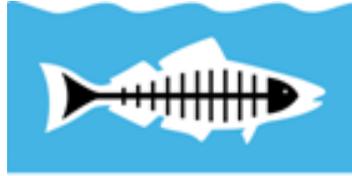


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Heal the Bay



December 20, 2018

Felicia Marcus, Chair
c/o Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814

Sent via e-mail to: commentletters@waterboards.ca.gov

RE: PROPOSED ESTABLISHMENT OF THE WATER QUALITY CONTROL PLAN FOR INLAND SURFACE WATERS, ENCLOSED BAYS, AND ESTUARIES OF CALIFORNIA; AND TOXICITY PROVISIONS.

To Chair Felicia Marcus and Members of the State Water Resources Control Board:

On Behalf of the undersigned groups, we respectfully submit the following comments in response to the Proposed Establishment of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California; and Toxicity Provisions (Draft Provisions).

A statewide toxicity plan to address both chronic and acute toxicity is desperately needed, and is long overdue. The need for statewide numeric toxicity provisions was first officially discussed in 2003¹. Toxicity has been observed historically in all nine regions, as reported by the State Water Resources Control Board (State Board) Surface Water Ambient Monitoring Program (SWAMP) in 2010². Of the 992 sites assessed by the SWAMP program, 473 sites (48%) had at least one sample where toxicity was observed, and 129 sites (13%) were classified as highly toxic. The *2014 and 2016 Integrated Report – Map of Impaired (Clean Water Act (CWA) 303(d) listed) Waters for Toxicity in California* shows that numerous waterbodies throughout California are impaired for toxicity (Attachment 1). In comparison to the *2010 Integrated Report – Map of Impaired (CWA 303(d) Listed) Waters for Toxicity in California* (Attachment 2), it is also apparent that the number of waterbodies impaired for toxicity has increased (from 255 impaired waterbodies in 2010³ to 326 in 2016⁴) despite the implementation of narrative toxicity limits in the Basin Plans for each of the nine Regional Water Quality Control Boards (Regional Boards) in California. Toxicity testing identifies discharges with toxic effluent that have cumulative negative impacts on aquatic life, even though they may meet requirements for the limited list of

¹ Los Angeles Regional Water Quality Control Board. 2003. *ORDER WQO 2003 – 0012: Review of Own Motion of Waste Discharge Requirements Order Nos. R4-2002-0121 [NPDES No. CA0054011] and R4-2002-0123 [NPDES NO. CA0055119] and Time Schedule Order Nos. R4-2002-0122 and R4-2002-0124 for Los Coyotes and Long Beach Wastewater Reclamation Plants*

https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0012.pdf

² Hunt, J., et al. 2010. California State Water Resources Control Board, Surface Water Ambient Monitoring Program. *Summary of Toxicity in California Waters 2001-2009*.

https://www.waterboards.ca.gov/water_issues/programs/swamp/docs/reports/tox_rpt.pdf

³ California State Water Resources Control Board. *2010 Integrated Report (Clean Water Act Section 303(d) List / 305(b) Report)*. https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml

⁴ California State Water Resources Control Board. *2014 and 2016 Integrated Report (Clean Water Act Section 303(d) List / 305(b) Report)*.

https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2014_2016.shtml

California Toxic Rule (CTR) priority pollutants. Toxicity limits are, therefore, an important safety net in discharge permits that serves to integrate the actual biological impacts of numerous pollutants. Statewide numeric toxicity limits that are widely applicable and readily enforceable would effectively complement the chemical approach addressing individual CTR priority pollutants, and the narrative toxicity limits to adequately protect aquatic life in California waterways.

A revised draft policy for numeric toxicity limitations was released in 2012 (2012 Draft Policy), nine years after the initial discussion regarding the need for these provisions in 2003. After submitting comments on the 2012 Draft Policy, the environmental community has eagerly awaited an updated draft for the past six years. During this time, a number of the Regional Boards have begun to incorporate numeric toxicity limitations into regulatory permits. However, this implementation has been inconsistent and incomplete statewide. In order to appropriately assess and address toxic waters throughout California, there must be consistent and strong statewide numeric water quality objectives for both acute and chronic toxicity.

We are encouraged that the State Board is finally continuing to move forward with these Draft Provisions. We agree with the goals of the State Board to (1) adopt consistent statewide numeric objectives, (2) adopt a program of implementation, and (3) require consistent monitoring and analysis methodology. We specifically support the inclusion of the whole effluent toxicity (WET) test methods⁵ and the transition to the Test of Significant Toxicity (TST) statistical method⁶. These methods are based on sound science, and the TST method provides a clear objective that can be incorporated into Regional Permits. We also support the shift from a policy to a plan in the 2018 Draft Provisions, which allows for more comprehensive statewide implementation.

