CALLEGUAS CREEK

Watershed Management Plan

A COOPERATIVE STRATEGY FOR
RESOURCE MANAGEMENT & PROTECTION

December 20, 2018

Electronic Submission: commentletters@waterboards.ca.gov

Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814

Subject: Comment Letter – Toxicity Provisions

Dear Ms. Townsend:

The Stakeholders implementing TMDLs in the Calleguas Creek Watershed (Stakeholders) appreciates the opportunity to provide comments on the proposed Establishment of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California (ISWEBE); and Toxicity Provisions (hereafter Draft Toxicity Provisions).

The Stakeholders have a strong interest in the Draft Toxicity Provisions for both its implications to individual dischargers and how it would impact TMDL compliance. As part of the Calleguas Creek Watershed Management Plan (CCWMP), the Stakeholders worked diligently with the Los Angeles Regional Water Quality Control Board (Regional Board), State Water Resources Control Board (State Board), and US Environmental Protection Agency (EPA) to develop the Calleguas Creek Watershed Toxicity TMDL (CCW Toxicity TMDL - effective March 2006). During this coordinated development effort, the CCWMP assisted Regional Board staff in developing a TMDL that appropriately and efficiently identifies toxic environmental conditions and allows for adequate implementation actions in areas where true toxic conditions have been identified. The implementation of this TMDL would successfully reduce toxic conditions in the watershed and we hope that any adopted toxicity provisions of the ISWEBE will facilitate the work that has already been done in the watershed.

The Stakeholders have submitted comments on the preliminary draft versions of the Toxicity Policy and are concerned that several of our key issues have not been addressed or discussed in the Draft Toxicity Provisions. In particular, the Stakeholders have requested that the Draft Toxicity Provisions use narrative objectives with implementation procedures for non-stormwater (i.e., wastewater) dischargers that include narrative effluent limitations and consistent numeric triggers for accelerated monitoring and Toxicity Reduction Evaluations (TREs) along with provisions for interpreting the narrative objectives for the purposes of 303(d) listing and TMDL target development. As these earlier recommendations have not been included in the Draft Toxicity Provisions, our fundamental concern with the Draft Toxicity Provisions continues to be the implementation of statewide numeric toxicity objectives and numeric effluent limitations for non-stormwater dischargers.

We also feel that the Draft Toxicity Provisions continue to fail to recognize the implications of numeric objectives to stormwater and agriculture dischargers, particularly in the context of TMDLs. For these types of dischargers in the Calleguas Creek Watershed, the Draft Toxicity Provisions will result in the potential application of the numeric objectives as effluent limitations for the agricultural and stormwater discharges.

For the non-stormwater dischargers, the Draft Toxicity Provisions have failed to demonstrate the need for numeric effluent limitations. In the Calleguas Creek Watershed and the Los Angeles Region in general, the use of narrative effluent limitations with numeric triggers had previously resulted in significant improvements to water quality. In the Calleguas Creek Watershed, the implementation of the Toxicity TMDL through the use of triggers for additional action, identification of toxicants and implementation of actions to address the identified toxicants has significantly reduced the observed toxicity in the watershed. This had all been accomplished without the need for numeric objectives or numeric effluent limits. The ability to not be in violation if actions are taken to identify and reduce observed persistent toxicity is sufficient to compel action and the Draft Toxicity Provisions do not provide sufficient justification as to why the consistent application of this approach will not work. Additionally, although the Draft Toxicity Provisions have attempted to address some of the concerns with the use of numeric effluent limitations for non-stormwater dischargers through the implementation procedures, the Draft Toxicity Provisions do not address the fact that due to the establishment of numeric objectives for receiving waters, TMDLs may drive more stringent numeric effluent limitations for non-stormwater dischargers than those outlined in the implementation provisions of the Draft Toxicity Provisions.

To address these key concerns, the Stakeholders recommend that the Draft Toxicity Provisions be revised to include the following:

1. A consistent narrative objective for all inland surface waters, enclosed bays, and estuaries of the state.
2. Appropriate implementation procedures to make 303(d) listing decisions. The procedures should be designed to identify and trigger actions only for persistent toxicity and help control the inherent issues with toxicity test procedures, such as false positives and false negatives by only requiring actions after multiple exceedances of the numeric values.
3. Include TMDL implementation language that states if numeric targets are used in a TMDL they are to be implemented as triggers for additional action, consistent with the implementation procedures of the Draft Toxicity Provisions. Additionally, the TMDL

implementation language should require that TMDL allocations only be developed for pollutants causing toxicity and the toxicity objectives should not be directly used as allocations in a TMDL. Although the Draft Toxicity Provisions do not require a reconsideration, the implementation provisions should state that if a Regional Board decides to reconsider an existing TMDL to include the Draft Toxicity Provisions, the reconsideration would need to consider the impact on required implementation actions and adjust the compliance schedule if additional actions are required.

