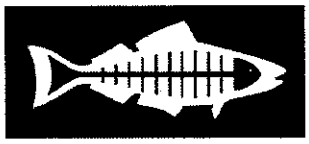
10/25/06 BdMtg Item 10
303(d) List
Deadline: 10/20/06 5pm



October 20, 2006

Chairwoman Doduc and Board Members
State Water Resources Control Board
1001 I Street
Sacramento, CA 95814

VIA EMAIL: commentletters@waterboards.ca.gov

Re: Comments on the September 2006 Draft "Revisions of California's Clean Water Act Section 303(d) List of Water Quality Limited Segments"

Dear Chairwomen Doduc and Board Members:

On behalf of Heal the Bay, Natural Resources Defense Council and Santa Monica Baykeeper we submit the following comments on the State Water Resources Control Board's ("State Board's") proposed update to the California Clean Water Act Section 303(d) List of Water Quality Limited Segments dated September 15, 2006 ("303(d) List" or "List"). We appreciate the opportunity to provide comments.

We strongly support many of the changes that were made to the 303(d) List in response to our January 31, 2006 comment letter and data submittal. Specifically, we support the State Board's decision to move 30 Santa Monica Bay beaches originally proposed for de-listing to the "Being Addressed" 303(d) List for indicator bacteria impairments. Clearly, readily available data that are routinely collected by local health departments strongly support this listing decision. Also, we are very supportive of the new trash impairment listings, especially for Compton Creek. Compton Creek Watershed is arguably the most visibly polluted watershed in Los Angeles County, if not the entire State. Further, multiple lines of evidence support this listing such as Los Angeles County Public Works and Heal the Bay trash collection data. In addition, we support the State Board's recommendation to maintain listings for Dominguez Channel, Dominguez Channel Estuary and Los Angeles River Estuary for DDT and Los Angeles/Long Beach Outer Harbor for PCBs. In addition to readily available data that indicate impairment, historical information clearly suggests that these areas are highly contaminated.

However, we have significant remaining legal and technical concerns with the State's failure to list a number of impaired waterbodies. For instance, the failure to list 45 statewide beaches as impaired by bacteria indicators is an egregious mistake. This concern and others are outlined below and discussed in more detail in our January 31, 2006 comment letter ("comment letter"), which is incorporated herein by reference and is included in Appendix A of this letter. Also as discussed in our previous comment letter, we have many overarching concerns with State Board staff's interpretation of the Water Quality Control Policy for

Developing California's Clean Water Act Section 303(d) List ("Listing Policy"). Several of our main concerns are revisited below, as the State's Response to Comments in Volume VI of the Staff Report ("Response to Comments") provided either no response or an inadequate response.

I. GENERAL APPLICATION OF LISTING POLICY

A. The State Board Should Consider All Readily Available Information.

We submitted multiple water quality datasets to the State Board in our comment letter, including extensive statewide beach indicator bacteria exceedance data, exotic species data and information for the Malibu Creek Watershed, Index of Biological Integrity data for Region 4, and several other datasets. However, the State Board apparently has not fully considered all of these data, as there are no fact sheets in the Staff Report based on any of the datasets specified above. The State Board provides a blanket remark in the Response to Comments for the majority of data submittals:

> "These comments address new data and information that was not readily available to State Water Board staff before the draft recommendations were released or focus on previous listings where data and information are not yet summarized. The completion of fact sheets for these data and information are being delayed until the next listing cycle to avoid further delay in the completion of the 2006 section 303(d) list and to avoid using data and information that may be only a subset of all data (I.e., to avoid bias). All the data and information provided was reviewed; however, priorities for using the data to prepare new fact sheets were established on the data sets that were already summarized in fact sheets." Response to Comments at 177.

From this generic response, it is impossible to distinguish among datasets that were reviewed by State Board staff and those given a lower "priority" and to interpret the reasoning behind these decisions. Regardless most, if not all, of these data were readily available to the State Board well in advance of our letter. For instance, statewide beach indicator bacteria data are collected by local health agencies and are readily available. In fact, Heal the Bay receives these statewide data on a weekly basis to support our Beach Report Card. Also State Board has this information in-house as part of the routine beach monitoring database that is maintained, in part, to meet reporting requirements of the U.S. EPA. In fact, State Board staff routinely rely on the Heal the Bay beach water quality database and their own database to make Clean Beach Initiative eligibility and funding decisions. Clearly, State Board staff failed to fully consider all readily available information.