However, we are concerned that a number of the comments proposed in our August 21, 2012 letter have not been adequately addressed. As written, the current Draft Provisions are not sufficient to meet the goal of the State Board to implement consistent statewide objectives in order to protect ecological health. Numeric toxicity effluent limitations and monitoring requirements should apply to all dischargers, including stormwater permittees, agricultural dischargers and publicly owned treatment works (POTW) facilities from small disadvantaged communities, regardless of any reasonable potential analysis (RPA) findings. The Draft Provisions should also include more stringent enforcement mechanisms. A TST “fail” indicates a level of toxicity with significant effect on ecological health, and therefore should constitute an enforceable violation. Additionally, the Draft Provisions should require immediate compliance with the numeric toxicity limits and monitoring requirements, as dischargers have now been on notice of statewide toxicity limits for fifteen years. These comments and others are discussed in further detail below.

I WE SUPPORT NUMERIC TOXICITY EFFLUENT LIMITS AND THE TST METHOD.

The TST statistical method provides an unambiguous “pass” or “fail” measurement of a test concentration’s toxicity, and its low false positive and false negative rates provide more statistical

⁵ Code of Federal Regulations, Title 40, Section 136.3. *Identification of Test Procedures*. https://www.ecfr.gov/cgi-bin/textidx?SID=3306646e3aed6dc2c11a17477a964205&mc=true&node=pt40.25.136&rgn=div5#se40.25.136_13

⁶ United States Environmental Protection Agency. 2010. *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document*. https://www3.epa.gov/npdes/pubs/wet_final_tst_implementation2010.pdf

power to correctly identify a test concentration as toxic or non-toxic. Although the TST method is not promulgated, there is United State Environmental Protection Agency (USEPA) guidance on the TST method, which has withstood vigorous peer review and legal challenges⁷. Considering the pace at which policy changes can be made at a federal level, we applaud the State Board for moving forward with statewide implementation of an analytical method that is scientifically robust and protective of California aquatic ecosystems. We strongly support the role of the reversed acute and chronic null hypotheses to provide dischargers with an incentive to improve the precision of test results by improving laboratory procedures and/or by increasing the number of replicates used in a given toxicity test. Additionally, the Environmental Laboratory Accreditation Regulation update⁸, due for release in January 2019, should improve the reliability of the laboratory data used for the TST statistical analysis, further reinforcing the reliability of the TST results⁹. We also applaud the State Board in addressing these data reliability issues.

II NUMERIC LIMITATIONS AND MONITORING REQUIREMENTS SHOULD APPLY TO ALL DISCHARGERS, WITH LIMITED EXCEPTION.

Our primary concern is that the Draft Provisions do not apply the chronic toxicity limits to stormwater permittees, agricultural dischargers, POTW facilities deemed insignificant dischargers, or those located in small disadvantaged communities. As currently written, the Draft Provisions may not apply toxicity limits to certain dischargers who could have the greatest potential to contribute toxicity to our waterways. Additionally, this flaw is in direct opposition to the goal of statewide consistency. Consistent numeric toxicity objectives that utilize WET test methods and the TST statistical method are the most effective regulatory approach for the protection of aquatic life and human health. Therefore, the Draft provisions should require numeric toxicity objectives for all dischargers, with limited exception.

II.A The Draft Provisions should apply to all dischargers, regardless of any Reasonable Potential Analysis (RPA) findings.

The Draft Provisions require an RPA before applying toxicity limits, except for major POTW facilities discharging ≥ 5 million gallons per day (MGD). Reasonable potential should, instead, be assigned to all dischargers. The CTR only contains 126 priority pollutants¹⁰, despite the fact that tens of thousands of chemicals are in use in a given year; and only a small subset of these 126 priority pollutants are included in permits with effluent limits. Additionally, low concentrations of multiple contaminants can

⁷ In the United States Court of Appeals decision on Edison Electric Institute, et al., Petitioners v. Environmental Protection Agency, et al. Respondents 391 F.3d 1267, 4-5 (D.C. Cir. 2004), the court sided with EPA, stating “In designing and refining the WET test methods, EPA sought to minimize the effect of organic idiosyncrasy by taking experimental and statistical precautions. The crux of petitioners' complaint is that EPA has not gone far enough. We disagree, and therefore deny the petitions for review.”

⁸ A report released by the Southern California Coastal Water Research Project in 2016 identified inconsistency between and within laboratories testing for toxicity in water samples. In response, the State Board has reevaluated the Laboratory Accreditation Regulation to address these inconsistencies. The draft update for these regulations are due for public release in January 2019.

⁹ California State Water Resources Control Board. *November 28, 2018 Executive Director's Report.*

file:///C:/Users/amoe/AppData/Local/Microsoft/Windows/INetCache/Content.Outlook/5J87CYWG/final_ed_rpt_112818.pdf

¹⁰ Code of Federal Regulations, Title 40, Section 423, Appendix A. *Priority Pollutants.*

<https://www.gpo.gov/fdsys/pkg/CFR-2014-title40-vol29/pdf/CFR-2014-title40-vol29-part423-appA.pdf>

have a negative synergistic and/or cumulative impact on ecological health. For this reason, toxicity objectives are the safety net in discharge permits, because toxicity tests can identify potential impacts from these aggregate effects. To achieve the State Board's goals for statewide consistency and protection of ecological health, it is critical that the Draft Provisions assign reasonable potential for both chronic and acute toxicity, and require toxicity monitoring and toxicity effluent limits for *all* dischargers, regardless of any RPA findings.

II.B The Draft Provisions should include effluent limits and monitoring requirements for stormwater permittees.