4. Consistent narrative effluent limitations for all non-stormwater dischargers, with corresponding specific, enforceable implementation requirements.
5. A discussion of the Urban Pesticides Amendments in the Staff Report that includes the goals of the amendments and that the Urban Pesticide Amendments may supersede elements of the Draft Toxicity Provisions, including the stormwater discharger monitoring requirements and be used as an alternative TMDL for 303(d) listings developed based on the toxicity objectives.

The attached comment letter details the significant concerns identified by the Stakeholders with the technical approach and implementation procedures in the Draft Toxicity Provisions. The attachment also includes more detailed recommendations that we feel would provide the desired statewide consistency and provide a comprehensive framework for cost-effectively addressing persistent toxicity associated with all types of dischargers. We request that these recommended changes be considered and evaluated and modifications to the Draft Toxicity Provisions be made to address all of the concerns included in this letter.

The Stakeholders support the goal of the State Board to develop a consistent statewide policy for toxicity that adequately protects the receiving water environment, including declaring samples toxic when they are indeed toxic and non-toxic when they are not toxic. We would like to work with the State Board to define a consistent policy for addressing toxicity that addresses our key concerns while effectively protecting beneficial uses. We feel this is possible if the State Board seriously evaluates our recommendations and the mechanisms for incorporating them into the Draft Toxicity Provisions.

Thank you for your time and consideration of these comments. If you have any questions, please contact me at 805-388-5334 or lmcgovern@cityofcamarillo.org.

Sincerely,

Lucia McGovern
Chair of Stakeholders Implementing TMDLs in the Calleguas Creek Watershed

CC: Ewelina Mutkowska, CCW TMDL Program Manager
Stakeholders Implementing TMDLs in the Calleguas Creek Watershed

Stakeholders Implementing TMDLs in the Calleguas Creek Watershed
Comments on the Draft Toxicity Provisions

The Stakeholders have the following comments on the proposed Establishment of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California (ISWEBE); and Toxicity Provisions (hereafter Draft Toxicity Provisions). These comments represent the significant issues identified by the Stakeholders during the review of the Draft Toxicity Provisions.

Numeric Objectives for Acute and Chronic Toxicity are Unnecessary and Problematic

The Analysis of Project Options Does Not Fully Consider the Ability of Numeric Objectives to Address Concerns with the Existing Approach to Toxicity Regulation

The analysis of project options for what types of water quality objectives should be established for chronic and acute toxicity did not include an evaluation of all alternatives. As a result, the analysis does not support the selection of numeric objectives as the preferred option. For example, the Draft Staff Report[1] (p. 50) provides the following rationale for not selecting the "No Action" alternative which would result in the continued use of the narrative water quality objectives for toxicity in each respective basin plan: "…despite the implementation measures established in the SIP, this approach has led to regulatory inconsistencies and potential impacts to aquatic life beneficial uses. This option would not meet project goal 1–to adopt consistent, statewide water quality objectives for acute and chronic toxicity that are protective of California's waters from both known and unknown toxicants. Narrative water quality objectives are not applied consistently across the state, providing uneven levels of protection of aquatic life beneficial uses and regulatory uncertainty. This option would also fail to meet project goals 2 and 3 as no program of implementation or a consistent flexible framework for monitoring would be adopted. Finally, this option would fail to meet project goal 4 as no statewide statistical approach would be adopted."

While these issues may be of concern with the current narrative approach, the State Board staff did not evaluate an approach that utilized a **statewide** narrative objective combined with **statewide** implementation procedures for non-stormwater dischargers. The Draft Staff report only considers the use of narrative objectives in each respective basin plan that are implemented using current procedures. However, we feel that a narrative standard combined with clear enforceable implementation requirements could be developed that would allow a narrative objective to contain clear measurements of compliance, address the concerns with narrative objectives outlined in the analysis of project options, and achieve the same level of protection of beneficial uses as a numeric objective. In addition, the numeric objective does not necessarily resolve any of the issues presented for the narrative objectives, particularly when considered with the implementation procedures included in the Draft Toxicity Provisions.

Finally, a numeric objective will not provide additional assistance with determining whether a violation has occurred. The implementation procedures and translation of the objective into permit

[1] Draft Staff Report, including Substitute Environmental Documentation, for the Toxicity Provisions. October 19, 2018.

conditions will dictate effluent limitations, the statistical approach used to analyze aquatic toxicity test data, and the number of toxicity tests required to determine compliance.

