

STATE WATER RESOURCES CONTROL BOARD
RESOLUTION NO. 2006 – 0013

APPROVING AN 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,
INCLUDING SPECIAL PROTECTIONS TO PROTECT BENEFICIAL USES

WHEREAS:

1. The State Water Resources Control Board (State Water Board) adopted the California Ocean Plan (Ocean Plan) on July 6, 1972 and revised the plan in 1978, 1983, 1988, 1990, 1997, 2000, and 2005.
2. The Ocean Plan states that waste shall not be discharged to areas designated as being of special biological significance.
3. The waters of the Northwest Santa Catalina Island have been designated as an Area of Special Biological Significance (ASBS).
4. Public Resources Code (PRC) section 36750 provides that, as of January 1, 2003, all ASBS are now included in the Marine Managed Area category State Water Quality Protection Areas (SWQPAs).
5. PRC section 36700(f) defines an SWQPA as “a nonterrestrial marine or estuarine area designated to protect marine species or biological communities from an undesirable alteration in natural water quality, including, but not limited to, areas of special biological significance that have been designated by the State Water Board through its water quality control planning process.”
6. The University of Southern California (USC) Wrigley Marine Science Center (WMSC) discharges waste seawater and storm water runoff into the Northwest Santa Catalina Island ASBS. This action covers all discharges from USC/WMSC into the ASBS, including all seawater point source discharges, storm water discharges, and nonpoint source discharges.
7. The State Water Board may grant exceptions to the Ocean Plan provided that (a) the exception will not compromise protection of ocean waters for beneficial uses, and (b) the public interest will be served.
8. The USC/WMSC has requested an exception to the Ocean Plan’s prohibition against discharges to ASBS for waste discharges from its facilities.
9. The staff of the Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) has reviewed this exception request and has recommended that the exception be granted.

10. The Los Angeles Water Board is proposing to issue a National Pollutant Discharge Elimination System (NPDES) permit for the discharges, which is contingent upon this exception being granted by the State Water Board.
11. The Los Angeles Water Board has concluded, and the State Water Board concurs, that if USC/WMSC complies with the conditions to be set forth in the NPDES permit, the discharges will not adversely impact biological communities in the ASBS nor will the discharges compromise protection of ocean waters for beneficial uses.
12. The USC/WMSC occupies a prominent role in marine science research and education, providing programs and facilities to USC and non-USC scientists and students and visitors from many other institutions. The USC/WMSC research activities and teaching laboratory aquaria both depend on the use of the flow thorough (open) seawater system. There are no viable alternatives to ocean disposed of waste seawater due to the remote location of the facility. If the exception is not granted, USC/WMSC will be forced to shut down its open seawater system. The State Water Board therefore finds that the public interest will be served by granting this exception.
13. The State Water Board prepared and circulated an Initial Study/[Mitigated Negative Declaration](#) (IS/MND) for the proposed exception in accordance with the California Environmental Quality Act (CEQA) and the California Code of Regulations, Title 14, Section 15070. The State Water Board finds, based on the whole record, including the IS/MND and comments received, that there is no substantial evidence that approval of the exception will have a significant effect on the environment because of the terms and conditions that have been incorporated into the project. The MND reflects the State Water Board's independent judgment and analysis.
14. The proposed exception will not violate State Water Board Resolution No. [68-16](#) (Antidegradation Policy) because approval of the exception will not lower water quality; the discharge will not unreasonably affect present and anticipated beneficial uses; the discharge will not result in water quality lower than that prescribed in the Ocean Plan; and, the people of California will benefit from the research and education provided by USC/WMSC while beneficial uses will still be protected.
15. The State Water Board held a public hearing on February 1, 2006 to consider comments on and minor revisions to the proposed exception and the IS/MND.
16. The exception will be reviewed during the Triennial Review of the Ocean Plan. If the State Water Board finds cause to revoke or re-open this exception, it may do so during the Triennial Review or at any other time that it so desires.
17. The State Water Board's record of proceedings in this matter is located at 1001 I Street, Sacramento, California, and the custodian is the Division of Water Quality.