Stormwater runoff is a known source of toxicity in California waterbodies. The Draft Provisions offer a significant step in achieving consistency in addressing toxicity statewide; however, we remain deeply concerned that the Draft Provisions do not require any numeric toxicity limits for stormwater permittees (neither municipal separate storm sewer systems (MS4), construction, nor industrial). Excluding stormwater dischargers from toxicity objective requirements will limit the ability to address an important source of toxicity, and is in direct opposition to the goal of statewide consistency. Therefore, the Draft Provisions should require that effluent limits and monitoring requirements be incorporated into the issuance, renewal or reopening of any stormwater permit after the effective date of this statewide toxicity plan.

Stormwater and urban runoff often contain metals, oils, pesticides, and other contaminants that can be extremely toxic to aquatic life. For example, the contaminants in both wet-weather and dry-weather flows into the Santa Monica Bay have elicited toxic responses in marine organisms such as giant kelp, red abalone and purple sea urchins^{11,12}. Despite the narrative water quality standards aimed to protect beneficial uses, there are many California waterways listed as impaired for aquatic toxicity on the CWA 303(d) list, and MS4 dischargers are often listed as a responsible party. Of the 326 waterbodies listed as impaired for toxicity, 55 have potential sources that have been identified, with 9 listed as having specifically an Urban Runoff/Storm Sewer source¹³. It is clear that stormwater permittees have the potential to cause or contribute to aquatic toxicity and must be regulated appropriately.

Currently, the Draft Provisions do not require toxicity objectives for stormwater permittees, and only require that stormwater dischargers who are already conducting toxicity testing use the TST method. The 2018 Draft Provisions do not even include the *recommendation* that all MS4 dischargers implement a monitoring program, which was included in the 2012 Draft Policy. Only a portion of stormwater dischargers are required to conduct toxicity monitoring, with requirements varying among dischargers. While we appreciate that stormwater and nonpoint source dischargers are required under the Draft Provisions to use the toxicity test methods, and that species specified in the Draft Provisions are subject to the analysis and reporting requirements, the Draft Provisions should apply to *all* stormwater dischargers. We urge the State Board to require that all stormwater dischargers (individual industrial stormwater dischargers, construction site stormwater dischargers and Phase I and II MS4s [including

¹¹ Bay, S., D. Greenstein, S. Lau, M. Stenstrom, and C. Kelley. 1996. *Toxicity of dry weather flow from the Santa Monica Bay watershed*. <https://www.biodiversitylibrary.org/page/39810453#page/35/mode/1up> (Pg. 33)

¹² Stenstrom, M.K. and S. Lau. 1998. *Assessment of Storm Drain Sources of Contaminants to Santa Monica Bay, Volume VI: Toxicity of Wet Weather Urban Runoff*. <http://www.seas.ucla.edu/stenstro/r/r45.pdf>

¹³ California State Water Resources Control Board. *2014 and 2016 Integrated Report* https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2014_2016.shtml

Caltrans] that discharge to inland surface waters, enclosed bays and estuaries) be subject to numeric toxicity objectives and toxicity monitoring requirements, as established by these Draft Provisions. Such a requirement provides an important insurance that MS4 monitoring is adequate to ensure that water quality is being protected by permit conditions.

II.C The Draft Provisions should include effluent limits and monitoring requirements for agricultural dischargers.

Agricultural discharge, which is regulated under the Porter-Cologne Water Quality Act, is also a known source of toxicity in California waterbodies, so we are also deeply concerned that the Draft Provisions do not require any numeric toxicity limits for agricultural dischargers. The 2010 SWAMP report shows that agricultural and urban areas had more sites with a greater magnitude of toxicity than less developed areas¹⁴. Attachment 1 shows that most waterbodies in the Central Valley, an area dominated by agricultural practices, are impaired for toxicity. Additionally, of the 55 waterbodies impaired for toxicity with identified sources listed in the *2014 and 2016 Integrated Report*, 26 are listed as sourced from agriculture, and an additional 15 are listed as having an unspecified non-point source. As is the case with stormwater, it is clear that agricultural dischargers have the potential to cause or contribute to aquatic toxicity and should be held to the same standards as other dischargers and regulated appropriately.

Currently, the Draft Provisions do not require toxicity objectives for agricultural dischargers, and only require that agricultural dischargers who already conduct toxicity testing use the TST method and comply with the reporting requirements. The 2018 Draft Provisions again do not include the recommendation that all channelized dischargers implement a monitoring program. To best uphold the State Board's Nonpoint Source Policy, however, the Toxicity Provisions should apply to any discharger that causes or contributes to acute or chronic toxicity. Specifically, the Nonpoint Source Policy recognizes that "the most successful control of nonpoint sources is achieved by prevention or by minimizing the generation of [nonpoint source] NPS discharges."¹⁵ Further, California Water Code sections 13260, 13263 and 13269, and the Nonpoint Source Policy (2)(c) require all current and proposed nonpoint source discharges be regulated, by one or a combination of administrative tools, that include waste discharge requirements (WDR), waivers of WDRs, or prohibitions. While there are presently no statewide toxicity requirements for nonpoint source dischargers, these Draft Provisions offer an important opportunity to address toxicity statewide for all dischargers, including agricultural dischargers. Any discharger that causes or contributes to toxicity in California waterways should trigger the requirements under the Draft Provisions, requiring the discharger to initiate a toxicity identification evaluation (TIE), required under the State Implementation Policy (SIP), in order to allow Regional Boards to identify sources of toxicity, and therefore successfully remove sources of toxicity.

