

## 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. 7007 2560 0001 7889 6989

### **AMENDMENT OF CONDITIONAL 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:

The Los Angeles Regional Water Quality Control Board (Regional Board) is in receipt of your notification on August 11, 2016, requesting modification of your Conditional Clean Water Act Section 401 Water Quality Certification for the subject project issued on April 15, 2016 (Certification).

USC Wrigley Institute for Environmental Studies (Applicant) is requesting to change the Project Description and Impacted Waters to the United States in the Certification to reflect changes to the activities associated with the Certification.

In response to your request, the Certification is modified as shown below. Deleted text is shown in ~~strike-out~~ and additional text is shown underlined.

In response to your request, under Attachment A, Item 7, Project Description will read:

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 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 Southern California Mytilids (*Mytilus galloprovincialis* and *M. californianus*); 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 and mussels to maturity.

Within two years, the oysters and mussels are expected to reach reproductive maturity and be used for laboratory breeding or growth experiments. Some oysters and mussels 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.

Under Attachment A, Item 16, Avoidance/Minimization Activities, will read:

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 and mussel monitoring.

I have determined that the above-proposed modifications do not constitute a significant change in the nature or scope of the activities described for the project in your original application. Therefore, all of the proposed modifications are hereby incorporated into 401 Certification No. 13-100 and no additional action by this agency pursuant to Section 401 of the Clean Water Act is necessary. This determination is limited to the proposed modifications contained in your notification to this Regional Board dated October 17, 2013 and described herein, and does not eliminate the Applicant's responsibility to comply with any other applicable laws, requirements and/or permits.

USC Wrigley Institute for Env. Studies

16-015 USC Catalina Island  
Shellfish Aquaculture Research

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

Sincerely,

Samuel Unger  
Samuel Unger, P.E.  
Executive Officer

Nov. 1, 2016  
Date

## DISTRIBUTION LIST

Jessica Dutton (via electronic copy)  
USC Wrigley Institute for Environmental Studies  
3454 Trousdale Pkwy. CAS 200  
Los Angeles, CA 90089  
jmdutton@usc.edu

Bill Orme (via electronic copy)  
State Water Resources Control Board  
Division of Water Quality  
P.O. Box 944213  
Sacramento, CA 94244-2130

Kirsten Ramey (via electronic copy)  
California Department of Fish and Wildlife  
Marine Region  
1933 Cliff Drive Suite 09  
Santa Barbara, CA. 93109

Bonnie Rogers (via electronic copy)  
U.S. Army Corps of Engineers  
Regulatory Branch, Los Angeles District  
915 Wilshire Blvd., Suite 1101  
Los Angeles, CA 90017

Melissa Scianni  
Elizabeth Goldmann (via electronic copy)  
U.S. Environmental Protection Agency, Region 9  
WRT-2-4  
75 Hawthorne Street  
San Francisco, CA 94105

G. Mendel Stewart  
Johnathan Snyder  
U.S. Fish and Wildlife Service  
2177 Salk Ave. Carlsbad Ca, 92008

California Coastal Commission  
200 OceanGate, 10th Floor  
Long Beach, CA 90802