The Analysis of Project Options Does Not Fully Consider the Ability to Define an Appropriate Numeric Toxicity Objective Give the Nature of Toxicity Testing

The use of numeric objectives does not recognize the realities of addressing the causes of toxicity. Toxicity is not a pollutant, but an effect. Dischargers cannot proactively address toxicity and prevent the discharges of "toxicity". Addressing persistent toxicity requires the identification of a toxicant so that mechanisms to reduce the discharge of the toxicant can be identified. Without this step, toxicity cannot be addressed. The State Board's Response to Comments (RTC)[2] states that "the identification of the toxicant is not always necessary to reduce toxicity" but does not provide any support for this statement. Therefore, regardless of whether the objective is numeric or narrative, no actions to control toxicity will be possible before additional studies are conducted. This reality is acknowledged by the State Board within the Draft Toxicity Provisions by including requirements for when non-stormwater dischargers must conduct a TRE to identify sources of persistent toxicity. Imposing a numeric objective will not result in the ability to address toxicity without identifying the toxicant responsible for the toxicity. It would be more effective in achieving the ultimate intent of the Toxicity Provisions – the reduction of toxicity in receiving waters – to use toxicity tests as a starting point to identify the cause(s) rather than as a regulatory endpoint. Narrative objectives provide more flexibility to appropriately address the complex issues associated with toxicity testing.

Section 5.1 of the Draft Staff Report does not address this issue and, therefore, has not fully considered the advantages and disadvantages of the narrative objective option. The justification for the selection of numeric objectives did not fully consider the complications outlined in this comment letter and therefore is insufficiently supported. If this issue was fully evaluated, the advantages of narrative objectives with clear implementation procedures to address the identified concerns would be highlighted.

Narrative Objectives are Appropriate and Can be Implemented Successfully

The use of a consistent statewide narrative objective with clear implementation procedures is supported by other State policies that address toxicity in sediment and would provide additional consistency across media. As the State Water Board acknowledged for sediment toxicity, "[a] narrative objective coupled with indicators to interpret the narrative objectives represents a logical means to assess sediment quality." *Staff Report and Draft Water Quality Control Plan for Enclosed Bays and Estuaries - Part 1 Sediment Quality (July 18, 2008), Appendix E,* at p. 68.) As such, we feel that a narrative objective with consistent implementation procedures, had it been fully evaluated by State Board staff, would have been the preferred alternative to address the existing concerns with the Draft Toxicity Provisions. We strongly recommend that the State Board consider the use of narrative objectives with consistent implementation procedures, including numeric triggers for conducting a TRE for non-stormwater dischargers. This step-wise approach

[2] Response to Comments on the 2012 Draft Policy for Toxicity Assessment and Control. State Water Resources Control Board. October 26, 2018.

is consistent with guidance from the EPA, both at the national[3] and regional[4] levels, a diverse national expert advisory panel[5] formed by the Society of Environmental Toxicology and Chemistry (SETAC) and funded by the EPA to provide guidance on WET issues, and the State Board Toxicity Task Force[6] specifically assembled to provide guidance on the regulatory use of toxicity tests within the State.

Numeric Objectives for Acute and Chronic Toxicity Have Significant Implications for 303(d) Listings, TMDLs and Stormwater and Agricultural Dischargers that were Not Evaluated

In addition to the issues identified in the previous comment, we feel there are broader implications for the use of numeric objectives that were not considered which further support the use of narrative objectives.

1. The selection of numeric objectives has implications for TMDL development and agricultural and stormwater dischargers that were not evaluated.
2. The inherent false positive rate applicable to all common statistical approaches for interpretation of aquatic toxicity testing would have significant impacts for 303(d) listings and TMDLs that were not considered.
3. The objective is inconsistent with the implementation provisions for non-stormwater dischargers included in the Draft Toxicity Provisions.

<u>Implications of Numeric Objectives for TMDLs and Stormwater Dischargers Regulated Pursuant to NPDES Permits, Nonpoint Source, and Other Non-NPDES Dischargers</u>

The Draft Toxicity Provisions are clear that they will not supersede the narrative toxicity water quality objectives in the basin plans and that, any TMDL, including their implementation provisions, adopted by the Regional Boards prior to the effective date of the Draft Toxicity Provisions will remain in effect. However, the Draft Staff Report does not recognize that the establishment of numeric objectives essentially drives requirements for numeric effluent limitations even though the Draft Staff Report acknowledges that there are "significant difficulties associated with numeric effluent limitations calculations and compliance monitoring" for stormwater.

