CASQA
California Stormwater Quality Association®
Dedicated to the Advancement of Stormwater Quality Management, Science and Regulation

February 17, 2017

Jeanine Townsend, Clerk to the Board
State Water Resources Control Board

Subject: Comment Letter -- Beneficial Uses and Mercury Objectives

Dear Ms. Townsend:

On behalf of the California Stormwater Quality Association (CASQA), thank you for the opportunity to provide comments on Proposed Part 2 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California – Tribal and Subsistence Fishing Beneficial Uses and Mercury Provisions, which was distributed for public review on January 4, 2017 (referred to hereinafter as the "Draft Beneficial Uses and Mercury Objectives" or "Draft Staff Report").

CASQA understands that the State Water Resources Control Board (State Water Board) is proposing to establish (a) three new beneficial use definitions pertaining to tribal traditional and cultural use, tribal subsistence fishing use, and subsistence fishing use; (b) one narrative and four numeric mercury water quality objectives to protect numerous beneficial uses of water involving human health and aquatic dependent wildlife; and (c) a program of implementation to control mercury discharges. In addition, the State Water Board is proposing to align the adoption of these items with the timeline stipulated within the U.S. EPA Consent Decree[1] so that U.S. EPA's obligation to establish the mercury water quality criteria for aquatic life and aquatic-dependent wildlife would also be satisfied.

At the February 7, 2017 State Water Board Hearing on this matter, several speakers testified that the proposed beneficial uses already exist and have existed for a long time (e.g., centuries, millennia) – long before California's water pollution control laws were enacted and the first legally recognized beneficial uses were established by regulation. CASQA understands the proposed beneficial uses at issue here pre-date California's water quality regulatory system. Unfortunately to-date, the proposed beneficial uses have not been legally recognized as existing and established in accordance with that system. Given that this is the current regulatory status, it is incumbent upon the State Water Board and Regional Water Boards to follow all of the regulations and administrative procedures to consider establishing what would officially be new, legally recognizable beneficial uses.

We provide comments herein to address issues of particular concern for CASQA members, which focus on the process and timeline for adoption of the Draft Beneficial Uses and Mercury Objectives, the proposed beneficial use definitions, full consideration regarding the attainability of the water quality objectives, and required implementation actions that are commensurate with the significance of the stormwater discharges.

[1] *Our Children's Earth Foundation and Ecological Rights Foundation vs. U.S. EPA*, No. 3:13-cv-2857-JSW (2014)

Issue #1 – Process and Timeline for Adoption of the Draft Beneficial Uses and Mercury Objectives

I. The State Water Resources Control Board should modify the process and extend the timeline for the adoption of the proposed beneficial uses, water quality objectives, and program of implementation.

CASQA understands that the State Water Board intends to adopt the Beneficial Use definitions and Mercury Objectives prior to June 30, 2017 to, in part, assist U.S. EPA in complying with a Consent Decree. While we support the State Water Board's effort to promulgate such water quality objectives for California rather than relying on the U.S. EPA to do so, attempting to meet the U.S. EPA driven June 30, 2017 deadline will, unfortunately, curtail a robust public review process for this rulemaking that will greatly impact permittees of all types, including municipal and industrial stormwater permittees. In fact, it is unclear if, to date, there has been outreach and feedback from a broad representation of industrial stormwater permittees, including those who participate in the CASQA Industrial Subcommittee.

Further, in addition to the adoption of mercury objectives for aquatic life and aquatic-dependent wildlife, which in itself satisfies the Consent Decree as it applies to mercury, the proposed action proposes new tribal and subsistence fishing beneficial uses, raising much larger and broader concerns, which simply cannot be fully addressed within the context of a *public hearing* approximately 30 days after being distributed.

Considering the broad scope of the action proposed (over 700 pages of information and technical analyses), including the adoption of multiple mercury numeric and narrative water quality objectives, the creation of new beneficial uses, the interplay with in-stream flow requirements (which was the subject of a February 1st workshop), and the actions within the implementation plan, CASQA is reiterating its request for either:

Option 1. An extension of time for the U.S. EPA Consent Decree and additional steps to the public process for this rulemaking[2]; or

Option 2. Bifurcate the U.S. EPA obligation to develop water quality criteria for wildlife (the proposed prey fish and California least tern prey fish objectives) by June 30, 2017 from the remaining portion of the proposal and add additional time and steps to the public process for the remaining portions of this rulemaking.

CASQA understands that a revised timeline can be accommodated under the terms of the Consent Decree in that the State Water Board can work with U.S. EPA to obtain an automatic extension of the Consent Decree. To the extent that U.S. EPA does not obtain the automatic extension (Option 1 is rejected), Option 2 would still allow the State Water Board to adopt objectives consistent with the terms of the Consent Decree while allowing appropriate time and consideration for the development of water quality objectives, beneficial use definitions, and a program of implementation that are not part of the terms of U.S EPA's Consent Decree.

