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September 4, 2012

Jenny Newman
Regional Water Quality Control Board
Los Angeles Region
320 W. Fourth Street
Los Angeles, CA 90013

Via Electronic mail: losangeles@waterboards.ca.gov

**SUBJECT: Comment Letter--Proposed Ventura River Algae and Nutrients
TMDL**

Dear Ms. Newman:

The California Association of Sanitation Agencies (CASA) and Tri-TAC appreciate the opportunity to provide comments on the proposed Total Maximum Daily Load (TMDL) for algae in the Ventura River. CASA and Tri-TAC are statewide organizations comprised of members representing local public agencies and other professionals responsible for wastewater treatment. Tri-TAC is sponsored jointly by CASA, the California Water Environment Association, and the League of California Cities. The constituency base for CASA and Tri-TAC collects, treats and reclaims more than two billion gallons of wastewater each day and serves most of the sewered population of California.

CASA and Tri-TAC do not routinely comment on individual TMDLs proposed by the various regional water boards. The exception to this practice is when a draft TMDL would establish a precedent or conflict with efforts to ensure consistent statewide approaches to important regulatory and technical issues. While we understand that the Los Angeles Regional Water Board staff has involved local stakeholders in the development of the proposed TMDL and has in many important respects taken into account the site-specific conditions in the watershed, there are several aspects of the draft TMDL that we believe raise potentially precedential issues of statewide importance. These issues, which relate to the calculation and implementation of the proposed wasteload allocations (WLAs) for publicly owned treatment works (POTWs), are the focus of our comments.

As an initial matter, we note that the Ojai Valley Sanitation District (OVSD) has made a significant investment in reducing its contributions of nutrients to the river, at significant cost to the District's ratepayers. As a result, OVSD's discharge now averages 4.0 mg/L of nitrogen. In order to achieve the proposed WLA of 3.0 mg/L in dry weather, the District will be required to spend an additional \$15 to \$17 million. This is a

significant burden on the District's ratepayers for a minimal environmental benefit, given the lack of information in the staff report supporting an algal impairment. CASA and Tri-TAC believe the TMDL, at least in its initial phase, should focus on reducing inputs that have not been historically regulated, such as horses, and full implementation of actions by stormwater agencies and agriculture as required by their recently renewed NPDES permits and conditional waiver, and then fully evaluating the impacts of the reductions prior to further ratcheting down on the District which has already reduced its contribution of nutrients by 90 percent.

Existing and Final WLAs Should be Calculated Based on Design Flow

The allocation calculations for OVSD are based on the assumption that the wastewater treatment plant will continue to discharge at the existing flow rate. This is directly contrary to federal regulations, which provide that “[i]n the case of POTWs, permit effluent limitations, standards, or prohibitions shall be calculated based on design flow.” (40 CFR §122.45(b).) This approach is problematic in that it limits the ability of the plant to accept higher flows in the future. By assigning load-based allocations and not utilizing design flow as the basis for the calculations, the TMDL prevents OVSD from considering actions that bring more flow into the wastewater plant, such as connecting properties now using septic systems or accepting dry weather diversions of urban runoff. Although the wastewater plant might have capacity for the flow, additional reductions to nutrient concentrations would be required to accept additional flow because of the load-based allocation limits. Additional nutrient reductions beyond the proposed effluent targets of 3 mg/L TN and 1 mg/L TP would require OVSD to install reverse osmosis treatment at the exorbitant cost of \$75 million. Due to the high expense that would be required for such treatment, the proposed WLAs based on actual flows would be equate to a “taking” of 0.9 MGD in treatment plant capacity. In accordance with federal regulations, the allocations for OVSD should be calculated based on the plant's design flow of 3.0 mgd.

Seasonal Allocations for POTWs Would be Consistent with the TMDL and Current Practice

For POTWs, the use of wet and dry day allocations as proposed in the TMDL is not a good fit. Unlike other categories of sources such as stormwater, dry and wet weather discharges from POTWs are relatively constant. While it is true that a storm event may cause elevated flows for a limited period of time, any modifications to the wastewater treatment plant to address allocations will not be designed to operate differently during dry and wet weather. Therefore, the separation of dry and wet days for the purposes of compliance with the TMDL will not provide any relief for OVSD.

We do understand the relevance of dry and wet weather to the impairment the TMDL is designed to address. While using wet days does not make sense, using wet and dry seasons is consistent with the way in which POTWs operate. Dry season WLAs will protect beneficial uses, would be consistent with the numeric targets, and are supported by data and analysis provided in the Draft TMDL Staff Report.

Given that the performance of any secondary treatment system is temperature dependent and performs best under stable operating conditions, seasonal allocations are more appropriate than dry-weather/wet-weather allocations. In addition, due to inflow/infiltration, increased influent flows are typically experienced during rainfall events and lead to reduced nutrient removal. The reduced performance due to increased influent flows may last for an extended period of time during the winter season (the season that does not correspond to the algal growing season) because multiple rainfall events may occur in succession. These multiple rainfall events may not allow for the secondary treatment system to stabilize back to normal operating conditions until the winter season ends and influent flows are allowed to stabilize for an extended period of time. Allocations based upon dry-weather/wet-weather days do not capture the most influential changes in the environment that lead to reduced nutrient removal and do not always coincide with the algal growing/non-growing season. In contrast, seasonal allocations do capture the most influential changes and may be selected to coincide with the algal growing/non-growing season.

The numeric targets established to interpret the biostimulatory objective are applied in the Draft TMDL as seasonal averages during the growing season. The application of nutrient allocations outside of the growing season to address targets that are only applicable during the growing season is not supported. The Draft Staff Report does not provide any additional information to support the need for allocations during all dry weather rather than just the growing season. Given that the TMDL already includes an 8% explicit margin of safety, applying conservative loads over half the year is not warranted.