When a TMDL is developed for a waterbody, one of the first steps in the development is the identification of numeric targets. If the TMDL is for a constituent with a narrative standard, interpretation of the narrative standard into a numeric value is needed. In the Calleguas Creek Watershed, the numeric targets for the Toxicity TMDL were established by identifying ***numeric targets for the constituents that had been identified as causing toxicity*.** Because the cause of toxicity had not been identified in all reaches, a numeric toxicity target was also included along with implementation procedures to allow the identification of the toxicant and addition of numeric

[3] Technical Support Document for Water Quality-Based Toxics Control, EPA Office of Water, March 1991, EPA/505/2-90-001, p. 62, Section 3.3.7.
[4] EPA Regions 9 and 10 Guidance for Implementing Whole Effluent Toxicity Testing Programs, EPA, May 31, 1996, pp. 2-1, 4-1, and 5-2.
[5] SETAC Wet Expert Advisory Panels, http://www.setac.org/wettre.html, Sections 1 and 4.
[6] Memo to Members of the State Water Resources Control Board from the Toxicity Task Force, September 27, 1995. Recommendations 2, 5, 9, and 10.

targets for that toxicant if necessary, after identification. The implementation provision included the following language:

> "The toxicity WLAs will be implemented in accordance with US EPA, State Board and Regional Board resolutions, guidance and policy at the time of permit issuance or renewal. Currently, these WLAs would be implemented as a trigger for initiation of the TRE/TIE process as outlined in USEPA's "Understanding and Accounting for Method Variability in Whole Effluent Toxicity Applications Under the National Pollutant Discharge Elimination System Program" (2000) and current NPDES permits held by dischargers to the CCW."

The TMDL clearly indicates that the implementation of the numeric toxicity targets and WLAs will be as a trigger for initiation of the TRE/TIE process. However, should the State adopt the Draft Toxicity Provisions, the dischargers subject to the Toxicity TMDL could be subject to the numeric objective and implementation procedures outlined in the Draft Toxicity Provisions given that the Toxicity Provisions clearly state "Nothing in this section limits the Regional Water Board's authority to reconsider a TMDL and its implementation provisions". There is currently no discussion about how a numeric objective should be used in the context of the TMDL and no implementation procedures for non-stormwater, stormwater or agricultural dischargers that prevent the application of the numeric objective as an instantaneous, single sample exceedance. As a result, all of the dischargers in the Calleguas Creek Watershed will likely be subject to requirements that are inconsistent with the implementation procedures in the Draft Toxicity Provisions as currently written because of the inclusion of a numeric objective in the Draft Toxicity Provisions.

If a narrative objective were included, it will be possible for the Regional Board to use the information in the Draft Toxicity Provisions to identify an appropriate numeric target, while providing them with the flexibility to include implementation procedures that are consistent with the implementation procedures in the Draft Toxicity Provisions for all types of dischargers. Additionally, a narrative objective provides the flexibility to develop a toxicity TMDL that just includes numeric targets for the pollutants causing the toxicity as the interpretation of the narrative toxicity standard if all toxicants have been identified. With the establishment of a numeric water quality objective for toxicity, the ability to consider these alternative approaches would be limited as a numeric objective must be included in the TMDL when available.

As shown above, the result of a numeric objective for toxicity is that, in the context of TMDLs, agricultural and stormwater dischargers will likely be subject to numeric interpretations of the Draft Toxicity Provisions. The Los Angeles County MS4 permit contains numeric effluent limitations for stormwater dischargers that are set equal to TMDL allocations. The MS4 dischargers in the Calleguas Creek Watershed will soon be incorporated into a Regional MS4 permit that is based on the Los Angeles County MS4 permit and will therefore have effluent limitations based on the Calleguas Creek TMDLs. As noted above, if State Guidance, in the form of these Draft Toxicity Provisions, are in place at the time of permit renewal, it is likely that the TMDL will be interpreted as requiring numeric effluent limitations for toxicity. The 2016 Conditional Waiver for Irrigated Agriculture states "If TMDL associated Water Quality Benchmarks are not attained by the deadlines in Table 2, then Dischargers shall comply with discharge limitations, using individual discharge monitoring as described in Section 2.d of

Appendix 2 or 3." Therefore, agriculture could also be subject to numeric effluent limitations for toxicity based on the inclusion of a numeric toxicity objective in the Draft Toxicity Provisions.

The Draft Staff Report does not evaluate the ability of these dischargers to meet the proposed numeric objectives in a cost-effective manner when considering the type of objective to select. The Draft Staff Report states the following assumption: "Although waters may be listed as an impaired waterbody for both known and unknown toxicants, if the toxicant responsible for the impairment is unknown, an assessment is typically conducted to discover the cause of toxicity prior to the development of a TMDL. Any probable TMDL for the control of toxicity will likely target specific sources of the toxicant, which could lead to controls similar to those that could be selected by a discharger in response to the Provisions." As previously stated, the cause of toxicity had not been identified in all reaches of the Calleguas Creek Watershed which led to the inclusion of a numeric toxicity target. As such, this assumption of the Draft Toxicity Provisions is not appropriate, and the economic analysis included in Section 9.1.4 of the Draft Staff Report for Stormwater and Nonpoint Source Dischargers must be revised to account for the full impact of establishing numeric objectives for toxicity. Once developed, this information must be considered in the analysis of project options.