THEREFORE BE IT RESOLVED:

The State Water Board:

1. Adopts the Mitigated Negative Declaration, with revisions proposed by staff on February 1, 2006, for the proposed exception.
2. Approves an exception to the Ocean Plan prohibition against discharges to the Northwest Santa Catalina Island ASBS to the USC/WMSC for discharges of waste seawater and storm water discharges. The exception is conditioned on compliance by USC/WMSC with its NPDES permit(s). The following conditions must be implemented through a NPDES permit(s) issued by the Los Angeles Water Board:
 - a. 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 Los Angeles 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.
 - b. USC/WMSC will not discharge chemical additives, including antibiotics, in the seawater system effluent. In addition and at a minimum, USC/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.
 - c. 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.
 - d. Flows for the seawater discharge system and storm water runoff (by storm event) must be reported quarterly to the Los Angeles Water Board.
 - e. USC/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.
 - f. USC/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). USC/WMSC is required to submit its final SWMP to the Los Angeles Water Board.

- g. 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.
- h. 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.
- i. 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 Los Angeles Water Board.
- j. 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 Los Angeles 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 Los Angeles Water Board within six months before the end of the permit cycle (permit expiration).
- k. 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 Los Angeles 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 Los Angeles Water Board at least six months prior to the end of the permit cycle (permit expiration). Based on the study results, the Los Angeles Water Board, in consultation with the Division of Water Quality, may adjust the study design in subsequent permits, or add additional test organisms.
- l. 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 a, 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, samples collected at the reference station must be analyzed for Ocean Plan indicator bacteria. Based on the results from the first year, the Los Angeles 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 p.

- m. 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 1 above. Based on the first year sample results, the Los Angeles 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.
- n. 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 Los Angeles 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.
- o. In addition to the bacterial monitoring requirements described in conditions 1. and m. 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 USC/WMSC sewage treatment plant spray field. This requirement along with the bacterial monitoring in conditions 1. and m. is meant to satisfy in total the Ocean Plan bacteria monitoring requirements. This additional bacteria monitoring may be eliminated by the Los Angeles Water Board if changes are made to USC/WMSC's sewage plant or treated sewage effluent system that would absolutely eliminate the possibility of contaminants entering the ASBS.

- p. 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, USC/WMSC is required to submit a report to the Los Angeles 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 Los Angeles Water Board may require modifications to the report. Within 30 days following approval of the report by the Los Angeles Water Board, USC/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 USC/WMSC has complied with the procedures described above and is implementing the revised SWMP, then USC/WMSC does not have to repeat the same procedure for continuing or recurring exceedances of the same constituent.
- q. USC/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.
- r. USC/WMSC must prepare a waterfront and marine operations nonpoint source management plan containing appropriate management practices to address nonpoint source pollutant discharges. Appropriate management measures will include those described in the State's Nonpoint Source Program Implementation Plan for marinas and recreational boating, as applicable. The Los Angeles Water Board, in consultation with the State Water Board's Division of Water Quality, will review the plan. The Los Angeles Water Board shall appropriately regulate nonpoint source discharges in accordance with the State Water Board's Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program. The plan must be implemented within six months of its approval.
- s. USC/WMSC will notify the Los Angeles Water Board within 180 days prior to any construction activity that could result in any discharge or habitat modification in the ASBS. Furthermore USC/WMSC must receive approval and appropriate conditions from the Los Angeles 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.
- t. The Los Angeles Water Board will include these mitigating conditions in the NPDES permit for the seawater effluent. Alternatively, the Los Angeles 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.

- 3 Authorizes the Executive Director to transmit the exception to the U.S. Environmental Protection Agency for approval.
- 4 Authorizes the Executive Director to file the Notice of Determination with the Governor's Office of Planning and Research.

CERTIFICATION

The undersigned, Acting Clerk to the Board, does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on February 15, 2006.

AYE: Tam M. Doduc
Richard Katz
Gerald D. Secundy

OPPOSED: None

ABSENT: Arthur G. Baggett, Jr.

ABSTAIN: None



Selica Potter
Acting Clerk to the Board