Agricultural dischargers should not be exempt from these Draft Provisions, but should be subject to toxicity limits and testing requirements regardless of whether they have existing toxicity monitoring

¹⁴ Hunt, J., et al. 2010. California State Water Resources Control Board, Surface Water Ambient Monitoring Program. *Summary of Toxicity in California Waters 2001-2009*.

https://www.waterboards.ca.gov/water_issues/programs/swamp/docs/reports/tox_rpt.pdf

¹⁵ State Water Resources Control Board. 2004. *Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program*.

https://www.waterboards.ca.gov/water_issues/programs/nps/docs/plans_policies/nps_iepolicy.pdf.

requirements. Toxicity effluent limits and monitoring requirements should apply to all agricultural dischargers to create statewide consistency and protect ecological health from potentially toxic agricultural runoff. We urge the State Board to require that all agricultural dischargers, including those currently not performing chronic toxicity monitoring under current WDRs or conditional waivers, adhere to the chronic toxicity monitoring program developed by each Regional Board in the next permit cycle.

II.D All POTW facilities should adhere to routine monitoring for toxicity.

The current Draft Provisions require that all POTW facilities and other NPDES permittees that discharge ≥ 5 MGD must complete routine chronic toxicity monitoring monthly, but that POTW facilities and NPDES permittees that discharge < 5 MGD must only complete routine chronic toxicity monitoring quarterly. However, there are many factors that must be considered when assessing potential impacts to a waterbody. Discharges less than 5 MGD can be the dominant source of flow in a waterbody¹⁶, and therefore can have a huge impact on ecological health if the effluent is or becomes toxic. The routine monitoring frequency in the 2012 Draft Toxicity Policy was slightly more appropriate than the 2018 routine monitoring frequency, requiring that ≥ 1 MGD discharge be monitored monthly, and < 1 MGD discharge be monitored quarterly. At a minimum, the State Board should return to using 1 MGD as the cut-off for monthly monitoring. However, due to the often abrupt nature of detrimental toxic events, all dischargers (including stormwater and agricultural dischargers) should be required to monitor chronic toxicity monthly, to ensure protection of ecological health.

II.E The term “Insignificant Discharges” should have a clear and limited definition to minimize exemption from toxicity objectives to the greatest extent practicable.

The Draft Provisions offer exceptions for insignificant dischargers, but it is unclear which dischargers might qualify for this exemption. This provision allows for a potential loophole in the statewide toxicity objectives. The term “insignificant discharges” is defined as “NPDES discharges that are determined to be a very low threat to water quality by the permitting authority.” However, there is no clear criteria for what constitutes a “very low threat.” As stated above, small discharges can still have a huge effect on ecological health. Thus, the Draft Provisions should incorporate toxicity objectives and monitoring requirements for all dischargers. At a minimum, the State Board should add clarifying language and criteria for what constitutes a “very low threat to water quality,” and create a process for making such a determination.

II.F The term “Small Disadvantaged Communities” should not allow for exemption from toxicity objectives.

The Draft Provisions also offer exceptions for discharges in small disadvantaged communities, defined as “municipalities with populations of 20,000 persons or less, or a reasonably isolated divisible segment of a larger municipality encompassing 20,000 persons or less, with an average median household income that is less than 80 percent of the statewide annual median household income.” This creates another problematic loophole. Assuming an average per capita water consumption of 178 gallons per day in

¹⁶ Webber, L.; Atkins, C.; Rasmussen, R.; and Conner, V. Regional Water Quality Control Board, Central Valley Region. 2000. *Effluent Dominated Waterbodies Draft Report*.

California¹⁷, subtracting 42 percent for residential demand for outdoor usage¹⁸, a community of 20,000 people could generate an average of 2.06 MGD, even considering statewide conservation efforts. Any discharge has reasonable potential to cause or contribute to toxicity. At a minimum, discharge with a permitted flow ≥ 1.0 MGD, considered by the EPA to be a major discharge with a high toxic pollutant potential, must be regulated appropriately¹⁹.

Under the Draft Provisions, small disadvantaged communities and areas downstream within the same watershed would have much less protection against toxic effluent discharge. All communities deserve equal access to non-toxic waters. Therefore, we request that the State Board, instead, require that all dischargers adhere to toxicity limits and monitoring requirements, but provide additional resources to areas that qualify as small disadvantaged communities, to support monitoring and compliance efforts.

II.G Acute toxicity limits should be required in areas where dilution credits are applied to chronic toxicity.