<u>Implications of False Determinations of Toxicity Under the Draft Toxicity Provisions Would Be Significant</u>

Although the Draft Toxicity Provisions try to address the issues with the false positive rate through the implementation procedures for non-stormwater dischargers, the implications of the false positive rate were not addressed for the numeric objective itself. The selection of numeric objectives has broader implications for TMDL development and stormwater and agricultural dischargers. As a result, the implications of the false positive rate are potentially significant, and the Draft Toxicity Provisions has not addressed these concerns. In particular:

1. The false positive rate would have significant implications for compliance with the Calleguas Creek Watershed TMDL.
2. The false positive rate would have significant implications for stormwater dischargers.

Implications for the CCW Toxicity TMDL

The Stakeholders are concerned over the implications of the false determinations of toxicity for the CCW Toxicity TMDL. The implementation of the toxicity TMDL in the CCW since 2006 has significantly reduced toxicity in receiving waters in the watershed. However, false determinations of toxicity resulting from the Draft Toxicity Provisions could reduce the ability of the Stakeholders to ever meet the requirements of the TMDL and delist toxicity in the watershed.

The TMDL monitoring program consists of quarterly dry weather monitoring and two wet weather events for toxicity, resulting in six toxicity monitoring results per year at each monitoring location. In order to delist toxicity in a reach, a minimum of 28 samples are required by California's 303(d) Listing Policy[7]. It will take five years of monitoring to achieve the minimum sample size under

[7] Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List. State Water Resources Control Board. Adopted September 30, 2004. Amended February 3, 2015.

the current TMDL monitoring program. Based on the statistical false positive rate applicable to all common statistical approaches for interpretation of aquatic toxicity testing, at least one and possibly two non-toxic samples will be determined to be toxic as a result of the statistics during the five-year monitoring period. In order to delist with a sample size of 28 to 36, no more than two samples can exceed water quality objectives. As a result, samples that were falsely determined to be toxic by the Draft Toxicity Provisions would prevent the waterbody from being delisted at a minimum if any other sample exhibited toxicity during the five-year period and potentially without any truly toxic samples being collected. This is despite the fact that the Listing Policy does not consider a water to be impaired if less than 10% of the samples, as determined through the binomial method, exceed water quality objectives. Consequently, the CCW could be achieving the toxicity objectives per the Listing Policy and not be able to delist as a result of false determinations of toxicity under the Draft Toxicity Provisions.

Issues with delisting the watershed for toxicity potentially will be created as discussed above. If the CCW cannot be delisted for toxicity, the TMDL implementing stakeholders will be subject to ongoing monitoring and TMDL management costs to address a non-toxic waterbody. Additionally, because the toxicity objectives are included as wasteload and load allocations in the TMDL, POTWs, stormwater and agricultural dischargers in the watershed would be subject to ongoing permit requirements related to the TMDL.

These implications are not limited to the CCW. False determinations of toxicity will result in the inability of listed waterbodies throughout the state to be delisted even after a TMDL has been developed and controls have been implemented for identified toxicants. This will result in community resources being spent to implement TMDLs for non-toxic waterbodies.

To address these concerns, the Draft Toxicity Provisions should be revised to include an alternative 303(d) listing process specific to listing and delisting waters on the 303(d) list for toxicity. Similar to the provision included within the ISWEBE Sediment Quality Provisions[8], a provision should be included within Section IV (Programs of Implementation) of the Draft Toxicity Provisions titled "Evaluating Waters for Placement of the Section 303(d) List". Within this section, the State Water Board can modify the Listing Policy procedures to account for the false positives, by modifying the number of exceedances required to place a waterbody on the 303(d) list.

False Positives have Significant Implications for Stormwater Dischargers

For stormwater entities, the impact of the establishment of numeric objectives is even more significant. The Ventura County municipal separate storm sewer system (MS4) permit includes receiving water limitations that are set equal to the water quality objectives. On July 13, 2011, the United States Court of Appeals for the Ninth Circuit issued an opinion in *Natural Resources Defense Council, Inc., et al., v. County of Los Angeles, Los Angeles County Flood Control District, et al.*[9] (*NRDC v. County of LA*) determined that a municipality is liable for permit violations if its discharges cause or contribute to an exceedance of a water quality standard. This revised

[8] Amendments to the Water Quality Control Plan for Enclosed Bays and Estuaries of California, Sediment Quality Provisions. State Water Resources Control Board. May 7, 2018.
[9] No. 10-56017, 2011 U.S. App. LEXIS 14443, at *1 (9th Cir., July 13, 2011).

interpretation of the receiving water limitations language in the Ventura County MS4 permit means that MS4 permittees could be subject to permit violations due to the numeric receiving water objectives for toxicity.

