6/26/07 Scoping Mtg.
CA Ocean Plan Amend.
Deadline: 7/27/07 Noon

Heal the Bay

CALIFORNIA COASTKEEPER ALLIANCE
A Statewide Voice for Our Waters

DEFENDERS OF WILDLIFE

July 19, 2007

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

Re: Comments on the Amendments to the California Ocean Plan Scoping Document

Dear Chairwomen Doduc and Board Members:

On behalf of Heal the Bay, California Coastkeeper Alliance, and Defenders of Wildlife we submit the following comments on the Amendments to the California Ocean Plan Scoping Document dated June 2007 ("Scoping Document" or "Document"). We appreciate the opportunity to provide these comments.

We strongly support several of the preferred alternatives outlined in the Scoping Document such as the recommendations to delete the exclusion for vessel wastes and to clarify that metals are expressed as total recoverable concentrations in the Ocean Plan. However, we have concerns with several of the preferred alternatives as described in the Scoping Document. These issues are discussed in detail below.

Issue 2. Fecal Coliform Standard for Shellfish

The Scoping Document indicates that Alternative 2 is the preferred alternative. This alternative adds the DHS fecal coliform standard for shellfish and amends the Ocean Plan to address non-human sources of indicator bacteria for all beneficial uses. While including the DHS fecal coliform standard for shellfish makes sense, we believe that it is inappropriate to address non-human sources of indicator bacteria in the Ocean Plan. There are no epidemiological studies that have differentiated between human and natural sources. In other words, no study has separately quantified the risk of exposure to human and non human sources of bacteria. In fact, non-human sources of pathogens have led to numerous water and food borne outbreaks of E. coli 0157 cryptosporidium. Also, loads from "natural sources" are often augmented by humans. For example, ponding that results from human activities often attracts birds that are a source of bacteria. As another example, nutrient inputs from human sources can cause eutrophication that can lead to bacterial regrowth. Thus, these situations would not truly constitute a "natural source" loading. For these reasons, the State Board should not address non-human sources of indicator bacteria in the Ocean Plan until epidemiological evidence can support such a change.

Issue 6. Vessel Discharges

The undersigned groups strongly support the staff recommendation to "[a]mend the Ocean Plan to delete the exclusion for vessel wastes and to reflect current state and federal requirements governing vessel discharges." Vessel discharges, including the discharge of non-indigenous species through ballast water into state and federal waters, damages the economy, environment and human health. Ballast water from ships is the single largest source of invasive species, which are associated with increasing damage to coastal habitats and public infrastructure. Ballast water also contains a host of other pollutants that impact receiving waters, including native bacteria and viruses as well as chemical pollutants.

The Clean Water Act assigns U.S. EPA both the legal authority and the legal obligation to regulate the discharge of all pollutants, including but not limited to invasive species, in vessels' ballast water. Additionally there are several state laws that require the regulation of vessel discharges, including the Porter-Cologne Water Quality Control Act. As the scoping document notes, in 2006 the State Water Board approved a Clean Water Act Section 303(d) list that included listings of "exotic species" as a regulated pollutant under the Clean Water Act. Therefore, updating the Ocean Plan to include regulation of vessel discharges containing invasive species would reduce remaining inconsistencies between the Ocean Plan and the state and federal laws.

In particular, the undersigned groups urge the State Board to ensure that it implements all legal requirements governing vessel discharges pursuant to state and federal law, including the *Northwest Environmental Advocates v. U.S. EPA (N. District of Cal., Sept 18, 2006)* decision in which the court held that U.S. EPA (and, by delegation, the states) must regulate ballast water discharges of invasive species with NPDES permits.. As an example, the Michigan Department of Environmental Quality already launched its Ballast Water Control General Permit program in the October of 2006. The permit program, which is the first of its kind in the nation, requires oceangoing vessels to treat their ballast water prior to entering Michigan ports in order to prevent aquatic invasive species from being introduced into the Great Lakes.[1] We encourage the State Board to follow the law and Michigan's example and start issuing NPDES permits for ballast water and other vessel discharges immediately.

Issue 10. Desalination Facilities and Brine Disposal

State Board staff selects Alternative 2 as the preferred alternative, which establishes a narrative water quality objective where salinity should not exceed a certain percentage of natural background. Although the Scoping Document does not recommend a specific percentage, at the June 26th scoping meeting, staff mentioned that they were considering 10 percent of natural background as the limit. This percentage appears too large based on toxicity studies. A SCCWRP study found that the percent normal development of purple sea urchin embryos were reduced 56 to 75 percent in salinities of 36.5 g/kg (approximately 8.9% above ambient). Given that the salinity of California near coastal marine water is approximately 33.5 g/kg, 10% above natural background would be at a salinity level that is known to cause urchin embryo development problems.