Under the current Draft Provisions, dilution credits may be given for chronic toxicity. In these situations, chronic testing is performed with dilution credits applied to tested concentrations. However, if a discharge has such a dilution credit applied to chronic toxicity, it would be possible for acute toxicity testing to show toxicity in situations where chronic toxicity is not demonstrated. Therefore, if a discharger is allowed to apply dilution credits to chronic toxicity testing, there should be requirements for acute testing without these credits applied. Dilution credits should never be applied to acute toxicity because the toxicological effect of morbidity is too severe. Otherwise, mixing zones could be completely devoid of many species of aquatic life. Language should be added to the Draft Provisions to require monthly acute toxicity testing in permits where dilution credits are applied to chronic toxicity objectives.

II.H Routine Monitoring should continue on a monthly basis during toxicity reduction evaluation (TRE) activities.

Under the current Draft Provisions, in the event that two violations occur within one calendar month, or two consecutive calendar months, the discharger must initiate a TRE. We appreciate this improvement in the 2018 Draft Provisions, where violations lead to a TRE rather than to an accelerated monitoring program, which has been proven to be an ineffective method of addressing toxicity²⁰. However, the Draft Provisions also state that “the permitting authority may also approve a temporary reduction in the frequency of the routine monitoring specified in Section IV.B.2.c.i.(A) for dischargers conducting a TRE. When a discharger is conducting a TRE, the permitting authority may temporarily reduce the routine monitoring frequency to two chronic toxicity tests per calendar year.” This limits the frequency of monitoring that would potentially lead to the report of a toxicity objective violation. Out of regard for

¹⁷ Public Policy Institute of California. 2016. *Just the Facts: Water Use in California*.

<https://www.ppic.org/publication/water-use-in-california/>

¹⁸ Public Policy Institute of California. 2006. *Lawns and Water Demand in California*.

http://www.ppic.org/content/pubs/cep/ep_706ehp.pdf

¹⁹ United States Environmental Protection Agency. 2018. *Clean Water Act Analytical Methods*.

<https://www.epa.gov/cwa-methods/whole-effluent-toxicity-methods>

²⁰ Stevenson, C., K. James, M. Gold. 2009. *License to Kill: The Ineffectiveness of Toxicity Testing as a Regulatory Tool in the Los Angeles Region, 2000-2008*.

https://www.waterboards.ca.gov/water_issues/programs/state_implementation_policy/docs/comments/cmmnts_012111/mark_gold_attachment.pdf

transparency to the public, we request that this provision be removed, and that the State Board continue to require monthly monitoring during TRE activities.

II.1 Species Sensitivity Screening should occur during every permit renewal cycle.

As currently written, the Draft Provisions require that “the permitting authority may require a species sensitivity screening for chronic toxicity prior to every subsequent issuance, renewal or reopening,” and at a minimum, species sensitivity screening must occur “no less than once every ten years unless the discharger is participating in a regional monitoring program and the permitting authority determines that 1) the discharger has conducted a valid species sensitivity screening using test methods and statistical analysis required by these provisions and 2) the nature of the effluent has not changed since the last species sensitivity screening.” However, in the event that receiving water conditions or effluent quality is altered, the species sensitivity screening would need to be reevaluated for the toxicity monitoring to fully protect ecological health. We request that the Draft Provisions instead require that the species sensitivity screening occur no less than once per permit issuance, renewal or reopening, with discretion given to the permitting authority to require additional species sensitivity screening in the event that effluent alteration is observed.

III ENFORCEMENT OF THE DRAFT PROVISIONS SHOULD BE MORE STRINGENT IN ORDER TO PROTECT AQUATIC LIFE.

III.A The Draft Provisions should include more stringent enforcement mechanisms.

The current Draft Provisions allow multiple TST tests to “fail” without a violation occurring, as long as there is no more than one TST “fail” within a calendar month. The Draft Provisions state that “[if] an acute or chronic toxicity routine monitoring test result in a “fail” at the IWC²¹, then non-stormwater NPDES dischargers shall conduct a maximum of two MMEL²² compliance tests.” If the two subsequent MMEL compliance tests “pass,” then there is no violation. This provides a “free pass” for toxicity objective exceedances, requiring that two out of three (2/3) samples exceed within a month. The Los Angeles Regional Board has followed this method of treating an exceedance of toxicity objectives as a trigger for further action rather than an enforceable violation, which has been proven ineffective.

Heal the Bay’s report *License to Kill: The Ineffectiveness of Toxicity Testing as a Regulatory Tool in the Los Angeles Region, 2000-2008* demonstrates how ineffective this method has been in protecting aquatic wildlife²³. As mentioned in this report, “During the eight-and-a-half-year study time period among the 42 dischargers, there were 819 chronic and 68 acute toxicity exceedances in the plant effluent, and there were 64 acute toxicity exceedances among all receiving water testing stations. Despite this frequency of instances of toxicity, the Regional Board recorded only 80 violations in the Los Angeles Region from 2000 to 2008 for these 42 dischargers... only 1.2% (11/887) of the instances in which toxicity was present in the effluent did the Regional Board follow up with a substantial enforcement action.” Since instances of toxicity are erratic and unpredictable in nature, but have the

²¹ Instream Waste Concentration

²² Median Monthly Effluent Limitations

²³ Stevenson, C., K. James, M. Gold. 2009. *License to Kill: The Ineffectiveness of Toxicity Testing as a Regulatory Tool in the Los Angeles Region, 2000-2008*.

https://www.waterboards.ca.gov/water_issues/programs/state_implementation_policy/docs/comments/cmmnts_012111/mark_gold_attachment.pdf

potential to be highly detrimental to aquatic life, it is critical that limits for toxicity are set as clear quantifiable daily maximum limits.