The false determinations of toxicity applicable to all common statistical approaches for interpretation of aquatic toxicity testing have more significant impacts under the Draft Toxicity Provisions than under the current Regional Board Basin Plans because of the inclusion of numeric objectives and the corresponding use of single exceedances of the numeric objectives to determine 303(d) listings and correspondingly drive BMP implementation and potential permit limit violations. These impacts were not evaluated in selecting the numeric objectives as the preferred alternative and would be mitigated by the inclusion of a narrative objective in the Draft Toxicity Provisions.

Numeric Objectives are Inconsistent with the Implementation Provisions for Non-Stormwater Dischargers and Could Result in TMDL-Driven WLAs for Toxicity that Produce More Restrictive Effluent Limits Than Those Outlined in the Draft Toxicity Provisions.

While the Draft Toxicity Provisions explicitly state that the numeric objectives would not supersede the narrative toxicity water quality objectives in Basin Plans, the Draft Toxicity Provisions do supersede Basin Plan toxicity provisions to the extent that:

A. The Basin Plan provisions specify methods of assessing compliance with any numeric or narrative water quality objectives for acute and chronic aquatic toxicity; and
B. The Basin Plan provisions regard aquatic toxicity testing and/or interpretation of aquatic toxicity testing results; and
C. The Basin Plan provisions are in conflict with the Draft Toxicity Provisions.

As discussed above, the numeric objectives currently lack any averaging period or allowable exceedance frequency. As a result, they are interpreted as instantaneous maximum objectives not to be exceeded at any time. In the absence of any provisions to the contrary in the Draft Toxicity Provisions, TMDL numeric targets will need to be interpreted as instantaneous maximums and corresponding allocations would likely be interpreted in the same way. As previously stated, the assumption in the Draft Staff Report that the toxicant or toxicants contributing to the impairment would first be identified prior to TMDL development is incorrect. As a result, WLAs for non-stormwater dischargers could be more stringent than the implementation provisions outlined in the Draft Toxicity Provisions. If this is not the intent of the Draft Toxicity Provisions, then language explicitly precluding this scenario from occurring should be included.

Recommendations

The comments above document a number of serious concerns with the use of numeric objectives as outlined in the Draft Toxicity Provisions. The Draft Toxicity Provisions fail to consider several aspects of the implication of selecting numeric objectives that will have significant impacts that are inconsistent with other discussions in the Draft Toxicity Provisions. Additionally, we feel that a properly structured narrative objective can address all of the concerns with narrative objectives discussed in Section 5.1 of the Draft Staff Report and most of the concerns with a numeric

objective outlined in the letter and establish consistent statewide toxicity provisions that will promote uniformity and protect aquatic life beneficial uses.

As a result, the Stakeholders request the State Board modify the Draft Toxicity Provisions to include a narrative objective as outlined below:

1. Define a consistent narrative objective for all inland surface waters, enclosed bays, and estuaries of the state.
2. Identify appropriate implementation procedures to make 303(d) listing and delisting decisions. The procedures should be designed to identify and trigger actions only for persistent toxicity and help control the inherent issues with toxicity test procedures, such as false positives and false negatives by only requiring actions after multiple exceedances of the numeric values.
3. Include TMDL implementation language that states if numeric targets are used in a TMDL they are to be implemented as triggers for additional action, consistent with the implementation procedures of the Draft Toxicity Provisions. Additionally, the TMDL implementation language should require that TMDL allocations only be developed for pollutants causing toxicity and the toxicity objectives should not be directly used as allocations in a TMDL. Although the Draft Toxicity Provisions do not require a reconsideration, the implementation provisions should state that if a Regional Board decides to reconsider an existing TMDL to include the Draft Toxicity Provisions, the reconsideration would need to consider the impact on required implementation actions and adjust the compliance schedule if additional actions are required.

We feel that this approach will address our concerns with the objectives in the Draft Toxicity Provisions and result in consistent protection of aquatic life beneficial uses in waters throughout the state and protection of aquatic habitats and biological life from the effects of known and unknown toxicants.

Use of Numeric Effluent Limitations for Non-Stormwater Dischargers Are Not Required and Narrative Limits Will be Protective

In addition to the concerns with numeric objectives, we have similar concerns about implementation procedures in the Draft Toxicity Provisions that require the use of numeric effluent limitations for non-stormwater dischargers. Non-stormwater dischargers cannot proactively cause their non-toxic effluent to be more non-toxic or more reliably non-toxic. When effluent toxicity does occur, the cause of the toxicity cannot be addressed through source control or additional treatment until the source of the toxicant has been identified. In these cases, it is not appropriate to consider the discharge "out of compliance" or "in violation" while the cause of the toxicity is still under investigation, as long as the discharger is aggressively seeking the source of the toxicity and, if identified, takes responsible action(s) to reduce the source. However, the Draft Toxicity Provisions currently considers the non-stormwater discharger in violation ahead of the ability to take any action to identify the toxicant or address the toxicity.