The body of regulations and guidance that bear on 303(d) listing are unambiguous about the information that should be considered in making listing decisions: *all of it*. TMDL regulations state clearly that "[e]ach State shall assemble and evaluate all existing and readily available water quality-related data and information to develop the [303(d)] list."[1] Recognizing these principles, the Listing Policy clearly states that "all readily available data and information shall be evaluated." Listing Policy at § 6. The result of the failure to review

[1] 40 C.F.R.§ 130.7(b)(5).

all readily available data is that the List may, or may not, actually set forth the full extent of impaired waters. Moreover, in many instances staff proposes to delist or not list well-studied waters such as the statewide beaches Campbell Cove in San Mateo and Stillwater Cove in Monterey notwithstanding the availability of high quality data. The State Board should direct staff to adequately respond to all data submittals and evaluate data that were indeed readily available. (see January 31, 2006 comment letter for a detailed analysis of this issue.)

B. <u>Narrative Standards Must Be Evaluated.</u>

Staff is proposing to de-list several nuisance conditions, including excess algal growth, odor, taste, and foam, which are all covered under various narrative standards in the Basin Plans, on the basis that they are conditions, not pollutants. For instance, State Board staff is justifying the de-listing of several reaches on Arroyo Seco for excess algal growth by concluding that "…excess algal growth [is] considered a condition and not a pollutant, and it is uncertain if the growth data are backed by pollutant data…." Response to Comments at 48. Further, staff comments that "[t]he use of guidelines to interpret narrative standards is a precautionary approach. Evaluation guidelines are being used as a transparent surrogate for the narrative water quality objective to be used on in the listing process." Response to Comments at 14. This reasoning is inconsistent with both the CWA and Porter-Cologne Act, as well as the express terms of the Listing Policy, and is by no means "precautionary" on the side of water quality.

One of the main objectives of the CWA is to restore water quality so that all of the Nation's waterbodies are fishable and swimmable. 33 U.S.C. § 101(a). The narrative standards at issue are necessary to attain this important goal. Moreover, federal regulations explicitly state that narrative water quality standards should be assessed for the purpose of listing waters under Section 303(d). 40 CFR § 130.7(b)(3). The Porter-Cologne Act similarly acknowledges both narrative and numeric water quality objectives; the State and regional boards are charged with enforcing these objectives. Cal. Water Code § 13241.

Staff's proposed rationale for not listing nuisances because they are conditions rather than pollutants is erroneous. First, the State Board is contradicting themselves, as there are numerous examples of impairments based on narrative objectives that are included on the 303(d) List such as exotic species listings on the Cosummes River and the San Joaquin River. Also using staff's own terminology, the narrative water quality standards themselves describe a condition, not a pollutant. Presumably, these narrative standards exist because it is difficult to pinpoint one specific pollutant that causes these conditions under all circumstances. For instance, odor could be caused by algae or by petroleum or trash or a combination of factors including water temperature and flow. Regardless of the cause, it is a nuisance. Under staff's proposed approach, however, a segment would not be listed even though specific narrative standards are not attained whenever a pollutant(s) causing the problem cannot be precisely identified during the listing process. Plainly, nuisance conditions must be considered for listing on the 303(d) List. Thus, the State Board should evaluate narrative standards when making de-listing and listing decisions. (see January 31, 2006 comment letter for a detailed analysis of this issue.)

C. <u>The Lack of Acceptable Evaluation Guidelines Should Not Be a Reason for De-listing and "Do Not List" Decisions.</u>

Staff has made numerous de-listing or "do not list" decisions based on the assertion that there is no existing and/or acceptable evaluation guideline under the provisions of the new Listing Policy. For instance, the September 2005 draft 303(d) List proposed that Malibu Creek be added to the List as impaired by aluminum. However in the September 2006 draft 303(d) List, this decision was reversed, and the State Board offers the justification that "[t]here are 20 samples available but there is no applicable water quality standard available with which to assess them." Staff Report at 348. This general rationale is improper as these decisions are based solely on a "guess" that there is no impairment.