[1] http://www.michigan.gov/deq/0,1607,7-135--154144--,00.html

Instead of using the percentage of natural background approach, we recommend that the Ocean Plan require that salinity levels are not above background levels outside of the zone of initial dilution. This approach has been used for Ocean point sources dischargers for decades. At a minimum, State Board should consider a percentage of background that would not impact marine species, with an added margin of safety.

Issue 14. Regional Ambient Water Quality Monitoring

State Board staff recommends including a model monitoring approach in the Ocean Plan that provides flexibility in implementing standard monitoring procedures, with minimum requirements. We agree with the selection of this alternative and strongly support the State Board providing basic direction to Regional Boards on the implementation of the Ocean Plan. However, we have several concerns with minimum requirements outlined in the Draft Proposed Standard Monitoring Procedures ("Draft Monitoring Procedures"). These concerns are outlined below and are addressed to some extent in our letter to the State Board dated August 15, 2006 and attached for reference.

General Concerns

- The Draft Monitoring Procedures allow regional or group monitoring programs to substitute for several of the proposed core monitoring requirements at the discretion of the Regional Boards. Both core and regional monitoring have a unique purpose, so they are not interchangeable. Group monitoring does not give an accurate reflection of individual pollution sources. Pollution is site-specific, and sampling should be as well. For instance, group monitoring makes it impossible to measure the effectiveness of site-specific best management practices or the on-going effects of runoff from individual facilities. Moreover, under the group monitoring approach, it will be extremely difficult to pinpoint, mitigate and potentially enforce up the source(s) of pollution in a timely manner. Thus, we urge the State Board to require minimum individual core monitoring for all of the categories of dischargers.

- The Draft Monitoring Procedures require that point sources with a discharge in excess of 10 MGD complete certain monitoring requirements. At the June 26th scoping meeting, State Board staff indicated that the 10 MGD threshold was selected because it was a median value of discharge volumes throughout the state. We assume this statistic only included coastal discharges. Thus as proposed, 50% of the dischargers will not be required to meet these minimum monitoring requirements. This is inappropriate. Discharges of less than 10 MGD are often a major source of pollutants. Also, some of these smaller discharges flow to ecologically sensitive areas. Has the State Board looked at discharges that are below this threshold and discharge to near shore or ecologically sensitive areas? The State Board should reevaluate this threshold value and take into consideration site specific conditions for smaller discharge.

Indicator Bacteria

- The indicator bacteria monitoring requirements outlined in the Draft Monitoring Procedures are somewhat unclear. They state that storm water monitoring is

required during wet weather with a minimum of three storms per year. How does the State Board define "wet weather" and a "storm" event? We recommend defining a storm event as rainfall exceeding 0.1-0.2 inches in a 24 hour period, depending on the permeability of the area. Wet weather should be defined as the day of the storm and the three days following. This wet weather definition is used in the State Department of Health Services Guidance on Saltwater Beaches.

Chemical Constituents

- The Draft Monitoring Procedures require chemical constituent monitoring of storm water discharges at a minimum of 10% of all outfalls greater than 36 inches in diameter. The State Board should specify that these monitored outfalls should be representative of areas with a higher likelihood of pollutant sources. Also, all of the monitoring locations should not drain the same type of land use area. At a minimum, there should be no discretion for monitoring in watersheds over 50 square miles. Otherwise, the biggest pollution contributors may not be sampled.

- The Draft Monitoring Procedures should require that the Regional Boards take into account individual site characteristics such as when pesticides are applied and crop rotation and irrigation schedules when developing a monitoring program. If the discharger significantly changes a management practice such as the type of crop or pesticide(s) used, additional samples should be collected during the monitoring cycle to characterize the new discharge. Overall, the State Board should maintain consistency with agricultural monitoring requirements that are currently in place in the State.

Sediment Monitoring

- Sediment quality monitoring is only required for Phase I discharges. Phase II urban areas can greatly impact coastal water quality. For instance, coastal cities such as Santa Barbara and Monterey have a large urban footprint but are slightly under the 100,000 population threshold. Thus, these borderline Phase II areas should be required to conduct sediment quality monitoring.

