

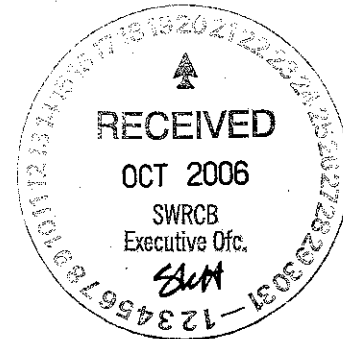


**BAYKEEPER.**

*Defending Our Waters—from the  
High Sierra to the Golden Gate*

October 20, 2006

Chair Tam Doduc, Members of the State Water Board  
c/o Song Her, Clerk to the Board  
State Water Resources Control Board  
Executive Office  
1001 I Street, 24<sup>th</sup> Floor  
Sacramento, CA 95814



*Submitted via electronic mail to [commentletters@waterboards.ca.gov](mailto:commentletters@waterboards.ca.gov)*

**Re: Proposed 2006 Federal Clean Water Act Section 303(d) List of Water Quality  
Limited Segments in Regions 2 and 5**

Dear Chair Doduc and Board Members:

On behalf of Baykeeper and its San Francisco Bay and Deltakeeper chapters, we thank you for the opportunity to submit comments on the 2006 Clean Water Act §303(d) list of impaired waters ("303(d) list") proposed by the California State Water Resources Control Board ("State Board"). In the interest of brevity, Baykeeper incorporates by reference comments previously submitted by the California Coastkeeper Alliance and the Natural Resources Defense Counsel on January 31, 2006 and on October 20, 2006, which articulate many of our overarching concerns with the listing process. The following comments, therefore, primarily address the proposals specific to the San Francisco Bay-Delta Estuary.

While Baykeeper commends the State Board for making some necessary changes—such as continuing to list the San Francisco Bay for polyaromatic hydrocarbons—we continue to object to the State Board's failure to list the Bay for PBDEs and to list Bay Area urban creeks for pyrethroids and trash.



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**A. The San Francisco Bay should be listed for PBDES.**

Sediment and water column monitoring conducted by the San Francisco Estuary Institute ("SFEI") as part of the Regional Monitoring Program clearly shows that PBDE levels "have been increasing rapidly and are now known to be ubiquitous [in the Bay]."<sup>1</sup> Despite evidence of this alarming trend, staff incorrectly refused to list the San Francisco Bay<sup>2</sup> for PBDEs on the grounds that (1) no guideline exists against which to compare available data and (2) no California data exists that establishes a link between PBDE concentrations and impacts.<sup>3</sup>

First, as mentioned in the comments previously submitted by Baykeeper and the California Coastkeeper Alliance, the lack of a numeric guideline or standard against which to compare data is not a sufficient basis for keeping a water segment off the 303(d) list. In addition to requiring listing when evaluation specific guidelines are exceeded, the State Listing Policy allows staff to weigh all of the evidence when "all the other Listing Factors do not result in the listing of a water segment but information indicates non-attainment of standards."<sup>4</sup> When the significant body of peer-reviewed literature describing PBDE effects on fish and humans<sup>5</sup> is considered in conjunction with Bay-specific tissue, water and sediment data, the weight of the evidence strongly suggests that PBDEs are impairing water quality in the San Francisco Bay.

Second, California-specific data establishing a link between PBDE concentrations and impacts is not necessary, as suggested by the response to comments, to conclude that PBDEs are impacting Bay beneficial uses. Any evidence demonstrating the effects of PBDES on aquatic life can be used to determine whether impairment exists. The onus is on the State Board to identify peer-reviewed research—wherever it is from—that will assist them in determining whether impacts are likely at the levels currently being observed in the Estuary. In sum, the San Francisco Bay should not be kept off of the 303(d) list because staff has failed to identify and review sufficient data to develop an appropriate guideline.

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<sup>1</sup> San Francisco Estuary Institute (SFEI), *The Pulse of the Estuary: Monitoring and Managing Water Quality in the San Francisco Estuary*. SFEI Contribution 517. San Francisco Estuary Institute, Oakland, CA.

<sup>2</sup> The San Francisco Bay includes the Central Bay, South Bay, San Leandro Bay, Suisun Bay, and San Pablo Bay.

<sup>3</sup> State Water Resources Control Board, *Revision of the Clean Water Act Section 303(d) List of Water Quality Limited Segments Staff Report, Vol. IV: Responses to Comments*, p. 43 (September 2006).

<sup>4</sup> State Water Resources Control Board, *Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List*, p. 8 (September 2004).

<sup>5</sup> See, e.g., Muirhead, EK *et al.* Oral exposure of PBDE-47 in fish: toxicokinetics and reproductive effects in Japanese Medaka (*Oryzias latipes*) and fathead minnows (*Pimephales promelas*), *Environ Sci Technol.* 40(2):523-8 (January 2006). (discussing reproductive effects observed in fathead minnows).

**B. Bay Area Urban Creeks should be listed for pyrethroids.**

Staffs' responses to comments failed to mention pyrethroids entirely, despite being explicitly raised in our previous comments. Studies done by Dr. Don Weston at the University of California at Berkeley clearly show that pyrethroids are contributing to sediment toxicity in Bay Area urban creeks. This fact was recognized in the urban creeks pesticides TMDL recently adopted by the San Francisco Water Board and was discussed extensively at SFEI's annual Regional Monitoring Program conference. While Baykeeper is optimistic that pyrethroid toxicity will be addressed via the urban creeks pesticides TMDL, the law still requires all water quality limited segments to be placed in the 303(d) list. Accordingly, Bay Area urban creeks should be listed for pyrethroids.