As an overarching premise, the Section 303(d) listing process should err on the side of protecting water quality and beneficial uses. These decisions to de-list or list because no guideline is available are not precautionary, as there is no scientific evidence or data indicating that water quality standards, including beneficial uses, are being attained. Given the nature of some of the chemicals with no apparent guideline – like DDT, a highly toxic, persistent and bioaccumulative compound – this proposed approach is not justified. Thus, the State Board should *not* de-list these waterbodies until such time as substantial information is gathered to indicate that water quality standards are being met. The TMDL development process offers numerous opportunities to assess appropriate load allocations and compliance schedules providing the flexibility to address constituents without guidelines. Also a situation-specific weight of evidence approach, outlined in Sections 3.11 and 4.11 of the Listing Policy, should be employed to evaluate potential listings and de-listings when there is no available guideline. (see January 31, 2006 comment letter for a detailed analysis of this issue.)

D. <u>Situation-Specific Weight of Evidence Listing/De-listing Factors Must Be Considered.</u>

The Situation-Specific Weight-of- Evidence Approach set forth in Sections 3.11 and 4.11 of the Listing Policy was included to cure well-understood legal and technical inadequacies in a the State Board's draft binomial-only listing policy. Board Members required that a weight of evidence approach complement the specified listing and delisting factors, acting as a "safety net" to ensure that all impaired waterbodies are included on the 303(d) List.

Apparently State Board staff is misinterpreting this language to mean that the weight of evidence approach does not have to be employed as a "check" when delisting appears appropriate under the specified delisting factors but would not be appropriate when all evidence is considered. In the Response to Comments, State Board staff remark that "[t]he situation-specific weight of evidence factors are not a 'safety net' but rather a separate factor to be used when data and information are available that cannot be evaluated clearly under the other listing or delisting factors." Response to Comments at 11.

Properly applying Sections 3.11 and 4.11 to listing and de-listing decisions is critical. Both of these sections of the Listing Policy require an evaluation of all available evidence under the situation-specific weight of the evidence process whenever there is any information that

indicates non-attainment of standards. Together, these sections provide flexibility to allow the State to use its best professional judgment in listing and de-listing decisions so that it can meet Section 303(d) standards and submit impaired waters lists that EPA can approve. The need for this flexibility and judgment is highlighted by the fact that some well-known and obviously polluted waterbodies may not meet the specific requirements of the Listing Policy's other de-listing or listing factors. Similarly, the binomial table approach does not work in the absence of any quantitative data, yet there may be other information indicating impairment.

State and regional board staff thus need clear direction from the State Board that they are **required** to apply Sections 3.11 and 4.11 whenever there is any information indicating impairment regardless of the other factors, consistent with both the language of the Listing Policy and the intent of the State Board in including these sections. (see January 31, 2006 comment letter for a detailed analysis of this issue.)

E. Sediment Chemistry Data Should be Evaluated under Situation-Specific Weight of Evidence

Staff recommends *not* listing numerous water segment- pollutant combinations despite the fact that a sufficient number of samples exceeded the sediment quality guidelines. For instance, Army Corps of Engineer sediment data for zinc, copper, benzo(a)anthracene, and dibenzo-a,h-anthracene in Ballona Creek indicate an impairment exists. The number of exceedances for each of these constituents necessitates listing as required under Table 3.1 of the Listing Policy, and the sediment quality guidelines are exceeded by several orders of magnitude in some cases. However, State Board staff cites Section 3.6 of the Listing Policy for the decision to not list these waterbody-pollutant combinations. This line of reasoning is inappropriate, as sediment quality data are sufficient for listing decisions on their own merit.

Pollutants in sediment must be evaluated using a situation-specific weight of evidence approach under Section 3.11 of the Listing Policy. The magnitude of the SQG exceedance may also be considered in conducting this situation-specific weight of evidence analysis. The State Board therefore should require its staff and the regional boards to evaluate available sediment quality data using the Section 3.11 situation-specific weight of evidence approach, regardless of the availability of overall sediment toxicity data. (see January 31, 2006 comment letter for a detailed analysis of this issue.)