Aquatic Life Toxicity

- The Draft Monitoring Procedures require that alternative amphipod species shall be used a minimum of once per year. Is the three-species-screening still required as is outlined in the August 2006 draft? As Regional Boards have acknowledged in their NPDES permit programs, a species screening for the most sensitive species is an appropriate, protective approach.

Benthic Community Health

- The Draft Monitoring Procedures require benthic community monitoring once per permit cycle for certain categories of non-storm water point sources. This low monitoring frequency is inadequate, as benthic community health can drastically change from year to year, let alone for a five year period. Appropriately, the NPDES monitoring program for the Los Angeles County Joint Water Pollution Control Plant and the Hyperion Treatment Plant require ***annual*** benthic infauna community monitoring. The State Board should take a similar approach in the Amendments.

- There is no sound rationale for limiting benthic community monitoring to non-storm water point sources. Storm water pollution can also severely impact the benthic community. The State Board should include a provision for benthic community monitoring at storm water outfalls as well.

Bioaccumulation

- The Draft Procedures require that a mussel watch program be conducted by certain point source and storm water dischargers at least once per permit cycle. Bioaccumulation monitoring is useful to determine pollutant contamination of species in the vicinity of the discharge and understand how concentrations are changing over time. However, only monitoring bioaccumulation in mussels may not provide information about human health risk concerns. In addition to a mussel watch program, the State Board should require bioaccumulation monitoring of at least one fish species. Many NPDES monitoring programs require fish bioaccumulation monitoring. The NPDES monitoring program for the Los Angeles County Joint Water Pollution Control Plant and the Hyperion Treatment Plant require ***annual*** bioaccumulation monitoring of two fish species. The Goleta Sanitation District is required to perform annual bioaccumulation monitoring for fish and mussels. The State Board should require bioaccumulation monitoring for mussels and fish.

Issue 22. Suspended Solids Regulation in Table A

The Scoping Document designates Alternative 3 as the preferred alternative. This alternative would amend the Ocean Plan to include secondary treatment standards for suspended solids with compliance required within 5 years. We are extremely supportive of requirements to have all wastewater treatment facilities that discharge to the Ocean meet secondary treatment standards. In fact, this should have happened over 25 years ago. However, there is no reason that the discharger should wait five years to meet secondary solids removal standards, since the current advanced primary treatment should already achieve an 85 percent solids removal. The State Board should require that all dischargers of primary treated wastewater be placed on a Time Schedule Order to meet the 30 mg/L suspended solids limit within five years, and the 85 percent solids removal limit should be met immediately.

Issue 23. Plastic Debris Regulation

State Board staff selects Alternative 2 as the preferred alternative. This would amend the Ocean Plan to state that ocean waters shall not contain trash and to require that waste streams be "essentially free" of trash including plastic debris. The Scoping Document states that "'[e]ssentially free' does not mean a zero discharge prohibition. Incidental very low levels of trash would not result in violations if Regional Water Boards find that such levels do not cause a nuisance or impact beneficial uses." Document at 19. This statement is inappropriate, as there is **no** acceptable level of trash. Zero trash discharge is the only suitable discharge limit for trash, given water quality standards set forth in Basin Plans. Even small quantities of trash violate the Clean Water Act and Basin Plan requirements. For instance, small amounts of trash can maim or kill wildlife that becomes entangled in, or ingests, the debris. The Los Angeles Regional Board acknowledged that the zero trash discharge limit was appropriate when they adopted the original LA River Trash TMDL in 2001. In order to meet this requirement, the implementation element of the LA River Trash TMDL specifies that compliance with final waste load allocations may be accomplished by using a "full capture system." Plainly, zero trash discharge is the only fair interpretation of the water quality standards that will guarantee protection of the beneficial uses of the ocean environment with an appropriate margin of safety.

In sum, the State Board must ensure that the California Ocean Plan sets forth a program of implementation to ensure that water quality standards are met in our coastal waters. However, several selected alternatives in the Scoping Document do not pave the way to water quality standards attainment. Thus, we urge the State Board to consider the suggestions to strengthen the amendments provided in the comments above. 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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August 15, 2006

Chair Doduc and Board Members
State Water Resources Control Board
Executive Office
1001 I Street, 24th Floor
Sacramento, CA 95814

Re: Comments on the Proposed Draft Amendments to the Standard Monitoring Procedures of the California Ocean Plan

Dear Chair Doduc and Board Members:

On behalf of Heal the Bay and California Coastkeeper Alliance, we submit the following comments on the proposed Draft Amendments to the Standard Monitoring Procedures of the California Ocean Plan ("Draft Amendments" or "Amendments"). We appreciate the opportunity to provide these comments.

