



**Alan C. Lloyd, Ph.D.**  
Agency Secretary

# State Water Resources Control Board

## Division of Water Quality

1001 I Street • Sacramento, California 95814 • (916) 341-5455  
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**Arnold Schwarzenegger**  
Governor

**MITIGATED  
NEGATIVE DECLARATION**  
Pursuant to Section 21080(c)  
Public Resources Code

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To: Office of Planning & Research                      From: State Water Resources Control Board  
State Clearinghouse    Division of Water Quality  
1400 Tenth Street    1001 I Street  
Sacramento, CA 95814    Sacramento, CA 95814  
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**Project Title:** Exception to the California Ocean Plan for the University of Southern California Wrigley Marine Science Center Discharge into the Northwest Santa Catalina Island Area of Special Biological Significance (No. 25)

**Applicant:** University of Southern California  
Wrigley Institute for Environmental Studies  
AHF 232  
Los Angeles, CA 90089-0371

**Project Description:** University of Southern California (USC) Wrigley Marine Science Center (WMSC) seeks an exception from the California Ocean Plan prohibition on discharges into Areas of Special Biological Significance (ASBS). The exception with conditions, if approved, would allow continued waste seawater and storm water discharges into the Northwest Santa Catalina Island ASBS.

**Determination:** The State Water Board has determined that the above-proposed project will have a less-than-significant effect on the environment for the reasons specified in the attached Initial Study.

**Terms and Conditions:**

1. The discharge must comply with all other applicable provisions, including water quality standards, of the Ocean Plan. Natural water quality conditions in the receiving water, seaward of the surf zone, must not be altered as a result of the discharge. The surf zone is defined as the area between the breaking waves and the shoreline at any one time. Natural water quality will be defined, based on a review of the monitoring data, by Regional Water Board staff in consultation with the Division of Water Quality of the State Water Board. For constituents other than indicator bacteria, natural water quality will be determined using the reference station in the ocean in the vicinity of Goat Harbor or Italian Gardens near Twin Rocks Point on the northern coast of Santa Catalina Island. For indicator bacteria, the Ocean Plan bacteria objectives will be used.
2. WMSC will not discharge chemical additives, including antibiotics, in the seawater system effluent. In addition and at a minimum, WMSC, for its waste seawater effluent, must comply with effluent limits implementing Table B water quality objectives as required in Section III.C. of the Ocean Plan.
3. For metals analysis, waste seawater effluent, storm water effluent, reference samples, and receiving water samples must be analyzed by the approved analytical method with the lowest minimum detection limits (currently Inductively Coupled Plasma/Mass Spectrometry) described in the Ocean Plan.

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4. Flows for the seawater discharge system and storm water runoff (by storm event) must be reported quarterly to the Regional Water Board.
5. WMSC must continue to prevent all discharges of non-storm water facility runoff (i.e., any discharge of facility runoff that reaches the ocean that is not composed entirely of storm water), except those associated with emergency fire fighting.
6. WMSC must specifically address the prohibition of non-storm water runoff and the reduction of pollutants in storm water discharges draining to the ASBS in a Storm Water Management Plan/Program (SWMP). WMSC is required to submit its final SWMP to the Regional Water Board.
7. The SWMP must include a map of surface drainage of storm water runoff, including areas of sheet runoff, and any structural Best Management Practices (BMPs) employed. The map must also show the storm water conveyances in relation to other facility features such as the laboratory seawater system and discharges, service areas, sewage treatment, and waste and hazardous materials storage areas. The SWMP must also include a procedure for updating the map and plan when other changes are made to the facilities.
8. The SWMP must describe the measures by which non-storm water discharges have been eliminated, how these measures will be maintained over time, and how these measures are monitored and documented.
9. The SWMP must also address storm water discharges, and how pollutants have been and will be reduced in storm water runoff into the ASBS through the implementation of BMPs. The SWMP must describe the BMPs currently employed and BMPs planned (including those for construction activities), and an implementation schedule. The BMPs and implementation schedule must be designed to ensure natural water quality conditions in the receiving water due to either a reduction in flows from impervious surfaces or reduction in pollutants, or some combination thereof. The implementation schedule must be developed to ensure that the BMPs are implemented within one year of the approval date of the SWMP by the Regional Water Board.
10. At least once every permit cycle (every five years), a quantitative survey of benthic marine life must be performed near the discharge and at a reference site. The Regional Water Board, in consultation with the State Water Board's Division of Water Quality, must approve the survey design. The results of the survey must be completed and submitted to the Regional Water Board within six months before the end of the permit cycle.
11. Once during the upcoming permit cycle, a bioaccumulation study using mussels (*Mytilus californianus*) must be conducted to determine the concentrations of metals near field (within Big Fisherman Cove) and far field (at the reference station). The Regional Water Board, in consultation with the Division of Water Quality, must approve the study design. The results of the survey must be completed and submitted to the Regional Water Board at least six months prior to the end of the permit cycle (permit expiration). Based on the study results, the Regional Water Board, in consultation with the Division of Water Quality, may adjust the study design in subsequent permits, or add additional test organisms.
12. During the first year of each permit cycle, two effluent samples must be collected from the waste seawater discharge (once during dry weather and once during wet weather, i.e. a storm event). In addition, samples must also be collected at the reference station, described in condition 1, along with the effluent samples. Samples collected at the reference station will represent natural water quality for all Ocean Plan constituents except indicator bacteria and total chlorine residual. Samples at the reference station may be collected immediately following a storm event, but in no case more than 24 hours after, if sampling conditions are unsafe during the storm. All of these samples must be analyzed for all Ocean Plan Table B constituents, pH, salinity, and temperature, except that samples collected at the reference station do not require toxicity testing; instead,

