



EDMUND G. BROWN JR.  
GOVERNOR

MATTHEW RODRIGUEZ  
SECRETARY FOR  
ENVIRONMENTAL PROTECTION

Los Angeles Regional Water Quality Control Board

Ms. Roberta Marinelli  
USC Wrigley Institute for Env. Studies  
3454 Trousdale Pkwy. CAS 200  
Los Angeles, CA 90089

VIA CERTIFIED MAIL  
RETURN RECEIPT REQUESTED  
No. 7008 1140 0002 8671 9646

**TECHNICALLY CONDITIONED WATER QUALITY CERTIFICATION FOR PROPOSED USC CATALINA ISLAND SHELLFISH AQUACULTURE RESEARCH PROJECT (Corps' Project Letter of Permission), CATALINA HARBOR, TWO HARBORS, LOS ANGELES COUNTY (File No. 16-015)**

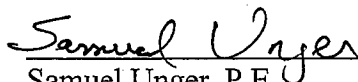
Dear Ms. Marinelli:

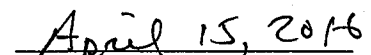
Board staff has reviewed your request on behalf of USC Wrigley Institute for Environmental Studies (Applicant) for a Clean Water Act Section 401 Water Quality Certification for the above-referenced project. Your application was deemed complete on March 1, 2016.

I hereby issue an order certifying that any discharge from the referenced project will comply with the applicable provisions of sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards) of the Clean Water Act, and with other applicable requirements of State law. This discharge is also regulated under State Water Resources Control Board Order No. 2003 - 0017 - DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges that have received State Water Quality Certification" which requires compliance with all conditions of this Water Quality Certification.

**Please read this entire document carefully.** The Applicant shall be liable civilly for any violations of this Certification in accordance with the California Water Code. This Certification does not eliminate the Applicant's responsibility to comply with any other applicable laws, requirements and/or permits.

Should you have questions concerning this Certification action, please contact Valerie CarrilloZara, P.G., Lead, Section 401 Program, at (213) 576-6759.

  
\_\_\_\_\_  
Samuel Unger, P.E.  
Executive Officer

  
\_\_\_\_\_  
Date

## DISTRIBUTION LIST

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U.S. Fish and Wildlife Service  
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California Coastal Commission  
200 Oceangate, 10th Floor  
Long Beach, CA 90802

ATTACHMENT A

Project Information  
File No. 16-015

1. Applicant: USC Wrigley Institute for Environmental Studies  
3454 Trousdale Pkwy. CAS 200  
Los Angeles, CA 90089  
Phone: (213) 740-4861 Fax: (213) 740-6720
2. Applicant's Agent: Jessica Dutton
3. Project Name: USC Catalina Island Shellfish Aquaculture Research Project
4. Project Location: Two Harbors, Catalina Island, Los Angeles County

<u>Latitude</u>	<u>Longitude</u>
33.426936	118.512003
33.427236	118.511769
33.427603	118.511464
33.427944	118.511139
33.426728	118.511758
33.426994	118.511547
33.427367	118.511211
33.427717	118.510908

5. Type of Project: Aquaculture construction
6. Project Purpose: The USC Wrigley Institute for Environmental Studies proposes to continue and expand long-term education and faculty research on the genetics of commercial shellfish at our marine laboratory on Santa Catalina Island. To establish capability for multi-generational research, Applicant proposes to deploy two new facilities in Catalina Harbor allowing complete life-cycle of research stock: (1) a FLUPSY (floating upwelling nursery system), to hold bivalves from 2-3 mm in size until they reach approximately one inch in size; and (2) a suspended long-line and tray system for rearing bivalves to maturity.
7. Project Description: The University of Southern California Wrigley Institute for Environmental Studies intends to install and operate, for a period of five years, a shellfish aquaculture research facility within the Cat Harbor State Marine Conservation Area (SMCA), a state designated Marine Protected Area located within a coastal embayment on the

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### Project Information File No. 16-015

southwestern shore of Santa Catalina Island. The proposed facility will be comprised of two main elements: (1) the FLUPSY, an approximately 480-square foot floating upwelling nursery system designed to culture juvenile Pacific oysters and Kumamoto oysters; and (2) an array of up to four parallel 150-foot buoyed longlines with attached trays capable of rearing a total of approximately 48,000 oyster to maturity. Within two years, the oysters are expected to reach reproductive maturity and be used for laboratory breeding or growth experiments. Some oysters would also remain in the longline system to ensure the propagation of genetic lines.

**FLUPSY:** The equipment supporting the FLUPSY, including upwelling bins, shellfish trays, propeller, drive train, circulation pumps and other equipment, will be supported on a floating barge (29 ft x 16.5 ft) and powered by a solar power array. The FLUPSY will be moored by line and chain to 4 200-pound Danforth anchors embedded in the sea floor.

**Longline Grow-out Facility:** An array of up to four parallel, 150 ft buoyed longlines will be placed in shallow waters (9 to 24 m) adjacent to the FLUPSY. Up to 15 stacks of 8 shellfish culture trays will be suspended along each longline. It is anticipated that the longlines will be installed in stages, with one longline the first year and up to three additional during years two and four, as needed. The four longlines will be anchored by two 200-pound Danforth anchors each, with an extra anchor at each end of the array for a total of ten anchors. Each longline will also have buoys and buoyancy floats.

