



GAIL FARBER, Director

# COUNTY OF LOS ANGELES

## DEPARTMENT OF PUBLIC WORKS

*"To Enrich Lives Through Effective and Caring Service"*

900 SOUTH FREMONT AVENUE  
ALHAMBRA, CALIFORNIA 91803-1331  
Telephone (626) 458-5100  
<http://dpw.lacounty.gov>

ADDRESS ALL CORRESPONDENCE TO:  
P.O. BOX 1460  
ALHAMBRA, CALIFORNIA 91802-1460

IN REPLY PLEASE

REFER TO FILE: **WM-9**

June 3, 2010

Mr Samuel Unger, PE  
Interim Executive Officer  
California Regional Water Quality  
Control Board – Los Angeles Region  
320 West 4th Street, Suite 200  
Los Angeles, CA 90013-2343

Attention Mr Man Voong

Dear Mr Unger:

### **COMMENTS OF THE COUNTY OF LOS ANGELES ON THE PROPOSED BACTERIA TOTAL MAXIMUM DAILY LOAD FOR THE LOS ANGELES RIVER AND ITS TRIBUTARIES**

Thank you for the opportunity to comment on the proposed amendment to the Water Quality Control Plan for the Los Angeles Region (Basin Plan) to incorporate the Total Maximum Daily Load (TMDL) for bacteria for the Los Angeles River and its tributaries. Based on a review of the proposed TMDL and the supporting Staff Report, the following comments are submitted on behalf of the unincorporated areas of the County of Los Angeles

#### **1. Stormwater agencies should be responsible only for their own discharges**

The proposed TMDL requires stormwater agencies to comply with waste-load allocations (WLAs) in the receiving water where many factors potentially affect the quality of the water from the time it is treated to the time it is tested at the compliance monitoring location. According to a study conducted by Cleaner Rivers through Effective Stakeholder-led TMDLs (CREST) for the Los Angeles River, a significant portion (more than 50 percent) of the bacteria loading to the Los Angeles River is unaccounted for (i.e., sources are unknown) and beyond the control of stormwater agencies.

Additionally, the Los Angeles County Municipal Storm Water Permit (MS4 Permit) provides that each discharger is responsible only for a discharge for which it is the operator (MS4 Permit, Finding G.4). The TMDL, as it applies to MS4 Permittees, should be consistent with the permit.

Recommendation. Revise the proposed TMDL to provide that a stormwater agency is responsible only for an exceedance caused by its own discharge

2. **The Load Reduction Strategy (LARS) as envisioned by CREST does not necessarily require multiagency coordination**

Based on our understanding and a discussion with the CREST consultant, the LRS as proposed by CREST is a phased and adaptive implementation strategy to reduce bacterial loading into the receiving waters; it does not necessarily require multiparty coordination. Page 7 of the proposed Basin Plan Amendment, implementation section, and Section 9.4.5 of the draft Staff Report misinterpret the LRS as “requir[ing] a coordinated effort among MS4 Permittees within a segment or tributary.” It is further stated that “For MS4 Permittees that choose to *not* follow a MS4 Load Reduction Strategy, the compliance schedule to attain final WLAs is shorter because only one implementation phase is allowed.” This again appears to erroneously equate the LRS with a coordinated effort by multiple agencies.

Recommendation. Revise page 7 of the proposed Basin Plan Amendment and Section 9.4.5 of the draft Staff Report to reflect the same implementation schedule regardless of whether or not an agency pursues the LRS, and if it does pursue a LRS, whether or not it pursues it independently or as part of a group.

3. **The geometric mean should not be calculated daily**

The U.S. Environmental Protection Agency (EPA) originally intended the use of the geometric mean as a tool to determine the condition of a water body over a longer period of time and to detect chronic problems. The EPA’s 69 Fed. Reg. 67218, 67225 (Nov 16, 2004), states that “because a geometric mean provides information pertaining to water quality that looks backwards in time, it is not necessarily useful in determining whether a [water body] is safe for swimming on a particular day.” Further, the EPA (page 67224 of the 69 Fed. Reg.) states that “it would be technically appropriate to apply the averaging period on a set basis such as monthly or recreational season.” In other words, the geometric mean is intended as an assessment tool for condition over time and not from day

to day Therefore, the proposed TMDL's use of the rolling 30-day period is inconsistent with the EPA's original intent.

