable for the Santa Clara River (i.e. the exemption applies for storms greater than 0.5 inches that generate a specified amount of flow in the river).
2. Consider not including targets for fecal and total coliform, and utilize targets for *E. coli* only. *E. coli* is the preferred indicator for freshwater as identified in the 1986 *USEPA Ambient Water Quality Criteria for Bacteria*, which is the basis of the Basin Plan Water Quality Objectives (WQOs). According to the 1986 *USEPA* guidance, *E. coli* provides equivalent protection to recreational uses as does fecal coliform and could therefore be used as the sole target in the TMDL. Additionally, the use of *E. coli* objectives only and the removal of fecal coliform

objectives are listed as one of the issues to be considered by Regional Board staff during the Triennial Review.

Issue #3 - Implementation Requirements

The VCWPD and the County would like to see the TMDL implemented in a way that is consistent with its existing management strategies in order to effectively use resources. Considerations for the implementation plan include:

1. The compliance time frame should depend on the resource expenditures necessary to achieve the load reductions specified in the TMDL. A timeframe longer than those adopted in other TMDLs (10 years) and more similar to those being discussed in the Los Angeles River Bacteria TMDL (30 years) is absolutely necessary for the MS4 dischargers to raise the necessary funding and to implement control measures, especially given the uncertainty in the data and sources for this TMDL and the difficulty in addressing bacteria discharges.
2. The implementation plan should include clear reconsiderations to evaluate and consider new data and information, if available. The TMDL reopeners should allow for adjustments to targets, wasteload allocations, and implementation schedule.
3. The monitoring program should be consistent with the newly adopted Ventura County MS4 Permit and not require accelerated monitoring when exceedances of objectives are observed (as currently required in other regional Bacteria TMDLs).

Issue #4 - Application of the Reference Reach Approach

It is our understanding that the number of allowable exceedances will be updated in this TMDL to match more recent data available on natural sources. We strongly support the use of newer data from more sites in evaluating the number of allowable exceedances (such as data from recent Southern California Coastal Water Research Project (SCCWRP) studies). The use of the Leo Carrillo Beach watershed as a reference reach for the Santa Clara River is inappropriate due to the location (beach versus inland surface water), smaller size, differing flow characteristics, and types of geography. Additionally, we would like to provide some thoughts on some additional changes to the currently used reference reach approach for consideration.

In considering other data for defining the number of allowable exceedances, the VCWPD and County request that exceedances during dry weather and exceedances of the geometric mean water quality objective be allowed by the TMDL at the frequency observed in the available data, and that all applicable data be considered in making this determination.

If the number of exceedance days is calculated in a similar manner to other bacteria TMDLs in the Los Angeles Region, the analysis should consider local precipitation gauges, rather than those of LA, and determine both critical dry and wet years for determining the allocations for dry and wet weather allocations respectively.

Issue #5 - Inclusion of Reach 3 in the TMDL

The VCWPD and County feel it is premature to include Reach 3 of the Santa Clara River in the TMDL at this time since it is not currently listed on the 303(d) list or subject to the Consent Decree. With the

Ms. Jenny Newman
February 17, 2010
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adoption of the new Ventura County MS4 NPDES Permit in May 2009, the VCWPD and County will be instituting a number of new requirements on urban stormwater discharges to Reach 3 during the permit term that are likely to reduce the amount of bacteria from the MS4 system. The implementation of BMPs may be sufficient to address the elevated bacteria concentrations through other mechanisms, such as a Category 4B listing. We respectfully request the Regional Board assess the impact of the actions currently being implemented by the MS4 permittees.

In conclusion, although we understand the Regional Board's united resources and pressure to meet Consent Decree deadlines, we do not feel that the restrictions warrant developing TMDLs without a proper and full analysis of the data and an extensive review of all available options during TMDL development. The VCWPD and County are also currently facing significant financial constraints. The costs of implementing this TMDL could be considerable without achieving a significant increase in environmental benefit. We request that you seriously consider and analyze the costs of implementation and compliance with the TMDLs as you evaluate mechanisms for developing and implementing them.

Thank you for your consideration of these suggestions from the VCWPD and the County . We look forward to working with you during the development process for the Santa Clara River Bacteria TMDL.

Sincerely,



Gerhardt Hubner
Deputy Director

CC: Norma Camacho, VCWPD Director
Jeff Pratt, PWA Director
Ewelina Mutkowska, Engineer Manager I
Ricardo Moreno, Water Quality Planner III