CASQA Recommendation: *Pursue Option 1 or 2 above and revise the schedule as follows:*

[2] Original letter sent to State Water Resources Control Board January 25, 2017; *Comment Letter – Beneficial Uses and Mercury Objectives: Request for Extension of Time*.

- *Extend the public comment period by 60 additional days to about mid-April 2017;*
- *Postpone the State Water Board's first hearing on this issue until May 2017;*
- *Provide additional opportunity for the submission of written public comments on any revisions; and*
- *Hold a final hearing for consideration of adoption in fall 2017.*

Issue #2 – Proposed Beneficial Use Definitions

New beneficial uses should only be established after sufficient time has been provided for constructive conversation and careful consideration by all stakeholders that may be impacted. Although State Water Board staff has provided outreach and have met with various stakeholder groups regarding the content of the definitions, CASQA believes additional time should be provided to all stakeholders on how the beneficial uses will be applied and used by the Regional Water Boards. Further, CASQA is concerned that staffs' recommended action would result in inconsistent application of the beneficial uses by the various Regional Water Boards. Specifically, the Draft Staff Report recommends that the three newly proposed beneficial use definitions be established, and that the Regional Water Boards then designate specific waterbodies within their respective regions. However, the proposed language for the ISWP contains no direction or guidance to the Regional Water Boards as to how they should determine applicability of the newly proposed beneficial uses. CASQA's specific concerns and recommendations are provided herein.

I. Statement of necessity for newly proposed beneficial uses fails to actually provide adequate data and information to support the necessity for the proposed beneficial uses.

Page 24, the Draft Staff Report contains a statement of necessity to support the need for adoption of the newly proposed beneficial uses. However, this statement is brief, and relies primarily on State Water Board Resolution No. 2016-0011. The Draft Staff Report does not provide data and information regarding the necessity for adopting the newly proposed beneficial uses. Moreover, it appears that initial discussion regarding the need for these uses was directly tied to the development of mercury objectives, and little consideration has been given as to how or why they would apply beyond the constituent of mercury.

CASQA Recommendation: *Revise the Draft Staff Report to provide additional data and information that clearly supports the need for the proposed beneficial uses beyond their relationship to the proposed mercury objectives.*

II. There are no limitations to application of the newly proposed beneficial uses, which could impact water rights, flows, and many other factors.

Beneficial uses are the underpinning of water quality based regulations and drive permit provisions, enforcement actions, and many other decisions of the Regional Water Boards as well as the State Water Board. Once established and applied to a specific waterbody (regardless if the use is existing or designated), beneficial uses must be protected, maintained, or attained where attainment does not currently occur. The proposed amendments to the ISWP and the Draft Staff Report provide no limitations as to how and when the proposed uses should be applied. For example, the Tribal Tradition and Culture Use (CUL) are "uses of water that support the cultural, spiritual, ceremonial, or traditional

rights or lifeways of California Native American Tribes, including, but not limited to: navigation, ceremonies, or fishing, gathering, or consumption of natural aquatic resources, including fish, shellfish, vegetation, and materials." Considering that many of California's waterbodies have been highly modified over the years, CASQA struggles to see how this beneficial use could be protected, maintained, or attained in many circumstances.

Further, the proposed ISWP language and the Draft Staff Report fail to discuss considerations of seasonality, realistic expectations for attainment of the uses, and other uses of the water. Porter-Cologne mandates that Regional Water Boards and the State Water Board regulate water quality to the highest level, considering all the demands made on the water. (Water Code § 13000.) Accordingly, it is important that the proposed ISWP language and the Draft Staff Report direct the Regional Water Boards to consider multiple factors when making decisions regarding designation of such uses. The ISWP and the Draft Staff Report require that a California Native American Tribe must confirm that the designation is appropriate. While this is an important step, it should not be the only requirement for determining if such designations are appropriate.

> **CASQA Recommendation:** *The proposed ISWP language and the Draft Staff Report need to be revised to identify various considerations that Regional Water Boards and the State Water Board need to consider prior to designating a waterbody with any of the newly proposed beneficial use designations.*

III. The Draft Staff Report fails to identify the need for Use Attainability Analysis prior to designation by Regional Water Boards, or provide Regional Water Boards with direction for application of the newly proposed beneficial uses.

Federal regulations require a state to conduct a use attainability analysis as described in 40 C.F.R., 131.10(g) when a state designates uses that do not include the uses specified in section 101(a)(2) of the Clean Water Act (CWA). The uses in section 101(a)(2) are for the protection and propagation of fish, shellfish and wildlife, and provide for recreation in and on the waters. These uses are often referred to as the fishable-swimmable uses. As described in the Draft Staff Report, the proposed beneficial uses are not fishable-swimmable uses, and thus any designation of such uses must only occur after the Regional Water Board has conducted a use attainability analysis pursuant to 40 C.F.R., 131.10(g). In other words, before designating these uses, the Regional Water Boards and/or the State Water Board should ensure that the uses are in fact attainable, considering the factors specified in 131.10(g).