Recommendation. Revise the proposed TMDL so that the geometric mean is calculated once per month or once per season

**4. The definition of wet weather should be consistent with the metals TMDL**

The existing metals TMDL for the Los Angeles River and its tributaries defines wet weather as "days when flow at the Wardlow Station is greater than 500 cubic feet per second," whereas the proposed bacteria TMDL defines wet weather as "days with rainfall of 0.1 inch or more plus the three days following the rain event." Such inconsistency between the two TMDLs would create a challenge in integrating the implementation activities of the two TMDLs. It is not appropriate to have two definitions of wet/dry weather for the same water body

Recommendation. The proposed TMDL should define wet weather the same way as the metals TMDL for Los Angeles River and its tributaries.

**5. More time should be provided for wet-weather implementation**

The proposed TMDL prescribes the same final compliance schedule for dry and wet weather; neither the Staff Report nor the TMDL contain an analysis of whether the TMDL's limits can be reached within the time frame proposed

As it has been seen in other similar TMDLs, addressing the wet-weather problem poses larger technical and economic challenges than addressing the dry-weather. In light of this fact, the implementation schedule for the wet weather should be longer than for the dry weather to reflect the time needed to address the added challenges associated with the wet weather

Recommendation. Perform an analysis of whether the TMDL's limits can be reached within the time frame proposed before assigning time frames for each segment. Revise the proposed TMDL to extend the wet-weather implementation schedule to 30 years.

**6. Level of monitoring should be commensurate with the level of use**

Section 9.7 of the draft Staff Report requires monthly monitoring during the first implementation phase and weekly monitoring during the second implementation

phase. Furthermore, as part of the LRS monitoring, all storm drain outfalls that are discharging to a segment or tributary must be monitored. This level of monitoring is excessive in light of the fact that there is no legal access to or recreational use in the Los Angeles River. There is no analysis in the Staff Report to substantiate this level of monitoring both in terms of frequency and number of sites.

Recommendation. Revise Section 9.7 of the draft Staff Report to remove specific details related to compliance monitoring and LRS monitoring and provide that the frequency of monitoring and the number of monitoring locations should be addressed in the monitoring plan to be submitted by the parties.

**7. Monitoring responsibilities should be incorporated into the TMDL for nonpoint-source and non-MS4 point-source dischargers**

The proposed TMDL assigns WLAs and load allocations to a number of parties in addition to the municipal stormwater dischargers, including the U.S. Forest Service, California Department of Parks and Recreation, and National Parks Services. However, the monitoring responsibilities in the TMDL are given entirely to the municipal stormwater dischargers without adequate justification. Municipal stormwater dischargers should not solely bear this responsibility because the non-MS4 sources also contribute bacterial loading into the Los Angeles River and its tributaries. Without this monitoring, the parties and the public will not know whether any failure to meet water quality standards is due to a discharge from non-MS4 sources.

Recommendation. Revise the proposed TMDL to include specific monitoring requirements for all nonpoint-source and non-MS4 point-source parties. Monitoring should synchronize with that conducted by the municipal stormwater dischargers.

**8. Establishment of the WLAs should consistently follow the reference system approach**

The proposed TMDL appears to selectively adhere to the reference system approach as set forth by CREST. For example, as described in the CREST Technical Report, the five (5) days of allowable single-sample exceedances for dry weather was derived by excluding the so-called "minimally impacted" reference sites. By including the minimally impacted sites in the analysis, the single-sample exceedance days for the reference watershed is 21 days.

Excluding minimally impacted sites is inappropriate for two reasons. First, the justification given to categorize those sites as “minimally impacted” is not convincing. For instance, one reason cited for characterizing a site as minimally impacted is the impact from wildfires. Wildfires are a naturally occurring phenomenon and, therefore, should not be considered as an “impact” in the sense of anthropogenic impact. Secondly, given the highly urbanized nature of the Los Angeles River Watershed, using minimally impacted sites as reference is appropriate.

In the case of the geometric mean WLA, the proposed TMDL abandons the reference system approach entirely without justification. According to the CREST study, significant exceedances of geometric mean were detected at the reference sites. Including results from the minimally impacted sites, the reference system exceeded the geometric mean numeric target 16 percent of the time, the number of exceedances is reduced to 15 percent when results from the minimally impacted sites are excluded. Additionally, by arbitrarily setting the geometric mean WLA at zero (0) exceedances, the proposed TMDL is essentially requiring the treatment or diversion of nonanthropogenic sources of bacteria. Further, setting a reference system-based geometric mean standard has been applied by other California Regional Water Quality Control Boards, such as the San Diego Regional Board.

Recommendation. Revise the proposed TMDL so both the dry-weather single-sample and geometric mean WLAs are established in accordance with the reference system approach and include minimally impacted sites in the calculation.

9. **The interim mass-based WLA should be expressed as a seasonal or an annual total instead of a daily average**

The interim WLA for the dry weather are expressed currently as daily averages on page 5 of the proposed TMDL. It would be more appropriate to express the mass loading on a longer time scale to accommodate the day-to-day fluctuation of bacteria concentrations.

