SAN FRANCISCO BAYKEEPER®

December 14, 2017

Ms. Felicia Marcus and Board Members
State Water Resources Control Board
1001 I Street
Sacramento, CA 95814

Transmitted via electronic mail to commentletters@waterboards.ca.gov

Re: Proposed Amendments to the Water Quality Control Plan for Enclosed Bays and Estuaries: Sediment Quality Provisions

Dear Chair Marcus and State Water Board Members,

On behalf of San Francisco Baykeeper and our more than five thousand members and supporters who use and enjoy the environmental, recreational, and aesthetic qualities of San Francisco Bay and its surrounding tributaries and ecosystems, we respectfully submit these comments for consideration by the State Water Resources Control Board, regarding the Proposed Amendments to the Water Quality Control Plan for Enclosed Bays and Estuaries: Sediment Quality Provisions (Proposed Amendments). We appreciate the opportunity to provide these comments.

Baykeeper has been engaged on the development of Sediment Quality Objectives (SQOs) for nearly twenty years and cannot understate our disappointment with the slow pace of SQO development and implementation, which has inhibited the pace of toxic sediment cleanup throughout the state. Members of the environmental and public health community have repeatedly noted that the slow pace of development, overly burdensome stakeholder process, and perplexing technical aspects of SQO implementation procedures have ensured a lack of commitment to implement the SQOs in a timely and comprehensive manner by the Regional Boards and individual dischargers. We do not wish to restate these comments but incorporate by reference prior comments dating from 2006, 2010 and 2011.

These comments focus on one particular change reflected in the Proposed Amendments at Chapter III.A.1.b.4:

> *Implementation provisions described in Chapter IV.A.2 and applicable provisions in Chapter IV.A.4 implementing the objective set forth in Chapter III.A.2.b. below do not apply to dischargers that discharge to receiving waters for which a total maximum daily load (TMDL) has been established to address for the bioaccumulation of organochlorine pesticide or polychlorinated biphenyls from sediment into sportfish tissue within enclosed bays and estuaries unless the applicable Regional Water Board approves the application of such provisions.*

This element of the Proposed Amendments creates a non-expiring grandfathering clause for all waterbodies with TMDLs for organochlorine pesticide or polychlorinated biphenyls (PCBs). For context, a 2001 court decision (San Francisco Baykeeper, Inc. v. State Water Resources Control Board, August 2001) ordered the State Water Board to adopt SQOs pursuant to the California Water Code §13393. The law requires the State Water Board to adopt SQOs for toxic pollutants that have been identified in toxic hot spots as part of the Bay Protection and Toxic Cleanup Program (BPTCP) and for other toxic pollutants of concern. Given that PCB impairments drive much of the sediment testing and assessments for San Francisco Bay and studies from recent years have upended the assumptions associated with the existing PCB TMDL, to excuse the San Francisco Bay Regional Water Quality Control Board from utilizing this tool for PCBs would likely mean that SQO testing and assessment will not be undertaken for San Francisco Bay. This should present serious concern for anyone involved in the SQO process or those with concerns over the slow pace of toxic sediment assessment and cleanup in California.

As described in the *2017 Pulse of the Bay*, "Knowledge about typical ambient conditions is a crucial piece of information for understanding margin contamination. This type of assessment has been conducted along the spine of the Bay for 25 years and since 2002 for the open Bay, but most of the margins have not been assessed".[1] Starting in 2010, one year after the adoption of the PCB TMDL for San Francisco Bay, monitoring in the margins of the Bay found high concentrations of PCBs in the margins at known and previously unidentified PCB hot spots (Figure 1). This effort led to a 2015 study to provide an unbiased, spatially distributed characterization of sediment contamination in Central Bay margin areas. Conclusions from this effort include:

> *The results of the study generally confirmed the conceptual model expectation that the margin sediments are more contaminated than those in the subtidal open Bay. PCB concentrations in sediment showed the largest differences between margins and open Bay (4-5 times higher on average [Figure 2].[2] These differences between Central Bay margins and open water areas are likely the largest to be found in San Francisco Bay, as margins in other Bay segments generally account for more of the total area, and the adjacent land use is less heavily industrial.[3]*