Requiring a use attainability analysis prior to use designation, which is required by federal regulations, is in direct contrast to the direction provided by the Draft Staff Report. The Draft Staff Report states that "there is no required or threshold of use that the Water Boards must consider when determining beneficial use designations." (Draft Staff Report, p. 111.) Moreover, the Draft Staff Report claims as follows "…, beneficial uses may be designated as a goal use (or probable future use in Porter-Cologne parlance) where neither the water quality is currently being attained or the use is actually occurring, but there is evidence to indicate that the use would be a probable future use." (Draft Staff Report, p. 112.) Not only do these statements conflict with federal regulatory requirements in 40 C.F.R. 131.10(g), but they also provide Regional Water Boards with inappropriate direction to adopt beneficial uses that may not actually exist, or be attainable.

Moreover, the proposed amendments in the ISWP should set forth the minimum data and informational requirements that Regional Water Boards need to consider prior to designating these beneficial uses to waterbodies in their regions. At this time, the proposed amendments are silent on these requirements, and the Draft Staff Report contains limited direction. For the CUL use, the Draft Staff Report merely suggests that the Regional Water Boards and the State Water Board can consider evidence from tribal communities and that they should not rely solely on anecdotal evidence. For the subsistence uses, the Draft Staff Report mentions that evidence could include an angler or community consumption study, and that a peer reviewed study is preferred. However, there are no minimum informational or data standards set for Regional Water Boards and the State Water Board to consider when they actually look to designate a waterbody.

> **CASQA Recommendation:** *The Draft Staff Report needs to be revised to reflect applicable federal regulatory requirements with respect to the designation of the newly proposed beneficial uses. Further, CASQA recommends that minimum informational and data requirements be identified as part of the proposed amendments to specifically guide Regional Water Boards and the State Water Board in making waterbody specific designations for these newly proposed uses.*

IV. Improper application of newly proposed beneficial uses could result in situations where it is impossible for MS4s and other dischargers to meet water quality objectives.

Once a waterbody is designated as having the use, discharge permits must include provisions that ensure that such uses are protected, maintained or attained. Moreover, narrative water quality objectives are then interpreted with water quality criteria from multiple academic sources and other sources to protect the beneficial use. These numeric values end up being receiving water limitations and/or total maximum daily wasteload allocations that are practically impossible for stormwater permittees to meet because stormwater permittees have little control over sources of pollutants. CASQA appreciates that where a beneficial use truly exists, it is important to try and protect and maintain water quality for that use. Unfortunately, historical designation of beneficial uses in California has at times resulted in the application of impractical beneficial uses to some waterbodies, followed by the improper application of receiving limitations and/or TMDL wasteload allocations. For example, due to tributary rule applications in the Central Valley, we often see aquatic life beneficial uses applied to agricultural drains that are specifically designed for irrigation return flows. To avoid such unintended consequences, it is imperative that there be specific parameters identified to describe what types of waterbodies are appropriate for designation of these uses.

> **CASQA Recommendation:** *To prevent the application of improper and impractical beneficial use designations, CASQA recommends that the State Water Board work closely with all interested stakeholders to clearly identify site specific factors and/or criteria that should be considered prior to the designation of the newly proposed beneficial uses.*

Issue #3 – Full Consideration Regarding the Attainability of the Water Quality Objectives

I. The Draft Staff Report does not adequately consider the California Water Code §13241 and §13050 factors as they relate to <u>attainability</u> of the water quality objectives.

Consistent with California Water Code (Wat. Code) § 13241, when setting the mercury objectives, the State Water Board must consider a number of factors, including the "(c) water quality conditions that *could be reasonably attained* through coordinated control of all factors affecting water quality." Wat. Code § 13050 additionally requires that the water quality control plans identify the (1) beneficial uses to be protected; (2) water quality objectives; and (3) a *program of implementation needed for achieving water quality objectives* [Emphasis added].

Thus, while the State Water Board does not necessarily need to conduct a "cost benefit analysis", the Draft Staff Report should, at a minimum, identify the requisite program of implementation necessary for achieving the proposed objectives and impacts of the program on factors listed in Water Code Section 13241so that there is some assurance that the proposed objectives can be reasonably attained.

The Draft Staff Report identifies that the "principal sources of mercury pollution to the waters within California are historic mines and atmospheric deposition[3]" and that "mercury is also present (but in smaller absolute amounts) in point-source discharges, due to a wide variety of potential industrial, commercial and residential sources". It also notes that the majority of the established mercury total maximum daily loads (TMDLs) identify the major sources of mercury as historic mines/mining legacy, historic manufacturing/processing, and atmospheric deposition[4].