F. The State Board Should Determine if Media Should be Specified on the 303(d) List.

We outlined a case for listing Dominguez Channel for DDT in fish tissue in our comment letter. In Response, the State Board remarked that "[t] he Listing Policy does not support listing pollutants multiple times for different media." Response to Comments at 53. This comment is confusing, as there are numerous examples throughout the 303(d) List where impairments in one or more media are specified. For instance, Colorado Lagoon is listed as impaired for chlordane in tissue *and* sediment. Region 4 303(d) List at 10.

The inconsistency with respect to specifying media on the List could lead to problems in the TMDL development process. If only one medium is specified, some may infer that no other

media are impaired for a specific waterbody-pollutant combination. Presumably, all pollution problems would be uncovered during TMDL development and this would not be an issue. However this inconsistency could lead to some confusion and misinterpretation of the actual impairment. Thus, the State Board should list all of the media known to be impaired.

II. BEACHES

A. Santa Monica Bay Beaches Bacteria Impairments

- **Pico Kenter Drain and Ashland Avenue Drain Should NOT be De-Listed.**

Although State Board staff correctly maintained the majority of Santa Monica Bay beaches on the "Being Addressed" 303(d) List for indicator bacteria impairments, there are two Santa Monica Bay beaches that are inappropriately proposed for de-listing: Pico Kenter Drain and Ashland Avenue Drain. In State Board's Staff Report, staff contends that "Pico Kenter Drain is an enclosed stormwater conveyance. Enclosed stormwater conveyance drains do not have designated beneficial uses in the Basin Plan, and therefore, no criteria apply to waters within the drain itself as such, should be listed as impaired." Staff Report at 413. The Staff Report provides an identical argument for the Ashland Avenue Drain. *Id* at 352. These statements are seriously flawed and demonstrate a general misunderstanding of these monitoring locations.

Indicator bacteria samples at these locations are collected at ankle-depth in the ocean wave wash, not within the storm drains themselves.[2] In fact the enclosed storm drain at Pico Kenter ends approximately 200 feet inland from the sample location (see photos and sample site description in Appendix B). The enclosed storm drain at Ashland Avenue terminates in the tidal zone. (see photos and sample site description in Appendix B). Clearly, the State Board has misconstrued the location of sampling. Moreover, readily available data collected in the wave wash exist that support retaining these two beaches on the 303(d) List as impaired by indicator bacteria. These data are attached in Appendix B. Thus, the State Board should maintain these listings for Pico Kenter Drain and Ashland Avenue Drain on the 303(d) List.

B. Statewide Beaches Bacteria Impairments

- **The State Board Should Add 45 Statewide Beaches to the 303(d) List.**
- **Ormond Beach (Oxnard Industrial Drain), San Buenaventura Beach (San Juan Drain), and Mission Bay Shoreline Should Remain on the 303(d) List.**

Readily available indicator bacteria data show that an additional 45 statewide beaches outside of Los Angeles County should be added to the 303(d) List and three beaches should *not* be de-listed. The data analysis was presented in Appendix 1-B of the comment letter submitted to the State Board in January. State Board staff responded to our data submittal by stating

[2] The word "drain" in the name of a sampling location does not mean that the sample is collected in the drain. This is simply a name that serves as a point of reference.

that "[a]ll of the data provided has been reviewed and fact sheets revised if the available data support keeping water body and pollutant on the list." Response to Comments at 169. However only four of the 49 beaches (Goleta Slough/Estuary, San Diego Bay Shoreline, Linda Mar and Huntington State Beach) have been added to the latest revision of the 303(d) List, and only one of the four beaches, Pacific Ocean Shoreline – Scripps HA, was maintained on the List. In fact it appears that these data were not even considered, as there are no fact sheets for these waterbody-pollutant combinations in the "Do Not List" section of the State Board's Staff Report. Fact sheets do exist for Ormond Beach and San Buenaventura Beach, but the evaluation only included data from 1999-2001.