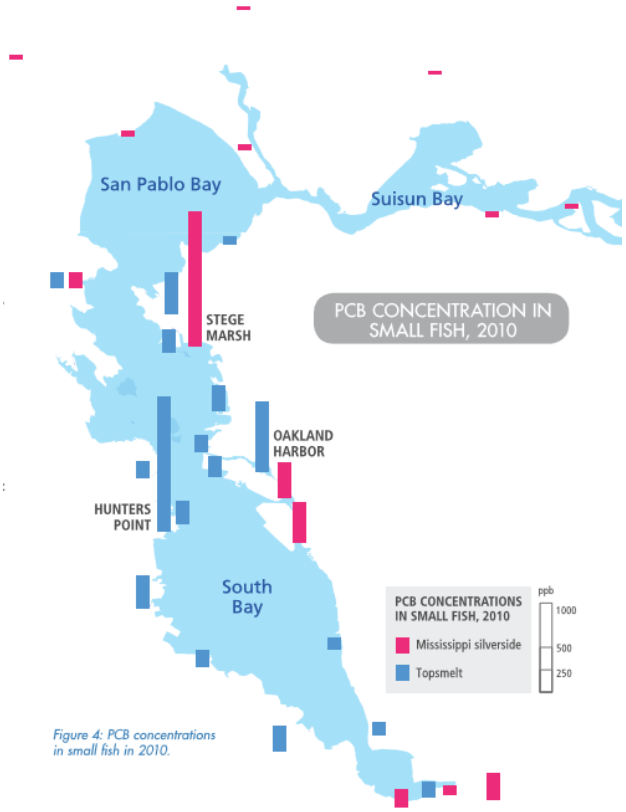

Figure 1. PCB concentrations in small fish in 2010 [4]

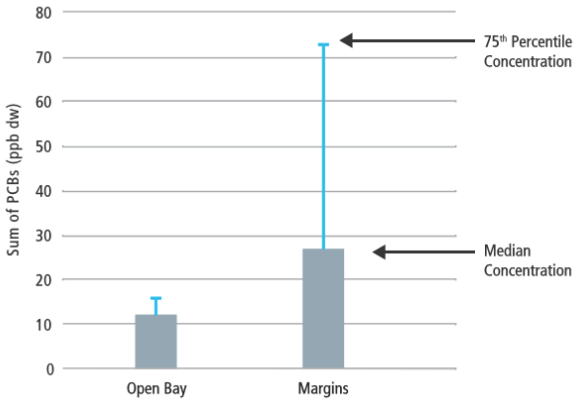

Figure 2. Distribution of PCB concentrations in the open Bay and the margin areas of Central Bay, not including Marin County, based on monitoring undertaken in 2015 [5]

[1] SFEI. 2017. The Pulse of the Bay: The 25th Anniversary of the RMP. SFEI Contribution #841. San Francisco Estuary Institute, Richmond, CA. Page 52.
[2] Yee D, Wong A, Shimabuku, I, Trowbridge, PR 2017. "Characterization of Sediment Contamination in Central Bay Margin Areas. SFEI Contribution No. 829". San Francisco Estuary Institute, Richmond, CA. Published Online: http://www.sfei.org/documents/characterization-sedimentcontamination-central-baymargin-areas
[3] SFEI. 2017. The Pulse of the Bay: The 25th Anniversary of the RMP. SFEI Contribution #841. San Francisco Estuary Institute, Richmond, CA. Page 52.
[4] Ibid. page 48
[5] Ibid. page 52

Results from the last several years of study in San Francisco Bay have caused the scientists involved in the original PCB conceptual model and associated TMDL to 'go back to the conceptual drawing board', putting into question the assumptions used to develop the TMDL.[6] Approval of these Proposed Amendments would remove any requirement to support future iterations of the PCB TMDL with the tools developed through the SQO process. Given that much of the scientific work undertaken to develop the SQOs were based on work related to assessment of PCB impairment in San Francisco Bay, there is no reasonable cause for removing the SQOs from the assessment toolbox as scientists and regulators undertake future revisions to the PCB TMDL in San Francisco Bay.

Baykeeper understands these Proposed Amendments retain the ability of Regional Boards to optionally utilize the SQO framework for revisions to TMDLs for PCBs and organochlorine pesticides. Given the significant investment already undertaken to develop the PCB TMDL in San Francisco Bay, which by admission of those involved in its development is fundamentally flawed, we feel it is highly unlikely the costly assessments needed to undertake the SQO process will ever be conducted. This translates into the highly likely scenario that needed SQO assessments will not be undertaken in San Francisco Bay, since PCB impairments have proven to be the motivating factor for sediment monitoring and assessments for much of the last 25 years.