To protect aquatic life, regional Basin Plans include narrative objectives allowing for *no* toxicity, because toxic conditions do not need to persist to have a devastating effect on critical species. Objectives within the CWA and the SIP both echo this goal to eliminate toxicity. Given these objectives, there should be strict enforcement capabilities for exceedances of toxicity limits in the Draft Provisions, as well. We recommend that the State Board revise the compliance determination language in the Draft Provisions to be consistent with these objectives, and read: “A test result indicating a “fail” is interpreted as a violation of the toxicity objectives. Failure to meet these objectives may result in appropriate enforcement action.” It would then be left to the discretion of the respective Regional Board to enforce the violation.

At a minimum, the Draft Provisions should require that 2/3 samples receive a TST “pass” to receive no toxicity violation, just as 2/3 samples must receive a TST “fail” to receive a toxicity violation. This process is shown in Tables 1A, 1B and 1C below. **Table 1A** shows the process for determining an MMEL violation as currently proposed in the Draft Provisions, requiring 2/3 TST “fails” for a MMEL violation. This approach addresses false positives during routine monitoring. **Table 1B** presents our preferred alternative, where a single “pass” equates to no violation, and a single “fail” equates to an MMEL violation. The credibility of the TST method supports the use of this approach, and it is adequately protective of aquatic life. **Table 1C** presents our second alternative to this process where 2/3 TST “fails” must occur before there is an MMEL violation, and similarly, 2/3 TST “passes” are required to avoid a violation. This approach addresses the possibility of both false negatives and false positives during routine monitoring, but does require that a minimum of two samples are analyzed each month. Extra monitoring required under this alternative scenario is highlighted in Table 1C below.

Routine Monitoring	MMEL Compliance Monitoring 1	MMEL Compliance Monitoring 2	MMEL Violation?
Pass	--	--	NO
Fail	Pass	Pass	NO
Fail	Pass	Fail	YES
Fail	Fail	--	YES

Table 1A: Current MMEL violation determination.

Routine Monitoring	MMEL Compliance Monitoring 1	MMEL Compliance Monitoring 2	MMEL Violation?
Pass	--	--	NO
Fail	--	--	YES

Table 1B: Proposed MMEL violation determination – Option #1.

Routine Monitoring	MMEL Compliance Monitoring 1	MMEL Compliance Monitoring 2	MMEL Violation?
Pass	Pass	--	NO
Pass	Fail	Pass	NO
Pass	Fail	Fail	YES
Fail	Pass	Pass	NO
Fail	Pass	Fail	YES
Fail	Fail	--	YES

Table 1C: Proposed MMEL violation determination – Option #2. Highlighted MMEL Compliance Monitoring results indicate additional monitoring required under this alternative option, as compared to the current method for MMEL violation determination.

III.B A maximum daily effluent limitation (MDEL) violation should occur with a TST “fail.”

An acute or chronic toxicity MDEL violation occurs if the TST results in a “fail,” for the survival or sub-lethal endpoint respectively, and the percent effect for the survival endpoint is equal to or greater than 50%. This percent effect value is twice the regulatory management decision (RMD) of 25% effect, and allows for 50% mortality and 50% chronic effects before an automatic violation of the MDEL occurs (which is worse than that proposed in the 2012 permit). In the State Board’s response to our 2012 comments, the 50% survival endpoint is described as a safety against false TST positives (i.e. false “fails”) leading to a violation. However, incorporating the TST analysis instead of the traditional analysis (No/Lowest Observed Effect Concentration [NOEC/LOEC]) already reduces the risk of both false positive and false negative toxicity results. Further, the Environmental Laboratory Accreditation Regulation update, expected for adoption in 2019, should improve the reliability of laboratory data. Therefore, it is inappropriate to include an additional threshold of 50% effect to address concerns of a false positive resulting in an MDEL violation. The MDEL values should be set at a more protective level because a TST “fail” is, by itself, significant evidence of a toxicity limit exceedance. Therefore, the MDEL should be set at the toxicity objective (i.e. a TST “fail” should result in an MDEL violation). At a minimum, the State Board should use toxicity observed at 1.5 times the RMD (approximately 37% effect), as this is more protective than what is currently in the Draft Provisions.

III.C The Draft Provisions should require immediate compliance with numeric toxicity limits and monitoring requirements.

Another major shortcoming within the Draft Provisions is the inclusion of a provision for Regional Boards to grant compliance schedules to achieve the toxicity objectives at their discretion. With these statewide toxicity objectives in development since 2003, dischargers have been on notice for fifteen years. Furthermore, the need for compliance schedules to apply new standards is unnecessary. Permittees have been required to meet similar toxicity standards for years, so meeting these objectives should not present new obstacles. We request that the State Board add language to the Draft Provisions that requires regulatory agencies to incorporate the toxicity objectives into all new permits and during any permit renewal or reopening process, and require immediate compliance with the effluent limitations and monitoring requirements.