The statewide beaches indicator bacteria data described above and presented in Tables 1 to 6 of Appendix 1-B of our previous comment letter demonstrate the need for numerous additional bacteria indicator listings and several maintained listings. For example, it is unconscionable to not list Swami's Beach in San Diego, an incredibly popular, yet still polluted beach. As these data were readily available to the State Board, as part of their routine beach monitoring database maintained by the State Board partially to meet reporting requirement of the U.S. EPA, and Heal the Bay provided an extensive data analysis to the State Board, these data should be included in the evaluation for the 2006 303(d) updates. As noted in Heal the Bay's *End of Summer Beach Report Card 2006*, water quality problems continue to exist at many of these statewide beaches. For instance, Stillwater Cove and almost half of the sampled locations on Mission Bay received failing grades (C,D, or F) based on data though September 30, 2006. Thus as highlighted in Appendix C, 45 statewide beaches should be added to the 2006 303(d) List as impaired by bacteria indicators, and the three beaches proposed for de-listing that are outlined above should be maintained.

III. OTHER POLLUTANTS

A. <u>Excess Algal Growth</u>

- **The State Board Should Maintain Excess Algal Growth Listings for the Waterbodies Outlined in Appendix D.**
- **The State Board Should Add Excess Algal Growth Impairment Listings for Calleguas Creek Reaches 7 and 12**

In our previous comments, we submitted data and other evidence in support of *not* de-listing fourteen water segments for excess algal growth impairments in the Los Angeles Region and adding two additional reaches to the List. However, none of these recommendations were endorsed by State Board staff in the latest version of the 303(d) List. Staff contend that "…excess algal growth is considered a condition and not a pollutant." Response to Comments at 58. Of note, State Board's response is inconsistent since certain algae listings are maintained. Many of the water segments proposed for the de-listing of algae do not have a nutrient listing such as Arroyo Seco Reaches 1 and 2 and Verdugo Wash Reaches 1 and 2. Thus, by removing the algae listings and not including nutrient listings, the State Board is in a sense ignoring a narrative water quality objective and a major water quality problem. Also as discussed above, the debate over whether or not algae is defined as a "pollutant" is a sidebar because narrative standards must be met through the 303(d) process regardless.

Anyone that has studied algae in riparian habitats will tell you that algal impairments can impact macroinvertebrate ecology and dissolved oxygen.

However, excess algal growth is, in fact, a pollutant. CWA Section 502(6) expressly defines "pollutant" to include "biological materials." 33 U.S.C. §1362(6). Courts also have held that biological materials, such as algae, can be considered a pollutant if they impair beneficial uses. *See Northwest Environmental Advocates v. U.S. EPA*, 2005 WL 756614 (N.D. Cal. 2005), see also *U.S. PIRG v. Atlantic Salmon of Maine* (D.Me., Aug. 2001) (citing *United States v. Hamel*, 551 F.2d 107 (6th Cir. 1977)) ("Courts have interpreted the definition of 'pollutant' expansively, stating that it 'encompasses[es] substances not specifically enumerated but subsumed under the broad generic terms' listed in Section 502(6)."). *U.S. PIRG v. Heritage Salmon Inc.*, Civil No. 00-150-B-C (D.Me. Aug. 28, 2001). Indeed, the definition of pollutant is 'meant to leave out very little.' " *Sierra Club, Lone Star Chapter v. Cedar Point Oil Co.*, 73 F.3d 546, 566-568 (5th Cir. 1996), *cert. denied*, 519 U.S. 811 (1996).

For those who have read the acclaimed *Los Angeles Times* 5-part series about the crisis in the world's oceans entitled "Altered Oceans," it would be difficult to conclude that excess algal growth is not a pollutant. (see Appendix E for attached articles). For these reasons and those outlined in our previous comment letter, the State Board should maintain the excess algal growth listings and include additional listings for Calleguas Creek Reaches 7 & 12. (see January 31, 2006 comment letter for detailed analysis of the proposed excess algal growth de-listings).

B. <u>Exotics Species</u>

- **The State Board Should List 18 Reaches within Malibu Creek Watershed as Impaired by Exotic Species.**

Heal the Bay presented the State Board with ample evidence as to the distribution of exotic invasive predator species and their impacts on the dwindling population of native aquatic species in the Santa Monica Mountains and Simi Hills. (see January 31, 2006 comment letter). Based on our analysis, we recommend that 21 water segments in the Malibu Creek Watershed be listed as impaired by exotic species. However, the State Board did not include any exotic species listings in Malibu Creek Watershed on the revised 303(d) List. In fact, State Board staff fails to address the exotic species data or analysis in the Response to Comments and Staff Report. Thus, it is unclear how the weight of evidence does not lead the State Board to propose these listings or if the State Board reviewed these data at all.