The principal argument made for numeric effluent limitations in the Draft Staff Report is that the "chronic toxicity effluent limitations in the Provisions clearly define what constitutes a violation."

The Draft Staff Report notes instances where "triggers are generally consistent with the effluent limitations in the Provisions, because they are based on the same RMDs and use the same statistical approach to evaluate the test data." The Draft Staff Report goes on to state that "the triggers are not numeric effluent limitations; therefore, the permit does not define what constitutes a violation." The Draft Staff Report does not appear to evaluate an option in which numeric triggers and TRE initiation requirements consistent with the Draft Toxicity Provisions are included in place of numeric effluent limitations along with a clear definition of what constitutes a violation (e.g., failure to prepare and submit an initial TRE Work Plan within 90 days after permit issuance, failure to conduct specific steps in the TRE Work Plan at the specified frequency). This option would provide the same advantages as the numeric effluent limitations option (clearly defining what constitutes a violation and eliminating inconsistencies that could lead to different interpretations of statewide policy and guidance and an inequitable distribution of violations and compliance costs) while also offering the advantage of not considering the non-stormwater discharger in violation ahead of the ability to take any action to identify the toxicant or address the toxicity.

A well-articulated toxicity regulatory strategy using narrative effluent limitations with numeric toxicity triggers with enforceable TRE requirements would be able to address the goals of the Draft Toxicity Provisions and address the concerns identified above. Consistent narrative effluent limitations with numeric toxicity triggers will allow time for toxicant identification without being in violation of the permit, while failure on the part of a discharger to adequately implement this process in response to toxicity would constitute a violation of the narrative toxicity limitation and expose the discharger to the imposition of penalties and other enforcement actions. The Draft Toxicity Provisions cause dischargers to be in violation regardless of whether or not actions are taken to address the toxicity. Finally, we feel that the identification of clear, specific, enforceable requirements in the Draft Toxicity Provisions will address concerns identified in the Draft Staff Report that a narrative effluent limitation does not provide a clear method for determining what constitutes a violation.

<u>Recommendations</u>

The Stakeholders support the following recommended approach to implementing toxicity effluent limitations in non-stormwater permits to:

1. Establish consistent narrative effluent limitations for all non-stormwater dischargers.
2. Establish specific, enforceable requirements in the implementation procedures for non-stormwater dischargers that provide clarity for assessing if a permit violation has occurred. Suggestions for these requirements include:
    - Failure to conduct the required toxicity tests at the required times and/or frequencies,
    - Failure to timely report any toxicity test results,
    - Failure to perform accelerated testing after exceeding the accelerated testing trigger,
    - Failure to conduct accelerated testing at minimum required frequencies,
    - Failure to prepare and submit an initial TRE Work Plan within 90 days after permit issuance,
    - Failure to amend TRE Work Plan as requested by Regional Board after review,

- Failure to initiate TRE Work Plan when TRE trigger was exceeded, and
- Failure to conduct specific steps in the TRE Work Plan at the specified frequency.

Each of these failures is easily proven and will eliminate the "permit deficiencies stemming from different interpretations of statewide policy and guidance" cited by EPA.

Implementation Requirements for Stormwater Dischargers Regulated Pursuant to NPDES Permits Should Be Addressed Through the Urban Pesticides Amendments

After decades of data collection by California MS4 stormwater programs, the composition of urban runoff and primary causes of toxicity (i.e., pesticides) from runoff are well characterized. Section 4.2 of the Staff Report provides evidence that the primary cause of freshwater toxicity statewide is pesticides. The Staff Report also points to instances where toxicity caused by pesticides is tied to urban areas. For example, in the San Francisco Bay region, correlation analyses and toxicity identification evaluations showed that the majority of toxicity was caused by pesticides at sampling sites located in close proximity to agricultural and urban areas. Similarly, a series of municipal stormwater reports from 2004 to 2010 were reviewed to determine the cause of freshwater toxicity in the San Diego Region. These reports found organophosphate and pyrethroid pesticides to be the primary toxicants.

Pesticide-related toxicity in surface waters receiving urban runoff has created a multi-million dollar regulatory burden for MS4 agencies statewide. Ongoing routine aquatic toxicity monitoring generates additional data that are not necessary for the characterization of stormwater discharges and diverts considerable resources away from addressing known causes of toxicity. While we appreciate the modifications to the Draft Toxicity Provisions regarding the monitoring provisions for stormwater dischargers, the State Board staff is working on alternative, more effective approaches to both toxicity monitoring and addressing pesticide-related toxicity impairments that should be acknowledged in these Draft Toxicity Provisions.