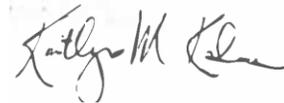
In summary, the Draft Provisions for implementation of toxicity objectives may be the most important policy item that the State Board will have voted on in recent years. And this critical policy is long overdue; the public has waited fifteen years for statewide toxicity objectives. We are, therefore, encouraged to see the State Board move forward with its adoption. However, while we recognize the importance for these Draft Provisions to be adopted as soon as possible, it is essential that the final policy be consistent, comprehensive and fully protective of environmental and ecological health. In order to strengthen the Draft Provisions and create consistent statewide objectives to protect our waterways from the impacts of aquatic toxicity, we request that that State Board edit the Draft Provisions to reflect the comments outlined in this letter. Most importantly, numeric toxicity effluent limitations and monitoring requirements should apply to all dischargers (including stormwater permittees, agricultural dischargers and all POTW facilities) regardless of any RPA findings, and the Draft Provisions should include more stringent enforcement mechanisms.

Thank you for this opportunity to comment on the Proposed Establishment of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California; and Toxicity Provisions. If you have any questions concerning these comments, please contact Annelisa Moe at Heal the Bay through email at amoe@healthebay.org or by phone at (310) 451-1500 X139.

Sincerely,



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Waterkeeper
Yuba River Waterkeeper

Steve Shimek
Coastkeeper & Executive Director
Monterey Coastkeeper
The Otter Project

Jen Kalt
Director
Humboldt Baykeeper

Matt O'Malley
Executive Director & Managing Attorney
San Diego Coastkeeper

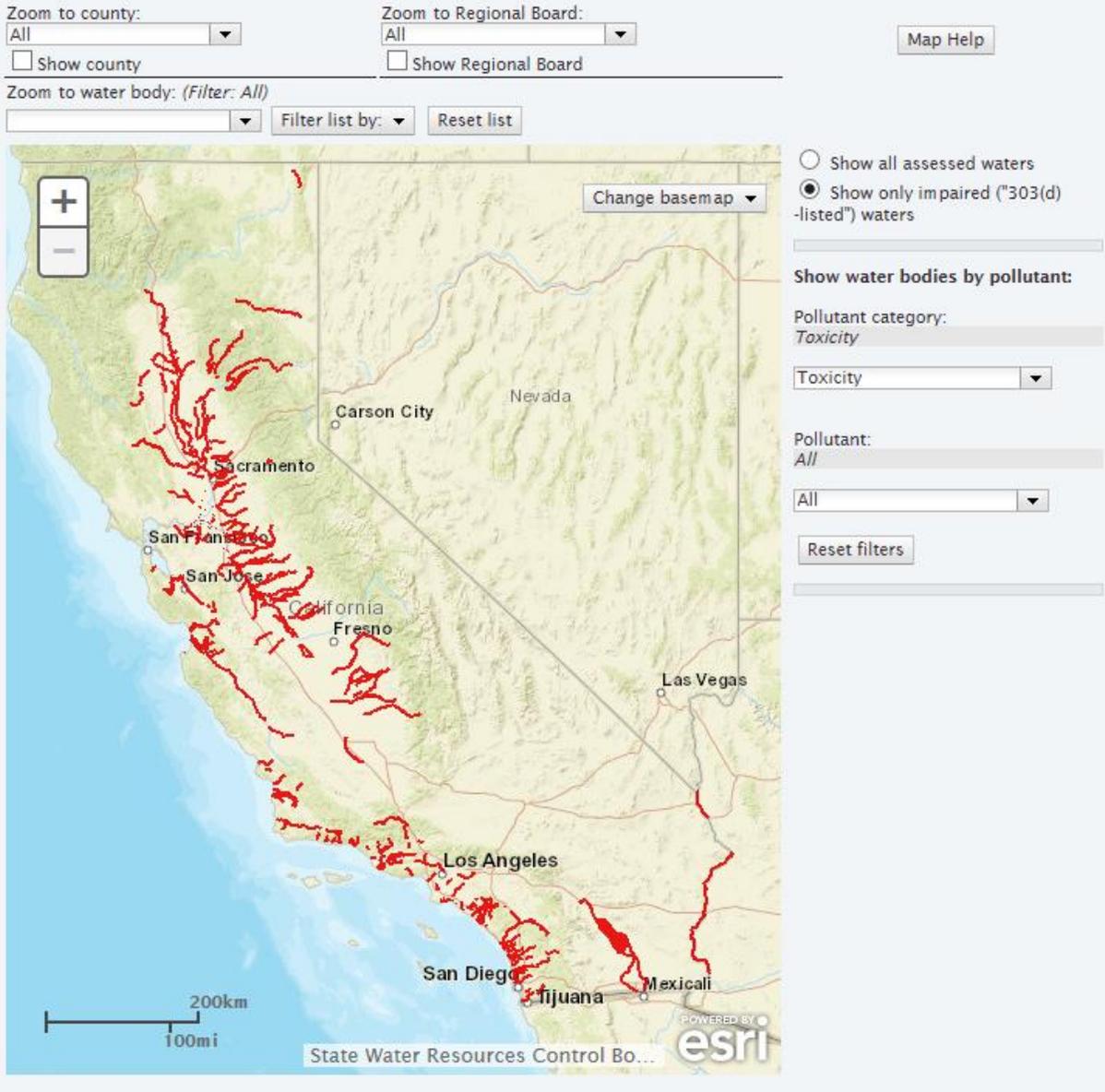
Kira Redmond
Executive Director
Santa Barbara Channelkeeper