The Draft Staff Report[5] includes a brief analysis regarding the water quality conditions that could reasonably be achieved (Section 10.1.3). The section notes that the major surface water discharge types include the following (along with some challenges in controlling the discharges from each):

- Historic mines – "the legacy of mercury left by historic gold and mercury mining is not easily controlled and may prevent attaining the Mercury Water Quality Objectives for many fish species for the next century in many waters"; "coordinated control of contaminants is extremely challenging"
- Atmospheric deposition – "the Water Boards do not regulate mercury emission to the atmosphere"
- Nonpoint sources (including mercury in soil due to natural geology[6])
- Wetlands
- Dredging
- Storm water
- Municipal and industrial discharges

The Draft Staff Report concludes "it may take a significant period of time to attain the objectives by implementing the mercury controls in the Provisions and developing and implementing other water quality control programs, such as TMDLs. Additionally, the Tribal Subsistence Fishing Water Quality Objective and the Subsistence Fishing Water

[3] Executive Summary, page xx
[4] Section 4.4.9 Sources of Mercury Identified in TMDLs
[5] Section 10.1.3 - *Water Quality Conditions that Could Reasonably be Achieved through Coordinated Control of All Factors Affecting Water Quality*
[6] Section 6.1.3 - Sediments from mines and naturally enriched soils are thought to be a major source of mercury in many areas of California, page 91.

Quality Objective may be very difficult to achieve in most waters as discussed in Section 6.5."

However, the 13241 analysis does not, given the primary sources of mercury, assess what combination of controls and/or timeframe is necessary in order for the water quality conditions to be achieved (and if they are even achievable in all cases, especially if the sources are not currently regulated by the Water Boards). For example, if there is a limited ability to control the primary sources (sediment associated with historic mines and atmospheric deposition) or there are areas where there are elevated levels of mercury in soils due to natural geology, it is unclear if the proposed objectives can be achieved.

> **CASQA Recommendation:** *The Draft Staff Report must be modified to identify a range of implementation actions (as proposed in Section 2.3.3, Section 7, and Appendix A) and to determine whether they would result in the reasonable attainment of the proposed objectives. Based on the results of the 13241 analysis, the program of implementation should be evaluated to ensure that it is commensurate with the achievability of the objectives and the primary factors that drive that achievability.*

II. The Draft Staff Report does not adequately consider the California Water Code §13242 as it relates to the implementation of the water quality objectives.

Consistent with Wat. Code § 13242, when setting the mercury objectives, the State Water Board must consider "*the program of implementation for achieving water quality objectives"* which "shall include, but not be limited to [Emphasis added]:

a. A description of the nature of actions *which are necessary to achieve the objectives*, including recommendations for appropriate action by any entity, public or private.
b. A *time schedule* for the actions to be taken.
c. A *description of surveillance* to be undertaken to determine compliance with objectives."

Although the Draft Staff Report discusses the elements of a program of implementation required by Wat Code § 13242[7], it does not fully address subd. (a)-(c).

For the "description of the nature of actions *which are necessary to achieve the objectives*, including recommendations for appropriate action by any entity, public or private" the Draft Staff Report simply refers to the program of implementation within Appendix A. However, it does not describe the range of actions (in combination) that would be necessary from the various sources in order to ensure that the objectives are achieved (e.g., can objectives be achieved if the dispersed, broad impacts of historic mining and/or atmospheric deposition cannot be addressed?[8]).

For the time schedule, the Draft Staff Report does not recognize the 100+ year timeframe that is expected before the objectives may be achieved. Instead, it references that the time schedule for compliance will be determined on a discharge-by-discharge basis by the Water Boards, pointing to the Water Board's existing Compliance Schedule Policy (Res. 2008-

[7] Section 10.2 – *Considerations Required by Water Code Section 13242*
[8] The Draft Staff Report identifies the principal sources of mercury pollution to the waters within California as historic mines and atmospheric deposition, Executive Summary (pg xxi).

0025). In turn, the Compliance Schedule Policy generally requires measures to be scheduled to achieve any final limit based on new water quality objectives, and that terms must be as short as possible, but generally not longer than ten years. It is critical that NPDES permittees not be held to a 5-, 10-, or 15-year timeframe when it is recognized that the objectives will not be attained within that timeframe.

Lastly, there is no description within Appendix A regarding the surveillance/monitoring that would need to take place to ensure that the fish tissue objectives within ambient receiving waters are progressing towards or are in attainment.

> **CASQA Recommendation:** *Based on the results of the 13241 analysis, the program of implementation should be modified to ensure that it is commensurate with the achievability of the objectives and the primary factors that drive that achievability. The program of implementation must account for the controllability of the primary sources, the influence of unregulated sources, the extended timeframes necessary to achieve the objectives, and the compliance requirements for regulated discharges (especially if they are a de minimis source).*

Issue #4 – Require Implementation Actions that are Commensurate with the Significance of the Stormwater Discharges

I. The Implementation of Water Quality Objectives (Section IV of Appendix A) should only require the implementation of best management practices (BMPs) when the municipal stormwater discharges are causing or contributing to a persistent exceedance of water quality standards.