Both groups strongly support the State Water Resources Control Board ("State Board") providing basic direction to the Regional Boards on the implementation of the California Ocean Plan, as this provides a certain level of consistency among monitoring programs and ensures that useful information will be gathered. However as outlined below, we have numerous concerns with the Draft Amendments as written.

Ocean Plan Chapter II. B. Bacterial Standards

The Draft Amendments state that "[t]he Regional Board may allow analysis for E. coli by approved test methods to be substituted for fecal coliform, if sufficient information exists to support comparability of E. coli methods with approved fecal coliform methods." Amendments at 1. This approach is problematic for two reasons. First, fecal coliform is not entirely made up of the species, E. coli. In fact, many scientists estimate that only 80-90% of fecal coliform is comprised of E. coli. Second, State bacteriological standards exist for the *total to fecal* coliform ratio. Thus, an accurate value for fecal coliform is necessary for this calculation and comparison to the threshold. For these reasons, the State Board should not assume a one to one comparison and simply allow one test to be substituted for the other.

Instead, Heal the Bay recommends one of several approaches. The easiest alternative would be for the State Board to acknowledge these issues and remove the option to substitute E. coli for fecal coliform monitoring from the Draft Amendments. However, if the State Board maintains this provision, then one of two approaches should be pursued. One option is for the discharger to conduct a study to determine the appropriate ratio

between fecal coliform and E. coli. This ratio would then be used to compare E. coli results to fecal coliform standards. Also, the appropriate E. coli to fecal coliform ratio would be used to calculate the total to fecal ratio. An alternate approach is for the State Board to modify the current bacteriological thresholds, assuming that 80% of fecal coliform is comprised of E. coli. For instance, the State Board would use a single-sample threshold of 320 E. coli/100 mL ocean water, in order to be appropriately protective of public health. The State Board would have to recalculate the geometric mean threshold as well.

Effluent Monitoring, Bacteria – Non-Storm Water Point Sources

The Draft Amendments outline that non-storm water point sources should conduct effluent monitoring for all Ocean Plan indicator bacteria. Amendments at 2. For clarity purposes, the Amendments should explicitly state that monitoring should occur for all three indicator bacteria: total coliform, fecal coliform, and enterococcus.

Also, does the State Board intend "effluent monitoring" to mean monitoring at the end-of-pipe or in the receiving water? At the State Board's August 8 workshop, staff indicated that the traditional definition of "effluent" was not used in the Amendments. In this instance and in general, the State Board should make their intensions explicitly clear.

Effluent Monitoring, Bacteria – Permitted Storm Water Point Sources

The Draft Amendments do not specify the monitoring location for permitted storm water sources. The State Board should include more detail on this topic. First in order to gain valuable public health information, it is vital that monitoring take place at point zero (in the surf zone at ankle depth at the discharge point) and ***not*** at the end-of-pipe. Also in order for the State Board to fully account for public health and beneficial uses, additional sampling points should be designated at set distances away from the discharge point to understand the fate and transport of pollutants. The State Board should stipulate these requirements in the Amendments.

Also, the Amendments require storm water monitoring during wet weather a minimum of three times per year. Amendments at 2. Bacteria monitoring at this frequency provides no benefit. AB411 requires weekly sampling. Monitoring must occur on at least a weekly basis and more frequently (ideally, five times per week) at beaches with year-round recreational use.

Effluent Monitoring, Table B – Permitted Storm Water Point Sources

The Amendments describe that Phase I storm water dischargers should monitor 10% of outfalls greater than 36 inches during three storms per year for Table B Marine Aquatic Life parameters and Phase II discharges should do the same during three storms per permit cycle. Amendments at 3. There are several issues with this requirement. Clearly,

monitoring only three storms per permit cycle has little to no value, as no variability will be captured at this extremely low monitoring frequency. Instead, monitoring should be conducted on a frequency that depicts variability. The State Board should require that Phase II dischargers monitor a minimum of two storms per year. Also, it is unclear how the State Board has determined that *10%* of outfalls greater than 36 inches is an appropriate number of monitoring locations. Regardless, the State Board should allow *no* discretion for monitoring in watersheds over 50 square miles. Otherwise as currently written, the biggest pollution contributors may not be sampled.