**C. Bay Area urban creeks should be listed for trash.**

As with pyrethroids, the responses to comments lacked any mention trash impairment of Bay Area urban creeks despite being discussed in our previous comments. To reiterate, Bay Area urban creeks should be placed on the 303(d) list for trash because monitoring data shows a violation of the San Francisco Bay Basin Plan's narrative standards for floating and settleable materials.<sup>6</sup>

Data collected at fourteen Bay Area creeks as part of the Surface Water Ambient Monitoring Program (SWAMP)<sup>7</sup> led researchers to conclude that trash is "a ubiquitous problem at the bottom of all watersheds...with particularly high plastic levels in wet weather."<sup>8</sup> The study also noted that the already "alarmingly high" levels of trash may actually be rising in some locations.<sup>9</sup> Studies by other groups have led to similar conclusions: one Baxter Creek study concluded that a previous restoration effort intended to improve beneficial uses for wildlife and humans was undermined by "the large volume of trash and its negative effects on water quality."<sup>10</sup> The presence of trash and other debris is clearly impacting important urban creek beneficial uses, such as fish migration, marine habitat, and recreation, accordingly, we request that Bay Area urban creeks be listed for trash.

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<sup>6</sup> Water Quality Control Plan (Basin Plan) for the San Francisco Bay Basin, Chapter 3: Water Quality Objectives

<sup>7</sup> "A Rapid Assessment Method Applied to Waters of the San Francisco Bay Region: Trash Measurement in Streams," Draft Report, San Francisco Bay Regional Water Quality Control Board (August 22, 2005).

<sup>8</sup> "Executive Officer's Report," California Regional Water Quality Control Board, San Francisco Bay Region, page 6 (September 2005). Available at

<http://www.waterboards.ca.gov/sanfranciscobay/Agenda/09-21-05/ Toc114474055>.

<sup>9</sup> Rapid Assessment, pg. 29.

<sup>10</sup> Bronner, C. et al., "Post-Project Appraisal of Baxter Creek at Booker T. Anderson Park: Shopping Carts-the New Boulders," Water Resources Center Archives, University of California (2005).

**D. The dioxin TMDL must be completed before 2019.**

Dioxins have been identified by the EPA as “potent animal toxicants with the potential to produce a broad spectrum of adverse effects in humans,” including adverse effects upon reproduction and development, suppression of the immune system, chloracne, and cancer.<sup>11</sup> As such, EPA considers dioxins as a “likely human carcinogen” and individual components of the mixture of dioxin as “human carcinogens.”<sup>12</sup> Given the severe threat of these pollutants to human health, EPA added dioxins to the 1998 303(d) list, and listed them as a high priority. In its letter transmitting the list, the EPA stated: “EPA’s decision to establish high priorities for dioxins, furans and dioxin-like PCBs is intended to focus attention on an urgent human health risk issue and help initiate needed monitoring and assessment activities. These efforts should begin now.”<sup>13</sup> In accordance with this warning, the EPA reiterated its “national policy states that States should establish TMDL development schedules not to exceed 8-13 years for each waterbody and pollutant combination on the §303(d) list.”<sup>14</sup>

Despite the severe documented effects of dioxin, and despite EPA’s admonishment to the State Board, the State Board not only failed to address the problem of dioxins in San Francisco Bay, it went in the opposite direction and downgraded dioxins from a high priority to a low priority in the 2002 list. No TMDL Proposed Completion Date was listed in the 2002 list, and now in the present list, the TMDL Proposed Completion Date is listed as 2019—twenty-one years from the date of listing. Such a delay is far beyond EPA’s policy to establish TMDL schedules “not to exceed 8-13 years.”

The State Board must address the serious threat created by dioxins in our water bodies. Accordingly, we ask that the State Board list dioxins as a high priority and require development of the dioxin TMDL, or make it clear in the 303(d) list that the State Board is assigning that responsibility to the EPA.

**E. The Fact Sheets and responses to comments frustrate public involvement.**

Public participation in the listing and TMDL process is not only necessary for an effective nonpoint source program, it is required by law.<sup>15</sup> The State Boards’ fact sheets and responses to comments, however, frustrate public involvement because they lack sufficient information and explanation to enable public evaluation of the proposed decisions. For example, the fact sheets fail to identify much of the literature relied upon or reviewed by staff in developing evaluation guidelines and in making listing decisions. Similarly, the responses to comments do not state the actual listing changes that resulted

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<sup>11</sup> Dioxin: Summary of the Dioxin Reassessment Science, NAS Review Draft, 6 (2003).

<sup>12</sup> *Id.*

<sup>13</sup> Letter from Alexis Strauss, Acting Director, Water Division to Walt Pettit, Executive Director, State Water Resources Control Board (May 12, 1999) (on file with author).

<sup>14</sup> *Id.*

<sup>15</sup> See Cal. Gov’t Code § 11340 et seq.

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from the comments submitted. Also troubling is the failure of staff to respond in any way to several issues raised by Baykeeper, namely our request that San Francisco Bay Area creeks be listed for pyrethroids and trash. We hope that during future listing cycles, the State Board will develop a more transparent listing and delisting process.

Thank you again for the opportunity to provide comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Sejal Choksi". The signature is fluid and cursive, with a long horizontal stroke at the end.

Sejal Choksi  
Baykeeper

Ric Murphy  
Acting Deltakeeper

Megan Anderson  
Environmental Advocates