Of note subsequent to our January 31, 2006 comments, aquatic invertebrate surveys in the Malibu Creek watershed have confirmed the presence of the New Zealand mudsnail, an insidious exotic invasive species. Recent surveys conducted by Heal the Bay, the Santa Monica Bay Restoration Commission and UCLA have confirmed the presence of the mudsnail at 16 of 45 locations throughout the watershed. In particular, the mudsnail has been found in the following locations: Medea Creek, Las Virgenes Creek, Malibu Creek, Lindero Canyon Creek, and the Medea Creek outlet into Malibou Lake. The report released by Santa Monica Bay Restoration Commission and Heal the Bay entitled, " Santa Monica

Mountains New Zealand Mudsnail Survey" is attached in Appendix F. This is a potentially catastrophic invasion that has lead to CDFG and State Parks posting of warning signs at 40 locations in the Watershed. The presence of the mudsnail augments the already solid weight of evidence for including these waterbodies as impaired by exotic species. Mudsnails, a voracious algae eater and prolific breeder, out compete native macroinvertebrates for food and substrate, thereby greatly reducing biological integrity and threatening local fish and amphibians. Thus, the State Board has a legal and moral obligation to add the waterbodies outlined in Appendix F and those cited as impaired by the mudsnail to the 303(d) List as impaired by exotic species.

C. Biological Communities

- **The Index of Biotic Integrity ("IBI") Scores Should be Evaluated to Determine Biological Communities Impairment.**
- **IBI Scores Should be Used as an Additional Line of Evidence in the Listing/de-listing Process.**

Heal the Bay presented the State Board with Index of Biotic Integrity ("IBI") data compiled by California Department of Fish and Game, Los Angeles County, Ventura County and Heal the Bay, in Appendix 7 of the January 31, 2006 comment letter. These data show that biological communities in numerous waterbodies throughout Los Angeles and Ventura counties are severely impaired. In the Response to Comments, State Board staff indicated that "[i]n circumstances where bioassessment data and chemical data (with associated guidelines) were available, these data were reviewed under section 3.9 of the Listing Policy." Response to Comments at 57. However, State Board staff did not propose to add biological community impairments to the 303(d) List for any of the waterbodies outlined in the data submittal as having low IBI scores.

Water segments with IBI data in the poor and very poor ranges meet the listing factors in sections 3.9 and 3.11 of the Listing Policy. As an example, Malibu Creek is included on the 303(d) List for several impairments, including nutrients and sedimentation. This, along with 20 of 22 IBI scores from seven sites in the poor or very poor ranges is sufficient to indicate that Malibu Creek should be placed on the 303(d) List for biological impairment under Section 3.9. In addition, IBI scores can and should be evaluated using the situation-specific weight of evidence approach. Section 3.11 of the Listing Policy states that "if the weight of evidence indicates non-attainment [of water quality standards], the water segment shall be placed on the section 303(d) list." Listing Policy at 8. The IBI scores should be weighed heavily in conducting such an analysis. Biological integrity has been used for waterbody listing decisions at numerous locations across the nation for years. Thus, the State Board should evaluate IBI scores when making listing decisions and should add the water segments presented in Appendix G to the 303(d) List as biological communities impairment.

IV. CONCLUSION

Often regulatory agencies use the excuse of lack of "good science" as the rationale for certain environmental management decisions. In this case, we have provided the State Board with extensive, high quality datasets from reputable monitoring agencies, yet State

Board has ignored this information and regulatory requirements set forth in the Listing Policy. As a result there are numerous 303(d) listing decisions that are not protective of human health or aquatic life. These decisions call into question the objectivity of the listing/de-listing process itself and staff's decision making on which data to review and how to review the data.

We have provided more than enough high quality data to make listing decisions for fecal bacteria on beaches, algae in streams, invasive species, and biological integrity that will lead to the restoration of impaired beneficial uses. Heal the Bay, NRDC and Santa Monica Baykeeper urge the State Board to use this "good science" to make appropriate decisions to protect public health and aquatic life.

If you have any questions or would like to discuss any of these comments, please feel free to contact us. Thank you for your consideration of these comments.

Sincerely,

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