The Implementation of Water Quality Objectives (Section IV of Appendix A) includes a *de facto* requirement that the provisions specified in Section IV.D.3.b be incorporated in municipal stormwater NPDES permits where <u>any</u> of the mercury water quality objectives apply, even if the municipal stormwater permittees are already implementing a wide range of controls that address mercury, have not been found to cause or contribute to persistent exceedances of the objectives, or if there is already a TMDL. However, this is counter to other portions of the Draft Staff Report and is inconsistent with the approach taken for other stormwater permittees such as the California Department of Transportation and enrollees under the Construction General Permit. In fact, with regard to Phase I and Phase II municipal stormwater programs, the Staff Report notes:

- "For many MS4s, permits already contain such control measures and best management practices."[9]
- "However, many of the existing general requirements in storm water permits can help reduce mercury in storm water. For example, Phase I and II MS4 permits contain requirements for public education outreach, pollution prevention, sediment controls for construction areas, and low impact development; all of these elements can also help reduce mercury in storm water."[10]

[9] Draft Staff Report, Executive Summary, page xxi
[10] Section 6.11.1, page 136

- "Phase I and Phase II MS4s are, on the whole, a smaller source of sediments. The sediment and erosion controls in the current MS4s permits would fulfill the requirements for mercury."[11]
- "Phase I and II MS4s already have some existing requirements for public education outreach, pollution prevention, sediment controls for construction areas, and low impact development. Additionally, street sweeping is already required by both Phase I and II MS4s. Street sweeping removes fine dust, which may contain mercury from brake pads or atmospheric deposition and keeps improperly discarded mercury containing items from contaminating storm water. If the required actions are already being conducted by an MS4 those activities would count towards compliance."[12]
- "Therefore, it is anticipated that the reasonably foreseeable methods of compliance are likely already being done by Phase I MS4s and there would be little to no change for Phase I MS4s. Phase II MS4s generally have fewer requirements, so it is estimated that some Phase II MS4s may need to add some of the activities described below."[13]

Thus, based on the points listed above and the supporting discussion within the Draft Staff Report, it is clear that both the Phase I and Phase II municipal stormwater permits already contain a) robust erosion and sediment controls as a part of the Construction and Land Planning programs; b) public education and outreach programs; c) household hazardous waste programs that accept key mercury containing items/materials; and d) additional requirements where mercury TMDLs have been adopted. As a result, it is unclear why Phase I and Phase II municipal stormwater programs are being held to a different standard than other stormwater dischargers and required to implement the controls listed in IV.D.3.b prior to any assessment as to the sources of identified receiving water impairments.

In addition, it is unclear 1) how the linkage between the mercury concentrations in stormwater discharges from urban areas and the definition of *Areas with Elevated Mercury Concentrations*[14] was established; and 2) what best management practices (BMPs) would be required. Although the Draft Staff Report states that "for areas that are specifically designated as Areas with Elevated Mercury Concentrations, the Water Boards would be required to include best management practices for erosion control in MS4 permits", the reality is that Phase I and Phase II permits may not cover all of the areas where there are elevated mercury concentrations and that, where there is coverage, the Phase I and Phase II permits already include requirements for erosion and sediment controls as a part of their construction programs. Therefore, it is unclear what additional controls are contemplated.

[11] Section 6.11.3, page 138
[12] Section 6.11.3, page 139
[13] Section 7.2.5, page 171
[14] AREAS WITH ELEVATED MERCURY CONCENTRATIONS: Areas with elevated mercury concentrations include the following areas:
1) Areas located in the Coast Range mountains with naturally mercury-enriched soil or sediments with total mercury concentrations of 1 mg/kg or higher;
2) Areas located in an industrial area with soil or sediments with total mercury concentrations of 1 mg/kg or higher;
3) Areas located within historic mercury, silver, or gold mine tailings;
4) Areas located within historic hydraulic gold mining pits in the Sierra Nevada mountain range.
5) Any other area(s) determined by the PERMITTING AUTHORITY in the applicable order.

Since discharges from urban areas are not a primary source of mercury and the municipal stormwater permits already include erosion and sediment controls, it is recommended that this provision be deleted.

Lastly, Appendix A should be modified to identify a compliance pathway for the discharge prohibitions and receiving water limitations for municipal stormwater permittees who are implementing the mercury pollution prevention and pollution control measures.

CASQA Recommendation:

Modify the language in Appendix A, Section IV.D.3.a as follows:

> *Chapter IV.D.3 applies to storm water dischargers regulated under general and individual NPDES STORM WATER permits issued pursuant to Clean Water Act section 402, subsection (p) that have been found to cause or contribute to persistent exceedances of water quality standards or when a mercury TMDL is being developed and the municipal stormwater dischargers are a significant source. The PERMITTING AUTHORITY shall consider ~~include~~ the requirements in Chapter IV.D.3.b in individual and general NPDES STORM WATER permits when adopting or re-issuing the permits.*

Modify the language in Appendix A, Section IV.D.3.b.1 as follows:

> *Phase I and Phase II MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s) permits shall include one or more ~~a combination~~ of the following mercury pollution prevention and pollution control measures to reduce total mercury or methylmercury discharges where the stormwater discharges have been found to cause or contribute to persistent exceedances of water quality standards or when a mercury TMDL is being developed and the municipal stormwater dischargers are a significant source.: ~~All of~~ T~~t~~he following control measures are ~~required, except,~~ at the discretion of the PERMITTING AUTHORITY, additional measure(s) may be substituted for one or more measures ~~if the substituted measure(s) would provide an equivalent level of control or prevent total mercury or methylmercury pollution~~. If the PERMITTING AUTHORITY substitutes other measures, the justification shall be documented in the permit fact sheet or equivalent document. The effort involved in each of the required measures shall be proportional to the size and population of the MS4.*