Recommendation. Revise the proposed TMDL so the mass-based interim WLAs are expressed as seasonal or annual totals.

**10. The Los Angeles International Airport (LAX) rain gage is not reflective of rainfall in the entire Los Angeles River Watershed**

The proposed TMDL uses rainfall data from the LAX rain gage to determine wet-weather condition. Using a single-rain gage in this instance is inappropriate for two reasons: First, the LAX rain gage is located outside of the Los Angeles River Watershed and far away from the upstream part of the watershed. Secondly, the Los Angeles River Watershed covers a large geographical area with significant spatial variation in rainfall and other climatic attributes.

Recommendation Revise the proposed TMDL to use three or more rain gage stations in the Los Angeles River Watershed to more accurately reflect the hydrologic and climatic variability within the watershed

**11. The TMDL should recognize the ongoing scientific progress on bacteria**

There are ongoing scientific studies of the bacteria indicators currently being used in the TMDLs. Recent studies conducted in Southern California have indicated the absence of correlation between traditional bacteria indicators and human health risks. The EPA recognizes the lack of sound science on bacteria and is currently conducting necessary scientific studies to establish new bacteria indicators and associated criteria for recreational waters by 2012. Further, the Southern California Coastal Water Research Project is also currently conducting an epidemiological study in Southern California and is expected to address some of the existing scientific limitations. Thus, developing the Los Angeles River Bacteria TMDL based on traditional indicators, which do not accurately predict the risk of illness, may lack scientific justification and needs reconsideration as new findings are made available.

Recommendation Revise the TMDL resolution to add a language that acknowledges the existence of ongoing studies and the possibility that the TMDL would be revised in the future to reflect the findings of the studies and/or new standards that may result thereof.

**12. The margin of safety as presented in Table 7-1 of the Staff Report is excessively high**

A margin of safety (MOS) is used in a TMDL to account for the uncertainty inherent in the TMDL development process while being protective of beneficial uses. However, the MOS should not be excessive and should generally be no

more than 10 percent of the loading capacity of the water body. For the proposed TMDL, the MOS is as high as 80 percent of the loading capacity for some reaches as shown in Table 7-1 of the draft Staff Report.

Recommendation: Revise the proposed TMDL so that no MOS is more than 10 percent of the loading capacity of the reach in question.

### **13. Miscellaneous Comments**

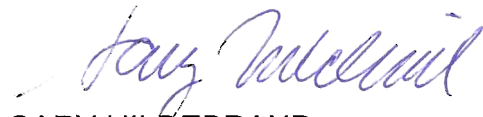
- a The proposed TMDL should consider the year-to-year rainfall variability in evaluating compliance
- b Table 7-39.4 should have headings that clearly distinguish the schedule for dry-weather compliance from the schedule for wet-weather compliance.
- c The title of the proposed TMDL should be revised as the 'Los Angeles River and its Tributary Bacteria TMDL' as opposed to the "Los Angeles River Watershed Bacteria TMDL " It is not the watershed that is on the 303(d) List, but the river reaches and its tributaries.
- d The interim WLA table on page 5 of the Basin Plan Amendment was adopted from the CREST report that was developed for dry weather only The table should be modified to clearly indicate that the interim WLAs are for dry weather only to avoid misinterpretation. The table should also be modified to reflect the letters "A", "B", etc. associated with each segment name.
- e The regrouping of the Los Angeles River reaches into segments would inappropriately incorporate unimpaired reaches of the Los Angeles River (Reaches 3 and 5) into the TMDL. The proposed TMDL should be modified to revert back to the reach delineation.
- f To be consistent with the implementation schedule in Table 7-39.4, the implementation sections on pages 6 and 7 of the Basin Plan Amendment should indicate that the MS4 Load Reduction Strategy will be subject to the Regional Board Executive Officer's approval.
- g On page 7, the third line of the third paragraph, "WLAs" should be replaced with 'interim WLAs.'

Mr Samuel Unger  
June 3, 2010  
Page 8

We look forward to your consideration of our comments. If you have any questions, please contact me at (626) 458-4300 or ghildeb@dpw.lacounty.gov or your staff may contact Ms Rossana D'Antonio at (626) 458-4325 or rdanton@dpw.lacounty.gov

Very truly yours,

GAIL FARBER  
Director of Public Works



GARY HILDEBRAND  
Assistant Deputy Director  
Watershed Management Division

GA:jtz

P:\wmpubl\Secretarial\2010 Documents\Letters\LAR Bacteria TMDL Comment (County).docx\10218

cc. Chief Executive Office