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samples collected at the reference station must be analyzed for Ocean Plan indicator bacteria. Based on the results from the first year, the Regional Water Board will determine the frequency of sampling (at a minimum, annually during wet weather) and the constituents to be tested during the remainder of the permit cycle, except that ammonia nitrogen, pH, salinity, and temperature must be tested at least annually. Chronic toxicity (for at least one consistent invertebrate species) must be tested at least annually for the waste seawater effluent. In addition, samples collected at the reference station must be analyzed for indicator bacteria according to the requirements of condition 16.

13. Once annually, during wet weather (storm event), the storm water runoff effluent and the receiving water adjacent to the seawater and storm water discharge system must be sampled and analyzed for Ocean Plan Table B constituents. The receiving water in Big Fisherman Cove must also be monitored for Ocean Plan indicator bacteria water quality objectives. The sample location for the receiving water will be immediately seaward of the surf zone in Big Fisherman Cove adjacent to the outfall location. Storm water runoff and receiving water must be sampled at the same time as the seawater effluent and reference sampling described in condition 12 above. Based on the first year sample results, the Regional Water Board will determine specific constituents in the storm water runoff and receiving water to be tested during the remainder of the permit cycle, except that indicator bacteria and chronic toxicity (three species) for receiving water must be tested annually during a storm event.
14. Once annually, the subtidal sediment near the seawater discharge system and storm water outfall in Big Fisherman Cove must be sampled and analyzed for Ocean Plan Table B constituents. For sediment toxicity testing, only an acute toxicity test using the amphipod *Eohaustorius estuarius* must be performed. Based on the first year sample results, the Regional Water Board will determine specific constituents to be tested during the remainder of each permit cycle, except that acute toxicity for sediment must be tested annually.
15. In addition to the bacterial monitoring requirements described in conditions 12 and 13 above, samples must be collected at the seawater intake structure during a maximum of three storm events per year that result in runoff from the spray field hillside, and measured for Ocean Plan indicator bacteria. The station at the seawater intake structure is selected for this requirement because it is near the bluff below the WMSC sewage treatment plant spray field. This requirement along with the bacterial monitoring in conditions 12 and 13 is meant to satisfy in total the Ocean Plan bacteria monitoring requirements. This additional bacteria monitoring may be eliminated by the Regional Water Board if changes are made to WMSC's sewage plant or treated sewage effluent system that would absolutely eliminate the possibility of contaminants entering the ASBS.
16. If the results of receiving water monitoring indicate that the storm water runoff is causing or contributing to an alteration of natural water quality in the ASBS, as measured at the reference station, WMSC is required to submit a report to the Regional Water Board within 30 days of receiving the results. Those constituents in storm water that alter natural water quality or receiving water objectives must be identified in that report. The report must describe BMPs that are currently being implemented, BMPs that are planned for in the SWMP, and additional BMPs that may be added to the SWMP. The report shall include a new or modified implementation schedule. The Regional Water Board may require modifications to the report. Within 30 days following approval of the report by the Regional Water Board, WMSC must revise its SWMP to incorporate any new or modified BMPs that have been and will be implemented, the implementation schedule, and any additional monitoring required. As long as WMSC has complied with the procedures described above and is implementing the revised SWMP, then WMSC does not have to repeat the same procedure for continuing or recurring exceedances of the same constituent.
17. WMSC must pursue and implement a program for prevention of Biological Pollutants (non-native invasive species) in consultation with the California Department of Fish and Game Marine Resources Division.

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18. WMSC must prepare a waterfront and marine operations non-point source management plan containing appropriate management practices to address non-point source pollutant discharges. Appropriate management measures will include those described in the State's Non-point Source Program Implementation Plan for marinas and recreational boating, as applicable. The Regional Water Board, in consultation with the State Water Board's Division of Water Quality, will review the plan. The Regional Water Board shall appropriately regulate non-point source discharges in accordance with the State Water Board's Policy for Implementation and Enforcement of the Non-point Source Pollution Control Program. The plan must be implemented within six months of its approval.
19. WMSC will notify the Regional Water Board within 180 days prior to any construction activity that could result in any discharge or habitat modification in the ASBS. Furthermore, WMSC must receive approval and appropriate conditions from the Regional Water Board prior to performing any significant modification, re-building, or renovation of the water front facilities, including the pier and dock, that could result in any discharge or habitat modification in the ASBS, according to the requirements of Section III.E.2 of the Ocean Plan.
20. The Regional Water Board will include these mitigating conditions in the National Pollutant Discharge Elimination System (NPDES) permit for the seawater effluent. Alternatively, the Regional Water Board may regulate the storm water discharge in a storm water NPDES permit and, in that case, would include those conditions relative to storm water in that storm water NPDES permit. In the latter case, all conditions would be included, in some combination, in the waste seawater effluent permit and the storm water permit.

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Adopted by the State Water Resources Control Board on February 15, 2006.

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Selica Potter  
Acting Clerk to the Board

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Date