Delete the language in Appendix A, Section IV.D.3.b.2 as follows:

> ~~*2) The PERMITTING AUTHORITY may include best management practices to control erosion in MS4 permits. However, the MS4 permit shall contain best management practices for AREAS WITH ELEVATED MERCURY CONCENTRATIONS.*~~

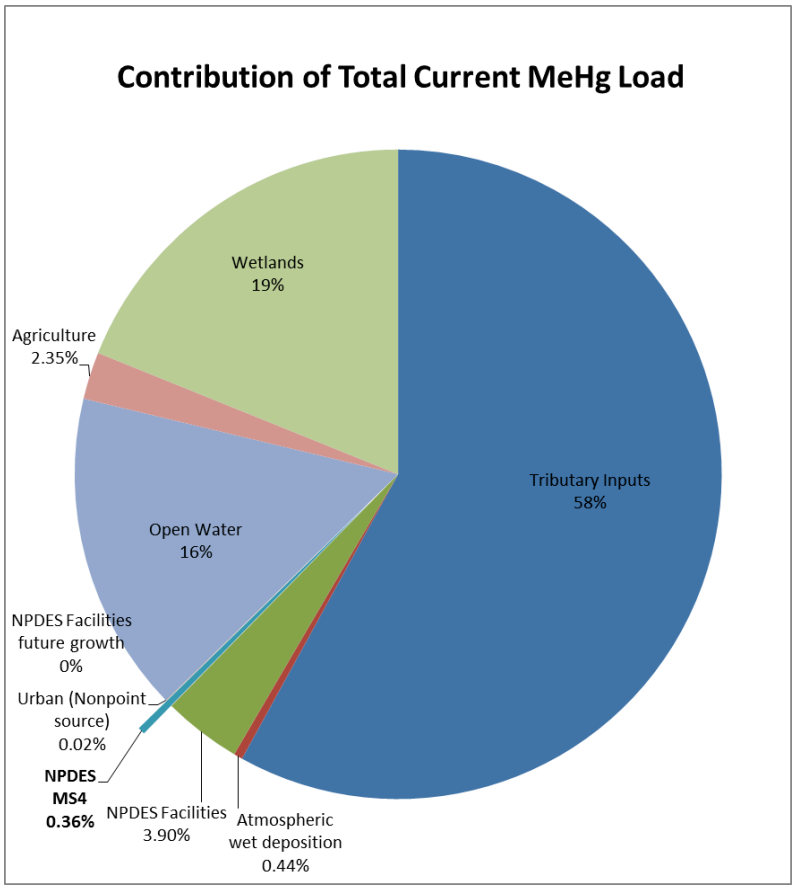
Add the following language in Appendix A, Section IV.D.3.b.2 (new section) as follows:

> *2) Compliance Determination. MS4 permittees in full compliance with the implementation of the mercury pollution prevention and pollution control measures are deemed to be in compliance with the mercury discharge prohibition and water quality objectives incorporated into the MS4 permit.*

II. The Implementation of Water Quality Objectives (Section IV of Appendix A) should recognize that there may be some instances where the municipal and/or industrial stormwater discharges are deemed insignificant discharges.

There may be some instances where the permitting authority determines that the municipal and/or industrial stormwater discharges are an insignificant (de minimis) source of mercury to the receiving water and that the implementation of the mercury pollution prevention and pollution control measures listed in *Appendix A, Section IV.D.3.b* will not have a measurable effect on fish tissue and should not be required.

For example, during the development of the Delta Methylmercury Total Maximum Daily Load (TMDL)[15], it was determined that the urban land use (stormwater permittees) contributes about 0.4% of the Delta methylmercury load (see Figure below – NPDES MS4) and municipal and industrial sources (combined) accounted for about 4% of the Delta methylmercury load (see Figure below – NPDES Facilities). As such, even if the municipal and industrial stormwater permittees are able to reduce the load to 0, which is very difficult to do due to the limited best management practices that directly affect mercury, the fish tissue objective will not be attained. Thus, the primary controls should address the most significant sources of mercury; tributary inputs, wetlands, and open water.