The use of seasonal allocations is consistent with existing precedent. Two of the nutrient TMDLs cited as precedent for this TMDL (Malibu Creek and Chorro Creek) include some form of seasonal allocation. The Malibu Creek TMDL includes separate allocations that apply during the summer (April 15 to November 15) and winter (November 16 to April 14) periods, and the Chorro Creek TMDL includes orthophosphorus allocations that only apply in May through September. We are unaware of any TMDLs for nutrients that have included dry day and wet day WLAs.

If the Regional Water Board continues to pursue WLAs based on wet and dry weather days notwithstanding these comments and our support of the use of the seasonal allocations, the dry weather WLA should be set to automatically adjust based on the number of dry weather days each year. The currently proposed dry weather WLAs are annual mass-based limits assuming 331 dry weather days per year. No allocations are provided for the OVSD for dry weather beyond 331 days in a given year. If there are, for example, 340 dry weather days in a particular year, OVSD would have to discharge a zero mass of nutrients on the extra nine days in order to remain in compliance with the TMDL.

Use of Performance-Based Limits Set at the 90th Percentile is Inappropriate

The use of performance-based limits for the wet days allocation in the TMDL is not warranted or consistent with the approach used to set wet day allocations for the other sources. For all other sources, with one exception, the wet day allocation is set to the Basin Plan objective for nitrate-N+nitrite-N. The approach is justified by the fact that wet season discharges of nutrients are not contributing to the impairments of the biostimulatory objective observed during the growing season. As a result, the applicable criterion is the Basin Plan objective. The one exception to this approach (wet day allocations in the Estuary) is due to the fact that there is no Basin Plan objective applicable to the Estuary. This is not the case for the reach to which OVSD discharges. There is a Basin Plan objective of 10 mg/L nitrate-N+nitrite-N that is applicable to the reach downstream of the discharge that has been used historically for the effluent limit for OVSD. For consistency with the other sources, 10 mg/L of nitrate-N+nitrite-N should be utilized as the allocation during the non-growing season for OVSD. No performance-based limits are necessary for OVSD. The treatment process installed for removal of nutrients will continue to operate year round, and OVSD has a consistent track record of improving performance regardless of effluent limitations, as evidenced by the fact that current discharge concentrations are well below the existing effluent limitation of 10 mg/L.

Given recent improvements in nutrient removal by the OVSD treatment plant, it appears that OVSD may be able to currently attain the proposed performance-based limits, which are set as daily maximum limits based on the 90th percentile of historical effluent results. However, in addition to the fact that these limits are not needed or appropriate, we are concerned about the precedent set by use of a 90th percentile basis for establishing performance-based limits, particularly when the limits would be applied as daily maximum values. If OVSD had not made these recent improvements, use of the 90th percentile standard would mean that the plant would be out of compliance 10% of the time. We recommend that, at minimum, the Regional Water Board include language in the TMDL stating that use of a 90th percentile to set daily maximum performance-based limits is not appropriate in most situations.

The TMDL Targets Should be Modified.

Numeric targets included on page 3 of Attachment A to Resolution No. R12-XXX contain percent algal cover thresholds in addition to chlorophyll *a* biomass thresholds. However, the *Nutrient Numeric Endpoints for California Report (CA NNE)* contains only chlorophyll *a* biomass thresholds. Percent cover estimates are semi-quantitative at best, tend to be highly variable and uncertain, and were not incorporated by the technical experts into the CA NNE. Therefore, the percent cover numeric targets on page 3 of the TMDL should be removed. Chlorophyll *a* biomass estimates can be supplemented with ash-free dry weight if Regional Water Board staff wish to confirm or provide additional support to the chlorophyll *a* estimates.

Also included on page 3 of Attachment A to Resolution No. R12-XXX is a numeric target for dissolved oxygen in the estuary. Regional Water Board staff should consider using regional (southern California) estuary dissolved oxygen thresholds developed as part of the State's estuary NNE project. This would correspond to a daily minimum (CMC) of 4.0 mg/L and a minimum monthly average (CCC) of 6.3 mg/L assuming salmonids are present. Additionally, it should be noted in the TMDL that dissolved oxygen measurements in the estuary should be collected at mid-depth to account for the utilized habitat of the species that were used in developing the threshold. Benthic species assumed to be much more tolerant of low dissolved oxygen were intentionally avoided in selecting oxygen sensitivity data used in developing the thresholds.

On page 9 of the Attachment A to Resolution No. R12-XXX, Regional Water Board staff proposes a special study to "confirm the conclusion that an algal biomass target of 150 mg/m² is fully protective of aquatic life and minimizes the risk of low DO events". The 150 mg/m² chlorophyll *a* biomass target represents the upper boundary determined through consensus by a panel of experts to be presumptive of unimpaired conditions. Based on the opinions expressed by the panel of experts, it is likely that algal biomass levels at or exceeding 150 mg/m² is fully protective of aquatic life. For this reason, this proposed special study should be re-worded to more accurately reflect this expert opinion as suggested below:

"Determine if algal biomass targets above 150 mg/m² are also fully protective of aquatic life and minimize the risk of low DO events".

In summary, we recognize the work that has been done to improve the proposed TMDL. However, we believe additional revisions to address the issues identified above are needed prior to adoption. Thank you for your consideration of our comments.

Sincerely,



Roberta L. Larson, Executive Director
CASA



Jackie Kepke, Vice Chair
Tri-TAC

cc: Jeff Palmer, General Manager, OVSD