Permitted Storm Water Discharges – Receiving Water and Sediment Quality

The Draft Amendments require receiving water and sediment quality monitoring for Table B Aquatic Life pollutants and acute toxicity in sediment during three storms per permit cycle. Amendments at 3. There are several issues with these requirements as written. First, contaminated sediments are primarily associated with longer-term, chronic impacts. Thus, the State Board should require *chronic* toxicity sediment monitoring as well. Also, sediment monitoring can be nearly impossible and dangerous during certain storm events. Therefore, the State Board should not require sediment monitoring *during* the event. In addition, monitoring should take place on an *annual* basis, at a minimum, in order to fully characterize the sediment and receiving water quality over the life of the permit. Appropriately, the recently adopted NPDES permit for the Los Angeles County Joint Water Pollution Control Plant requires *annual* sediment chemistry monitoring. NPDES at E-36.

Receiving water and sediment quality requirements are only outlined for Phase I discharges. This is another shortcoming in the Draft Amendments, as Phase II urban areas can greatly impact coastal water quality. For instance, coastal cities such as Santa Barbara and Monterey have a large urban footprint but are slightly under the 100,000 population threshold. Thus, these "borderline" Phase II areas should be required to conduct receiving water and sediment quality monitoring.

Finally, the Draft Amendments allow for the receiving water and sediment monitoring requirements to be satisfied through a regional monitoring program. In general, group monitoring tends to be extremely misleading and does not give an accurate reflection of individual pollution sources. Pollution is site-specific, and sampling should be as well. For instance, group monitoring makes it impossible to measure the effectiveness of site-specific best management practices or the on-going effects of runoff from *individual* facilities. Moreover, under the group monitoring approach, it will be extremely difficult to pinpoint, mitigate and potentially enforce upon the source(s) of pollution in a timely manner. Thus, the State Board should remove this provision from the Draft Amendments.

Agricultural Nonpoint Source Discharges

The Draft Amendments do not specify the location or frequency for agriculture runoff monitoring. The State Board should include a few more specific requirements in the Draft Amendments. First, the State Board should specify that monitoring should occur on an annual basis, at a minimum, in order to adequately identify agricultural impacts. Also, the Amendments should require that the Regional Boards take into account individual site characteristics such as when pesticides are applied and crop rotation and irrigation schedules when developing a monitoring program. If the discharger significantly changes a management practice such as the type of crop or pesticide(s) used, additional samples should be collected during the monitoring cycle to characterize the new discharge. Overall, the State Board should maintain consistency with agricultural monitoring requirements that are currently in place in the State.

Again as discussed above, permitting regional monitoring is problematic for source identification. Instead, the State Board should develop a minimum acreage value for the drainage area that needs to be monitored.

Table B Toxicity Tests

The Amendments stipulate that toxicity monitoring can be reduced to the most sensitive species after a screening period. Amendments at 3. This provision is not conservative. The pollutants contained in storm water are extremely variable, and different species have different sensitivities to different pollutants. Therefore, the most sensitive species at one point in time may not be the same as the most sensitive species at another time. Thus, the State Board should require that all three species be required for at least the first toxicity monitoring event of each season.

Benthic Community Monitoring

The Draft Amendments require benthic community monitoring once per permit cycle for certain categories of non-storm water point sources. Amendments at 4. This low monitoring frequency is inadequate, as benthic community health can drastically change over a period of five years. Appropriately, the NPDES monitoring program for the Los Angeles County Joint Water Pollution Control Plant requires ***annual*** benthic infauna community monitoring. The State Board should take a similar approach in the Amendments.

Also, there is no sound rationale for limiting benthic community monitoring to non-storm water point sources. Storm water pollution can also severely impact the benthic community. The State Board should include a provision for benthic community monitoring at storm water outfalls as well.

Model Monitoring Requirements

The Draft Amendments refer to the SCCWRP Model Monitoring Programs as another source of information for the Regional Boards to use in developing monitoring requirements. However, it is important to note that SCCWRP's efforts do not implement or substitute for SB72 requirements. The California State legislature adopted SB72 in 2001. This law requires the standardization of stormwater monitoring programs. SB72 also clarifies what information to consider when determining which constituents should be monitored in municipal runoff. California Water Code Section 13383.5 required that the requirements in SB72 be addressed by January 2003, which is over three years ago. To date, the State has failed to comply with SB72 requirements, and there has been no attempt to implement the law. The State Board should meet the requirements of SB72 to develop and implement a strong stormwater monitoring program as soon as possible.

If you have any questions or would like to discuss any of these comments, please feel free to contact us at (310) 451-1500. Thank you for your consideration of these comments.

Sincerely,

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