[15] Table 6.2 http://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/central_valley_projects/delta_hg/april_2010_hg_tmdl_hearing/apr2010_tmdl_staffrpt_final.pdf

CASQA Recommendation:

Modify the language in Appendix A, Section IV.D.3.a as follows:

> *Chapter IV.D.3 applies to storm water dischargers regulated under general and individual NPDES STORM WATER permits issued pursuant to Clean Water Act section 402, subsection (p) that have been found to cause or contribute to persistent exceedances of water quality standards or when a mercury TMDL is being developed and the municipal stormwater dischargers are a significant source.. The PERMITTING AUTHORITY shall consider ~~include~~ the requirements in Chapter IV.D.3.b in individual and general NPDES STORM WATER permits when adopting or re-issuing the permits.*
>
> *The PERMITTING AUTHORITY is authorized to exempt certain dischargers from some or all of the provisions of Chapter IV.D.3 if the PERMITTING AUTHORITY makes a finding that the discharge is insignificant (de minimis) with respect to the other identified sources of mercury within the subject watershed.*

III. The Draft Staff Report does not contain the technical justification or corresponding analysis for the reduction of the industrial stormwater Numeric Action Level (NAL) from 1400 ng/L to 300 ng/L, or clarify how the Water Quality Objectives will affect compliance with receiving water limitations.

The General Permit for Storm Water Discharges Associated with Industrial Activities (Industrial General Permit (IGP) – NPDES No. CAS000001) incorporates numeric action levels (NALs) for a number of constituents, including mercury, to help indicate the overall pollutant control performance at any given facility. The IGP contains annual and instantaneous maximum NALs. The annual NALs are uniformly established as the 2008 EPA Multi-Sector General Permit (MSGP) benchmark values, and are applicable for all parameters including total mercury (established as 1400 ng/L). In addition, the Industrial General Permit contains receiving water limitations requiring that dischargers ensure that discharges to not cause or contribute to an exceedance of any applicable water quality standards in any affected receiving water. (IGP Section VI).

Although the Draft Staff Report states "The provisions would not impose any new requirements", it goes on to state that the previously established NAL would be "updated" (become more stringent) and be reduced from 1400 ng/L to 300 ng/L[16]. According to the Draft Staff Report, the rationale for reducing the NAL is that:

- It is "very high compared to water quality based thresholds. The threshold of 1400 ng/L is 28 times higher than the outdated California Toxics Rule criterion (50 ng/L). (The Industrial General Permit is the only storm water permit that includes requirements for mercury monitoring.[17]).[18]"

[16] Section 2.3.3 – *Program of Implementation*, page 10

[17] This statement is not accurate. In fact, many municipal stormwater permits require monitoring program, which include mercury within the suite of constituents.

[18] Section 6.11.2 – *Issue Description*, page 137

- This concentration (300 ng/L) is six times higher than the outdated California Toxics Rule criterion (50 ng/L) and 25-75 times higher than water column targets that are consistent with meeting the objective (4 – 12 ng/L, Appendix I). Yet, the Numeric Action Level of 300 ng/L is about five times more protective than the current Numeric Action Level of 1400 ng/L[19].
- A criterion of 300 ng/L is included in the Provisions because the existing Numeric Action Level (1400 ng/L) is outdated and relatively high. The concentration of 300 ng/L is the lowest the Numeric Action Level could be without changing the analytical method. Requiring the use of the newer, more sensitive mercury analytical method would be much more expensive, and Numeric Action Levels are technology based, not water quality based.[20]

This rationale inappropriately compares the use of a benchmark to a water quality criterion, which have very different purposes.

In addition, the Draft Staff Report did not thoroughly analyze the economic impact of the revised NALs, or any implications for receiving water limitations compliance, on the total number of facilities that this may affect. The data analysis consisted of an unknown number of facilities over a limited one year period (2013-2014). Although the conclusion was that "most" discharges were below 200 ng/L, it is unclear how many facilities were analyzed and how many would meet the revised NAL. In fact, the detailed data analysis and results do not appear to be included as a part of the staff report. Thus, it is unclear what percentage of facilities statewide could currently comply with the revised NAL.

The economic analysis for industrial stormwater permittees is nonexistent and merely states "However, these control measures may not be sufficient to meet the revised Numeric Action level for mercury and, therefore, those dischargers affected are likely to incur incremental costs in order to come into compliance with the proposed policy. Due to the site-specific nature of these controls, we are unable to develop specific cost estimates associated with the incremental control activities".[21,22] Although controls may be implemented differently between sites, the range of available controls is likely limited. The economic analysis should identify the range of potential, additional controls and the number of facilities that may have to implement them in order to understand the magnitude of the economic impact on industrial facilities.

While we understand the intent of the proposed provisions, we are concerned that the approach undermines the overarching construct of the IGP and the use of the USEPA MSGP benchmark values as a generalized tool to gauge pollutant control performance at a facility. In addition, we are concerned that the impact of the revised NAL and receiving water limitation compliance on industrial facilities has not been adequately assessed.

As a result, CASQA strongly recommends that the IGP benchmarks remain intact until such time as they are modified using a consistent technical approach as a part of the IGP renewal. Instead of modifying the NALs piecemeal, we recommend that the Regional Water Boards

[19] Section 6.11.3 – *Options*, page 140
[20] Appendix P, P.2.1 – The Recommended Criterion for Mercury, page P-4
[21] Appendix R, Executive Summary, page ES-4
[22] Appendix R, R-40

consider the significance of the industrial stormwater sources of mercury and the use of TMDL-specific requirements (which may well be more stringent that the USEPA benchmark-based NAL exceedance requirements) during TMDL development. This would ensure that water bodies that are not in attainment are addressed while not arbitrarily modifying the approach within the IGP.