The Strategy to Optimize Resource Management of Stormwater (STORMS), adopted by the State Water Board in January 2016, aims to lead the evolution of stormwater management in California by advancing the perspective that stormwater is a valuable resource, supporting policies for collaborative watershed-level stormwater management and pollution prevention, and integrating regulatory and non-regulatory interests. Under Objective 6 of STORMS (increase source control and pollution prevention), the State Board is developing a statewide framework for urban pesticides reduction (Urban Pesticides Amendments) that will employ a multi-agency approach calling on participation from the Water Boards, municipalities, and state and federal pesticide regulators. [10] The goals of the Urban Pesticides Amendments stated in the California Environmental Quality Act (CEQA) Scoping Document[11] are the following:

[10] Statewide Urban Pesticides Reduction Fact Sheet. State Water Resources Control Board. July 20,2017.

[11] Information Document, Public Scoping Meeting, Proposed Amendments to the Water Quality Control Plan for Ocean Waters of California and Proposed Provisions of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California for the Control of Pesticide Discharges from Municipal Separate Storm Sewers. State Water Resources Control Board. January 25, 2017.

1. Achieve water quality objectives for pesticides and toxicity in urban receiving water and prevent or readily address future water quality impairments through implementation of a statewide program for urban pesticides source control, acting as an alternative to TMDL development to address pesticide and pesticide-related toxicity impairments in individual water bodies.
2. Establish consistent statewide requirements for MS4 dischargers to manage their causes and contributions to pesticide and pesticide-related toxicity impairments.
3. Create a comprehensive, coordinated statewide monitoring framework for pesticides and toxicity in urban runoff and receiving water that improves resource efficiency, usefulness of data, and coordination of data collection to support management decisions.

The State Board created a group of internal and external technical experts (referred to as the work team) to prepare background materials to inform the development of the Urban Pesticides Amendments. The work team developed a report[12] which summarized their efforts related to developing materials for components of the Urban Pesticides Amendments. Among these components are MS4 permit requirements and a monitoring program. For example, the monitoring program component of the work team report describes key design elements of a proposed statewide monitoring framework for pesticides and toxicity in urban runoff and receiving water that "improves resource efficiency, usefulness of data, and coordination of data collection to support management decisions". While the proposed statewide monitoring framework is not complete, the completed and ongoing efforts of the State Board-created work team should be leveraged within these Draft Toxicity Provisions. Furthermore, the State Board's Urban Pesticides Amendments Fact Sheet states that "a statewide plan for urban pesticides reduction would be established through an Amendment to the ISWEBE." As such, given that pesticides are the primary cause of toxicity for dischargers regulated pursuant to NPDES Permits, the State Board is developing Urban Pesticide Amendments to address toxicity caused by pesticides, and that the Urban Pesticides Amendments will be contained within the same document as the Draft Toxicity Provisions, the Draft Toxicity Provisions should include a statement that any elements which conflict with the Urban Pesticides Amendments (including, but not limited to, implementation requirements related to waters placed on the section 303(d) list for toxicity-related impairments and monitoring requirements for stormwater dischargers) are superseded by the Urban Pesticides Amendments when they become effective. Additionally, similar, source control approaches should be supported in the future if other widespread toxicants are identified in urban runoff.

Conclusions

The Stakeholders Implementing TMDLs in the Calleguas Creek Watershed are committed to proactively addressing water quality impairments. To this end, we have successfully developed and implemented numerous TMDLs, including one for Toxicity. Although we understand and support the goals of the Draft Toxicity Provisions, the chosen approach will have significant implications beyond what has been discussed and considered in the Draft Staff Report. The Calleguas Creek Watershed is unique in California in that the responsible stakeholders have developed stakeholder TMDLs and therefore very much understand the development process.

[12] Strategy to Optimize Resource Management of Stormwater, Attachment A Establish Statewide Framework for Urban Pesticides Reduction, Proposed Urban Pesticides Amendments Work Team Report. State Water Resources Control Board. August 4, 2017.

Additionally, the Stakeholders include all types of dischargers discussed in the Draft Toxicity Provisions. As a result, we are uniquely qualified to discuss the implications of the Draft Toxicity Provisions on watersheds with TMDLs and the resulting implications for stormwater and agricultural dischargers. The lack of consideration of the implications of the numeric objectives in contexts other than regulating non-stormwater dischargers (as highlighted by the justification for numeric objectives) is a significant deficiency of the Draft Toxicity Provisions and will lead to requirements that could be in conflict with the implementation procedures in the Draft Toxicity Provisions. We hope the State Board will seriously reconsider the proposed recommendations and utilize a narrative objective with consistent implementation procedures for 303(d) listings and non-stormwater dischargers that include multi-sample numeric triggers for listing decisions and requiring additional action by dischargers. This will allow the flexibility needed to address discharges from sources other than wastewater and avoid unnecessary listings and resource expenditures.