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| 8. Federal Agency/Permit:                  | U.S. Army Corps of Engineers<br>Letter of Permission  |
| 9. Other Required<br>Regulatory Approvals: | California Coastal Commission<br>Coastal Development Permit<br><br>California Department of Fish and Wildlife<br>Scientific Collecting Permit<br>Long Term Importation Permit<br><br>Santa Catalina Island Co.<br>Memorandum of Understanding Agreement |

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Project Information  
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10. California Environmental Quality Act Compliance: The California Coastal Commission issued the project's Coastal Development Permit (Permit No. 9-14-0489) pursuant to a certified regulatory program which meets the requirements of Guideline 15235(b) on December 9, 2015.
11. Receiving Water: Santa Catalina Island (Hydrologic Unit Code: 180701070002)
12. Designated Beneficial Uses: NAV, REC-1, REC-2, COMM, MAR, WILD, BIOL, RARE, SPWN, SHELL
13. Impacted Waters of the United States: Ocean: 0.90 temporary acres
14. Dredge Volume: None
15. Related Projects Implemented/to be Implemented by the Applicant: The Applicant has not identified any related projects carried out in the last 5 years or planned for implementation in the next 5 years.
16. Avoidance/Minimization Activities: The Applicant has proposed to implement several Best Management Practices, including, but not limited to, all terms and conditions set forth by the California Coastal Commission in Coastal Development Permit 9-14-0489, including benthic monitoring and non-native oyster monitoring.
17. Proposed Compensatory Mitigation: The Applicant has not proposed any compensatory mitigation.
18. Required Compensatory Mitigation: The Regional Board will not require any compensatory mitigation.  
See *Attachment B, Conditions of Certifications, Additional Conditions* for modifications and additions to the above proposed compensatory mitigation.

## ATTACHMENT B

### Conditions of Certification File No. 16-015

#### STANDARD CONDITIONS

Pursuant to §3860 of Title 23 of the California Code of Regulations (23 CCR), the following three standard conditions shall apply to this project:

1. This Certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to §13330 of the California Water Code and Article 6 (commencing with 23 CCR §3867).
2. This Certification action is not intended and shall not be construed to apply to any activity involving a hydroelectric facility and requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent Certification application was filed pursuant to 23 CCR Subsection 3855(b) and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
3. Certification is conditioned upon total payment of any fee required pursuant to 23 CCR Chapter 28 and owed by the Applicant.

#### ADDITIONAL CONDITIONS

Pursuant to 23 CCR §3859(a), the Applicant shall comply with the following additional conditions:

1. The Applicant shall submit to this Regional Board copies of any other final permits and agreements required for this project, including, but not limited to, the Army Corps of Engineers (ACOE) Letter of Permission, California Coastal Commission Coastal Development Permit and the California Department of Fish and Wildlife's (CDFW) Scientific Collecting Permit. **These documents shall be submitted prior to any discharge to waters of the State.**
2. The Applicant shall adhere to the most stringent conditions indicated with either this Certification, the ACOE Letter of Permission, the CDFW's Scientific Collecting Permit, or the CCC's Coastal Development Permit.
3. The Applicant shall comply with all water quality objectives, prohibitions, and policies set forth in the *Water Quality Control Plan, Los Angeles Region (1994)*, as amended.
4. The Avoidance/Minimization activities proposed by the Applicant as described in Attachment A, No. 16, are incorporated as additional conditions herein.

## ATTACHMENT B

### Conditions of Certification File No. 16-015

5. The Applicant and all contractors employed by the Applicant shall have copies of this Certification, the approved construction plan, and all other regulatory approvals for this project on site at all times and shall be familiar with all conditions set forth.
6. Fueling, lubrication, maintenance, operation, and storage of vehicles and equipment shall not result in a discharge or a threatened discharge to waters of the State. At no time shall the Applicant use any vehicle or equipment which leaks any substance that may impact water quality. Staging and storage areas for vehicles and equipment shall be located outside of waters of the State.
7. All excavation, construction, or maintenance activities shall follow best management practices to minimize impacts to water quality and beneficial uses.
8. No construction material, spoils, debris, or any other substances associated with this project that may adversely impact water quality standards, shall be located in a manner which may result in a discharge or a threatened discharge to waters of the State. Designated spoil and waste areas shall be visually marked prior to any excavation and/or construction activity, and storage of the materials shall be confined to these areas.
9. All waste or dredged material removed shall be relocated to a legal point of disposal if applicable. A legal point of disposal is defined as one for which Waste Discharge Requirements have been established by a California Regional Water Quality Control Board, and is in full compliance therewith.
10. The Applicant shall implement all necessary control measures to prevent the degradation of water quality from the proposed project in order to maintain compliance with the Basin Plan. The discharge shall meet all effluent limitations and toxic and effluent standards established to comply with the applicable water quality standards and other appropriate requirements, including the provisions of Sections 301, 302, 303, 306, and 307 of the Clean Water Act. This Certification does not authorize the discharge by the applicant for any other activity than specifically described in the 404 Permit.
11. The discharge shall not: a) degrade surface water communities and populations including vertebrate, invertebrate, and plant species; b) promote the breeding of mosquitoes, gnats, black flies, midges, or other pests; c) alter the color, create visual contrast with the natural appearance, nor cause aesthetically undesirable discoloration of the receiving waters; d) cause formation of sludge deposits; or e) adversely affect any designated beneficial uses.
12. The Applicant shall allow the Regional Board and its authorized representative entry to the premises, including all mitigation sites, to inspect and undertake any activity to determine compliance with this Certification, or as otherwise authorized by the California Water Code.