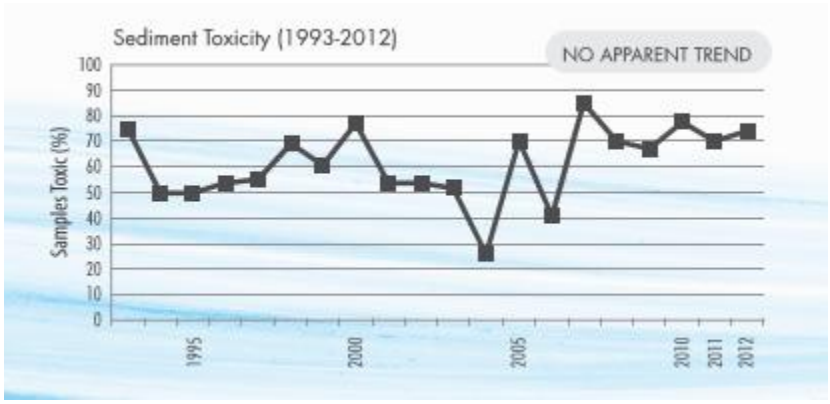

Figure 3. Percent Toxic Sediment Samples[7]

The lack of SQO assessments in San Francisco has proven to be an impediment to identifying the magnitude and extent of sediment toxicity throughout the estuary, where sediment toxicity has been a chronic issue throughout the system for decades (Figure 3). In the last year, San Francisco Bay Regional Board staff attempted to pursue a 303(d) sediment toxicity listing for San Francisco Bay. This request was rejected by the Regional 2 Board on the grounds that an insufficient number of SQO assessments had been conducted to warrant this listing, despite decades of data indicating widespread, moderate levels of sediment toxicity throughout the estuary since monitoring began.

The lengthy process associated with developing these SQOs has contributed to the lack of action on this serious indicator of beneficial use impairments in San Francisco Bay and other enclosed bays and estuaries. The approval of these Proposed Amendments will virtually ensure decades of further inaction where this proposed grandfathering clause applies.

[6] Ibid. page 49
[7] San Francisco Estuary Institute (SFEI). 2013. The Pulse of the Bay: Contaminants of Emerging Concern. SFEI Contribution 701. San Francisco Estuary Institute, Richmond, CA. Page 38.

Requested Revisions to the Proposed Amendments

Since Regional Boards and dischargers have long supported the development and application of SQOs when developing TMDLs for PCBs and organochlorine pesticides, Baykeeper recommends removal of the grandfathering clause provided at Chapter III.A.1.b.4. If this element of the Proposed Amendments reflects concerns that approval would immediately trigger the re-opening of existing TMDLs we ask the Board to consider a finite duration for the grandfathering clause and consider changing Chapter III.A.1.b.4 as follows:

> *Implementation provisions described in Chapter IV.A.2 and applicable provisions in Chapter IV.A.4 implementing the objective set forth in Chapter III.A.2.b. below do not currently apply to dischargers that discharge to receiving waters for which a total maximum daily load (TMDL) has been established to address for the bioaccumulation of organochlorine pesticide or polychlorinated biphenyls from sediment into sportfish tissue within enclosed bays and estuaries unless the applicable Regional Water Board approves the application of such provisions. Any future revisions and updates to applicable TMDLs are not subject to this exemption. Any TMDL revisions or permits where applicable TMDLs are implemented after 2020 shall require the application of these provisions.*

Conclusion

Despite long-standing critique of the SQO development process, Baykeeper recognizes the utility of the framework as a means of determining the magnitude and potential sources of sediment toxicity in California's enclosed bays and estuaries. As the largest estuary on the West Coast, with a number of unassessed and un-remediated sediment hot spots, we discourage any exemption targeting San Francisco Bay, which would effectively remove the SQO framework from the toolbox available to regulators and dischargers.

In sum, Baykeeper requests that the State Board either omits Chapter III.A.1.b.4 from the Proposed Amendments or limits the duration of their applicability to a clearly defined date.

Very truly yours,

Ian Wren
Staff Scientist
San Francisco Baykeeper