CASQA Recommendation:

Modify the language in Appendix A, Section IV.D.3.c as follows:

> *Upon permit reissuance or as a reopener, the State Water Board shall amend ~~revise the existing Numeric Action Level (NAL) for total mercury in~~ the NPDES General Permit for Storm Water Discharges Associated with Industrial Activities (Industrial General Permit) including the list of TMDLs in Attachment E and other applicable Permit provisions, in order to incorporate TMDL-specific permit requirements, and appropriate compliance schedules, to address adopted TMDLs. Such TMDL-specific requirements will supercede the existing IGP Numeric Action Level (NAL) ~~from 1400 ng/L to 300 ng/L or lower~~.*

Add the following language in Appendix A, Section IV.D.3.c.2 (new section) as follows:

2) Compliance Determination. Industrial stormwater dischargers in full compliance with erosion and sediment control BMP requirements and any applicable TMDL-specific requirements in the Industrial General Permit, are deemed to be in compliance with the Industrial General Permit receiving water limitations addressing the Water Quality Objectives adopted herein.

IV. The Implementation of Water Quality Objectives (Section IV of Appendix A) should clarify when the implementation provisions are already addressed by an existing TMDL (such that no additional requirements are necessary).

The Implementation of Water Quality Objectives (Appendix A, Section D.1) states [emphasis added]:

> *The implementation provisions pertaining to a particular beneficial use do not apply to dischargers that discharge to receiving waters for which a mercury or methylmercury total maximum daily load (TMDL) is established pertaining to the same beneficial use or uses.*

However, since the implementation actions listed under Section IV.D.3 as well as those specified in existing TMDLs generally apply under all circumstances (meaning they are not bifurcated based on beneficial uses), it is unclear how this "exception" for existing TMDLs is pragmatically utilized.

For example, the Sacramento-San Joaquin Delta Methylmercury TMDL (Delta Methylmercury TMDL) states that the beneficial uses that are deemed impaired by mercury include MUN, REC-1 (later addressed by COMM), and WILD[23] and that the methylmercury objectives to protect these beneficial uses are:

[23] Amendments to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins for the Control of Methylmercury and Total Mercury in the Sacramento-San Joaquin Delta Estuary, Table 2-1, page 10,

- 0.08 mg methylmercury/kg – TL3 fish (muscle tissue, wet weight – 150-500 mm)
- 0.24 mg methylmercury/kg – TL4 fish (muscle tissue, wet weight – 150-500 mm)
- 0.03 mg methylmercury/kg – fish (whole fish, wet weight – <50 mm)

However, the Draft Staff Report identifies a range of additional fish tissue objectives for the same beneficial uses, some of which may be more stringent than those within the Delta Methylmercury TMDL.

- Sport Fish (COMM, WILD)
  - 0.2 mg methylmercury/kg – TL3/TL4 fish (fillet, 150-500 mm)
- Prey Fish (WILD)
  - 0.05 mg methylmercury/kg – TL3 fish (whole fish, 50-150 mm)
- California Least Term Prey Fish (WILD)
  - 0.03 mg methylmercury/kg – TL3/TL4 fish (whole fish, <50 mm)

Therefore, the responsible parties listed within the Delta Methylmercury TMDL may be required to implement additional provisions in order to address the more stringent objectives despite the fact that the objectives pertain to the same beneficial uses, there is already a TMDL that has been adopted to address a mercury impairment, and there are limited BMPs available to address mercury. Since the responsible parties should not have to implement additional requirements until such time as the TMDL is reopened and modified based on an updated analysis, the Draft Staff Report should be modified accordingly.

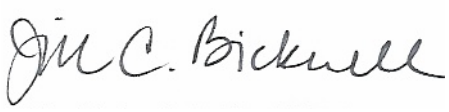
CASQA Recommendation:

Modify the language in Appendix A, Section IV.D.1 as follows:

The implementation provisions of Chapter IV.D shall be implemented through NPDES permits issued pursuant to section 402 of the Clean Water Act, water quality certifications issued pursuant to Section 401 of the Clean Water Act, waste discharge requirements (WDRs), and waivers of WDRs, where any of the mercury water quality objectives apply. The implementation provisions do not apply ~~pertaining to a particular beneficial use do not apply~~ to dischargers that discharge to receiving waters for which a mercury or methylmercury total maximum daily load (TMDL) is established ~~pertaining to the same beneficial use or uses~~.

Thank you again for the opportunity to comment on the Draft Staff Report. If you have any questions, please contact CASQA Executive Director Geoff Brosseau at (650) 365-8620.

Sincerely,



Jill Bicknell, Chair
California Stormwater Quality Association

---

http://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/central_valley_projects/delta_hg/april_2010_hg_tmdl_hearing/apr2010_bpa_staffrpt_final.pdf

cc: CASQA Board of Directors
CASQA Executive Program Committee
CASQA Policy and Permitting Subcommittee
CASQA Industrial Subcommittee