## ATTACHMENT B

### Conditions of Certification File No. 16-015

13. All project activities not included in this Certification, and which may require a permit, must be reported to the Regional Board for appropriate permitting. Bank stabilization and grading, as well as any other ground disturbances, are subject to restoration and revegetation requirements, and may require additional Certification action.
14. Ocean water quality monitoring shall be performed by the Applicant. A Water Quality Monitoring Plan shall be submitted prior to any project construction activities. Baseline sampling may be conducted at one location within the project boundary for each phase. All other sampling shall take place at a minimum of two locations. Monitoring for the following shall be included:
  - pH
  - temperature
  - dissolved oxygen
  - turbidity
  - total suspended solids (TSS)
  - visual assessment for floating particulates (oil and grease shall not be visible)

Analyses must be performed using approved US Environmental Protection Agency methods, where applicable. These constituents shall be measured at least once prior to project commencement (baseline sampling) and then monitored on a daily basis during the first week of construction, and then on a weekly basis, thereafter, until the work is complete. Monitoring shall ensure compliance with all water quality objectives specified in the 2012 Ocean Plan.

**Results of the analyses shall be submitted to this Regional Board by the 15th day of each subsequent sampling month.** A map or drawing indicating the locations of sampling points shall be included with each submittal. Construction activities shall not result in the degradation of beneficial uses or non-compliance of any water quality objectives. Any such violations may result in corrective and/or enforcement actions, including increased monitoring and sample collection.

15. The Applicant shall restore **all acres** of TEMPORARY IMPACTS to waters of the United States and all other areas of temporary disturbance which could result in a discharge or a threatened discharge to waters of the State.
16. All applications, reports, or information submitted to the Regional Board shall be signed:
  - (a) For corporations, by a principal executive officer at least of the level of vice president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which discharge originates.



**ATTACHMENT B**

**Conditions of Certification  
File No. 16-015**

- (b) For a partnership, by a general partner.
  - (c) For a sole proprietorship, by the proprietor.
  - (d) For a municipal, State, or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.
17. Each and any report submitted in accordance with this Certification shall contain the following completed declaration:

“I declare under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who managed the system or those directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Executed on the \_\_\_\_\_ day of \_\_\_\_\_ at \_\_\_\_\_.

\_\_\_\_\_  
\_\_\_\_\_  
(Signature)  
(Title)”

18. All communications regarding this project and submitted to this Regional Board shall identify the Project File Number **16-015**. Submittals shall be sent to the attention of the 401 Certification Unit.
19. Any modifications of the proposed project may require submittal of a new Clean Water Act Section 401 Water Quality Certification application and appropriate filing fee.
20. Coverage under this Certification may be transferred to the extent the underlying federal permit may legally be transferred and further provided that the Applicant notifies the Executive Officer at least 30 days before the proposed transfer date, and the notice includes a written agreement between the existing and new Applicants containing a specific date of coverage, responsibility for compliance with this Certification, and liability between them.
21. The Applicant or their agents shall report any noncompliance. Any such information shall be provided verbally to the Executive Officer within 24 hours from the time the Applicant becomes aware of the circumstances. A written submission shall also be provided within five days of the time the Applicant becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue and steps taken or planned to

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### Conditions of Certification File No. 16-015

reduce, eliminate and prevent recurrence of the noncompliance. The Executive Officer, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

#### 22. *Enforcement:*

- (a) In the event of any violation or threatened violation of the conditions of this Certification, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions as provided for under State law. For purposes of section 401(d) of the Clean Water Act, the applicability of any State law authorizing remedies, penalties, process or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this Certification.
- (b) In response to a suspected violation of any condition of this Certification, the State Water Resources Control Board (SWRCB) or Regional Water Quality Control Board (RWQCB) may require the holder of any permit or license subject to this Certification to furnish, under penalty of perjury, any technical or monitoring reports the SWRCB deems appropriate, provided that the burden, including costs, of the reports shall be a reasonable relationship to the need for the reports and the benefits to be obtained from the reports.
- (c) In response to any violation of the conditions of this Certification, the SWRCB or RWQCB may add to or modify the conditions of this Certification as appropriate to ensure compliance.

23. This Certification shall expire **five (5) years** from date of this Certification. The Applicant shall submit a complete application at least 90 days prior to termination of this Certification if renewal is requested.