Garry Brown
President
Orange County Coastkeeper
Inland Empire Waterkeeper

Johnathan Perisho
Design & Policy Director
The River Project

Evelyn Wendel
Founder and Executive Director
WeTap

2014 AND 2016 INTEGRATED REPORT — 303(D) LISTED WATERS FOR TOXICITY



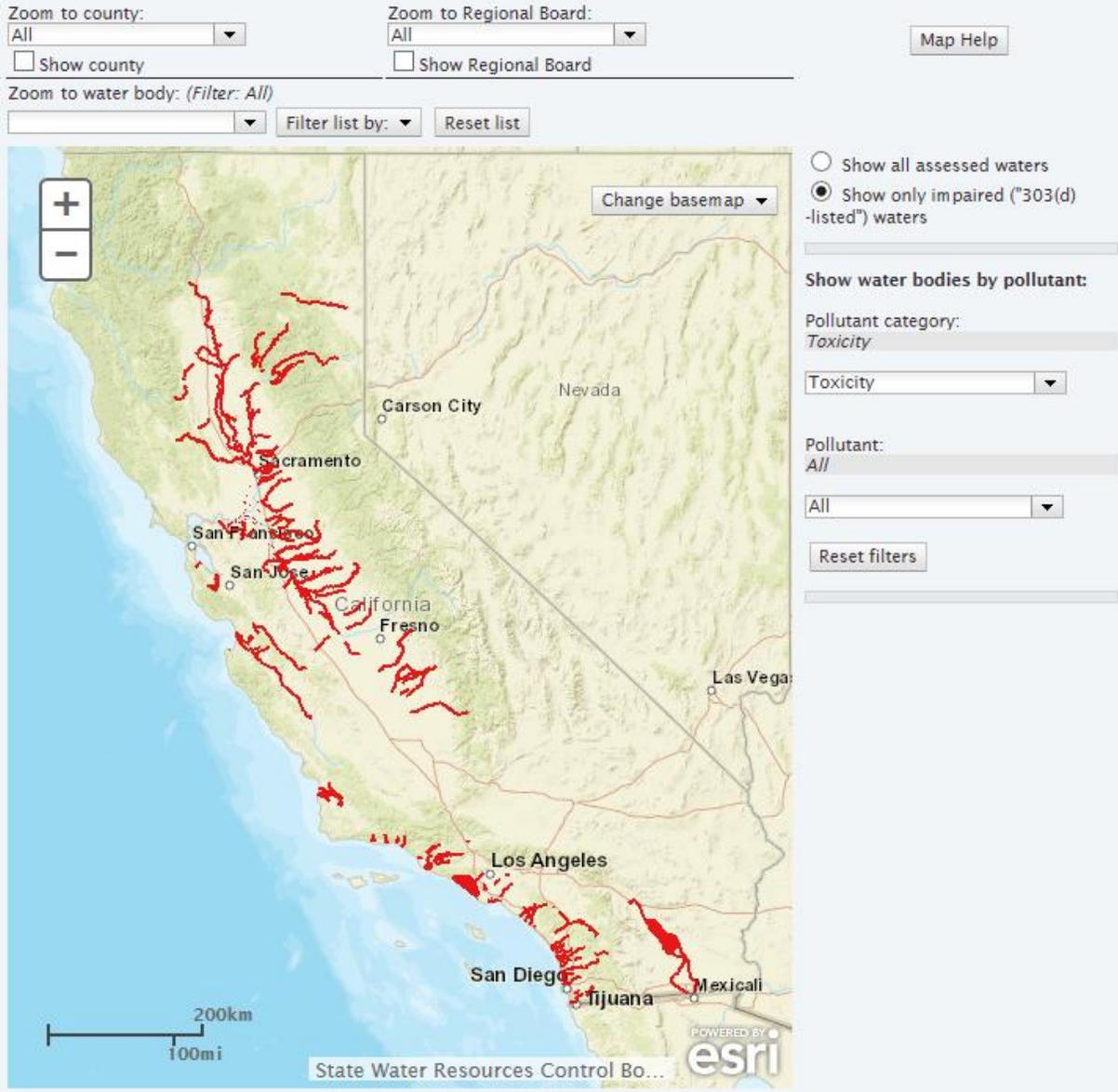
ATTACHMENT 1:

2014 and 2016 Integrated Report – Map of Impaired (“303(d) Listed”) Waters for Toxicity in California

Captured November 15, 2018 11:38 AM

https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2014_2016.shtml

2010 INTEGRATED REPORT — 303(D) LISTED WATERS FOR TOXICITY



ATTACHMENT 2:

2010 Integrated Report – Map of Impaired (“303(d) Listed”) Waters for Toxicity in California

Captured November 15, 2018 12:29 PM

https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml