March 6, 2017

In the Matter of

Water Quality Certification

for the

Humboldt Bay Mariculture Pre-Permitting Project

APPLICANT: Humboldt Bay Harbor, Recreation and Conservation District
RECEIVING WATER: Humboldt Bay
HYDROLOGIC UNIT: Eureka Plain Hydrologic Unit, No. 110.00
COUNTY: Humboldt
Files: Humboldt Bay Mariculture Pre-Permitting Project;
ECM PIN CW-822183, WDID No. 1B16123WNHU

FINDINGS BY THE EXECUTIVE OFFICER:

1. On February 12, 2016, the North Coast Regional Water Quality Control Board (Regional Water Board) received an application from the Humboldt Bay Harbor, Recreation and Conservation District (Applicant), requesting Federal Clean Water Act, section 401, Water Quality Certification (certification) for activities related to the proposed Humboldt Bay Mariculture Pre-Permitting Project (Project).

2. Public Notice: Information describing the Project was noticed for public comment on the Regional Water Board’s website on January 10, 2017. No comments were received.

3. Receiving Waters: The proposed Project will cause disturbances to three discrete locations within Humboldt Bay.
4. **Project Description:** The purpose of the Project is to allow for an expansion of commercial aquaculture activities in Humboldt Bay, to create jobs and improve the local economy, and increase local and sustainable seafood production. The Applicant will secure the required regulatory Project permits for aquaculture activities and then grant leases to private shellfish growers for discrete, subtidal portions of the Project’s pre-permitted sites.

The Applicant shall ensure that all activities are complaint with Project permits through the use of leases. The leases will include:

- A map, a legal description of the leased area, and an allowance to conduct specific aquaculture activities within that area;
- All regulatory requirements subject to the aquaculture activities;
- A description of the mechanisms by which the Applicant would oversee aquaculture activities, including reporting by the lessee to the Applicant; and
- A description of the process by which the Applicant would address failures to meet lease requirements, including cancelling leases and requiring the removal of all aquaculture equipment.

Annual compliance reports shall be submitted to the Regional Water Board by January 31 of each year to document the Applicant’s compliance with the permit terms and conditions.

Three general aquaculture methods will be employed: 1) Floating Upwelling Systems (i.e., “FLUPSYs”) or pump systems for growing juvenile shellfish, moored by chain and line to a pier and adjacent twelve-inch pilings or anchored with concrete or steel anchors; 2) Shellfish nursery rafts, anchored to concrete anchors; and 3) Macroalgae longline, single, independent lines fixed by removable mooring points or anchors and supported by floats. Floating walkways and mooring systems will also be installed and used to support aquaculture operations.

The Applicant will establish aquaculture operations at three discrete locations, all on the inland side of the north spit in Samoa, as shown below in Figure 1.
Sites 1-3 will be placed as follows:

- Subtidal Culture Site 1—Approximately 6.6-acre area located between 40.8105, -124.1871 to the south, and 40.814, -124.184 to the north (see Figure 2);

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1 All geographic coordinates cited in this certification use WGS84 datum
- Subtidal Culture Site 2—Approximately 8.6-acre area located between 40.8067, -124.1882 to the south, and 40.8088, -124.1875 to the north (see Figure 3; and
5. **Project Impacts:** Project implementation will result in approximately 6.5 square feet (0.00015 acres) of permanent fill of benthic habitat due to placement of eight 12-inch diameter piles. Project implementation will also result in approximately 2,162 square feet (0.050 acres) of temporary impacts to benthic habitat as a result of placing anchors and spud poles to support aquaculture apparatus.

6. **Mitigation for Project Impacts:** The Applicant shall remove 21 derelict pilings from Humboldt Bay as mitigation for Project permanent and temporary impacts.

7. **Avoidance and Minimization of Impacts:** The Applicant is proposing maximum impact thresholds at each of the three culture sites to avoid and minimize impacts to Humboldt Bay. The maximum allowable water surface area that could be in aquaculture production at culture sites 1, 2, and 3, will be 41,752 square feet (0.96 acres), 54,370 square feet (1.25 acres), and 37,932 square feet (0.87 acres), respectively. The maximum allowable volume of aquaculture equipment and cultured organisms at culture sites 1, 2, and 3, will be 127,756 cubic feet 166,472 cubic feet, and 116,142 cubic feet, respectively. The allowable benthic footprint at culture sites 1, 2, and 3, would be 673 square feet, 878 square feet, and 612 square feet, respectively. The allowable shellfish biomass at culture sites 1, 2, and 3, would be 647 dry weight kilograms, 843 dry weight kilograms, and 588 dry weight kilograms, respectively.
The Applicant shall include a ten foot wide gap or buffer between each contiguous 10,000 square feet of aquaculture structures, as well as perform all maintenance cleaning of the raft hulls, raft floats, and well infrastructure (excluding FLUPSY's) at onshore locations. Pile driving shall occur only between July 1 and October 15 and hydroacoustic monitoring shall be performed to avoid and minimize impacts to marine mammals and other aquatic species. Additional impact avoidance and minimization measures will be implemented to avoid intake system entrainment, impacts to marine birds and mammals, introduction of non-native species, impacts to eelgrass, and production of marine debris.

8. **Other Agency Actions:** The Applicant has applied to the United States Army Corps of Engineers (Corps) for an Individual Permit, pursuant to section 404 of the Clean Water Act and section 10 of the Rivers and Harbors Act of 1899. The Corps will initiate consultation with the National Marine Fisheries Service to determine whether Project implementation may result in impacts to federally-listed special-status species. The Applicant has received a Coastal Development Permit from the California Coastal Commission.

9. **CEQA Compliance:** As lead agency, the Humboldt Bay Harbor Recreation and Conservation District prepared an Environmental Impact Report for the Project (SCH no. 2013062068), pursuant to the requirements of the California Environmental Quality Act (CEQA).

10. **Antidegradation Policy:** The federal antidegradation policy requires that state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's *Water Quality Control Plan for the North Coast Region* (Basin Plan) implements, and incorporates by reference, both the state and federal antidegradation policies. This certification is consistent with applicable federal and state antidegradation policies, as it does not authorize the discharge of increased concentrations of pollutants or increased volumes of treated wastewater, and does not otherwise authorize degradation of the waters affected by this Project.

11. 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. The Order may be accessed at this web address:
Accordingly, based on its independent review of the record, the Regional Water Board certifies that the Humboldt Bay Mariculture Pre-Permitting Project (WDID No. 1B16123WNHU) as described in the application will comply with sections 301, 302, 303, 306 and 307 of the Clean Water Act, and with applicable provisions of state law, provided that the Applicant complies with the following terms and conditions:

All conditions of this certification apply to the Applicant (and their employees) and all contractors (and their employees), sub-contractors (and their employees), and any other entity or agency that performs activities or work on the Project as related to this Water Quality Certification.

Project-Specific Conditions

1. The maximum allowable water surface area in aquaculture production at culture sites 1, 2, and 3, shall not exceed 41,752 square feet (0.96 acres), 54,370 square feet (1.25 acres), and 37,932 square feet (0.87 acres), respectively. The maximum allowable volume of aquaculture equipment and cultured organisms at culture sites 1, 2, and 3, shall not exceed 127,756 cubic feet, 166,472 cubic feet, and 116,142 cubic feet, respectively. The allowable benthic footprint at culture sites 1, 2, and 3, shall not exceed 673 square feet, 878 square feet, and 612 square feet, respectively. The allowable shellfish biomass at culture sites 1, 2, and 3, shall not exceed 647 dry weight kilograms, 843 dry weight kilograms, and 588 dry weight kilograms, respectively.

2. There shall be no less than a ten foot wide gap or buffer between each contiguous 10,000 square foot of aquaculture structures.

3. All maintenance cleaning of raft hulls, raft floats, and well infrastructure (excluding FLUPSY’s) shall be performed at onshore locations. All biofouling organisms and

2 WGS84 datum
biological materials removed during these cleaning operations shall be collected and disposed of at an appropriate upland facility. Regular scraping of the floating upwelling system channels can occur on the rafts, provided that all biofouling organisms and biological materials are contained using tarps and/or screens. No discharge of untreated wash water or biofouling materials into Humboldt Bay shall occur during maintenance cleaning operations.

4. Pile driving shall occur only between July 1 and October 15. Hydroacoustic monitoring shall be performed to avoid and minimize impacts to marine mammals and other aquatic species. A qualified marine mammal monitor shall be present at all times during pile driving. Hydroacoustic monitoring shall be performed consistent with the Project requirements from the National Marine Fisheries Service and the California Coastal Commission.

5. The Applicant shall remove 21 existing pilings within the Project area to mitigate for installation of 8 new piles and potential impacts associated with the use of spud poles and anchors for aquaculture infrastructure stabilization. The Applicant shall remove six existing 12-inch diameter piles from subtidal site 1 and fifteen 12-inch diameter piles from subtidal site 2. Mitigation shall be completed prior to establishment of aquaculture operations.

6. All aquaculture operations shall:

   i) Use screens during washdown of Manila clam seed and equipment to contain all clams regardless of size and prevent seed from falling into the bay;
   ii) Remove all Manila clam seed from the nursery raft and FLUPSY system prior to reaching 12 millimeters shell size, at which size they are not sexually mature;
   iii) Not discard culled shellfish into Humboldt Bay; and
   iv) Be limited to the cultivation of Pacific oysters (Crassostrea gigas), Kumamoto oysters (Crassostrea sikamea), Manila clam seed (Tapes philippinarum), and native red algae such as Chondracanthus, Gracilaria, Palmaria, and Porphyra species. Culture of additional shellfish or algae species may be considered through an amendment to this certification.

Project-Specific Conditions Requiring Reports

7. Annual compliance reports shall be submitted to the Regional Water Board by January 31 of each year to document the Applicant’s compliance with the certification terms and conditions. The first report shall be due January 31, 2018. Annual reports shall include:
For each culture site, a description of the site’s current status of operations, production, culture methods and compliance with the thresholds identified in condition 1;

A summary of lessee compliance issues and Applicant actions to achieve lessee compliance;

An assessment of the originally proposed culture operations versus existing, “as-built” conditions, including a description of location, methods, equipment, and other pertinent information;

A narrative describing the state of operations and upkeep on the site, including the presence of discarded, broken or abandoned tools, gear or equipment, and deposited shells;

Representative photographs; and

The first annual report shall include documentation of pile removal, as required in condition 5. Before and after removal photographs shall be provided to demonstrate pile removal.

Standard Conditions

8. This certification action is subject to modification or revocation upon administrative or judicial review; including review and amendment pursuant to Water Code section 13330 and title 23, California Code of Regulations, section 3867.

9. This certification action is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent certification application was filed pursuant to title 23, California Code of Regulations, section 3855, subdivision (b) and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.

10. The validity of this certification is conditioned upon total payment of any fee required under title 23, California Code of Regulations, section 3833, and owed by the Applicant. The total application fee for the Project is $600. The Regional Water Board received $600 from the Applicant on March 21, 2016.

11. This certification will be subject to annual billing during the construction phase (“Annual Active Discharge Fee”). The construction phase will be considered complete once all three sites are populated with lessees. This certification will also be subject to annual billing during the monitoring phase of the Project (“Annual Post Discharge Monitoring Fee”), per the current fee schedule, which can be found on our website: [http://www.swrcb.ca.gov/northcoast/water_issues/programs/water_quality_certification.shtml](http://www.swrcb.ca.gov/northcoast/water_issues/programs/water_quality_certification.shtml). The monitoring phase of the Project will be active as long as operations are ongoing and annual reports are being submitted. These fees will be automatically invoiced to the Applicant.
12. The Applicant shall notify the Regional Water Board upon Project construction completion to request termination of the Annual Active Discharge Fee and to receive a “Notice of Completion of Discharges Letter.” If the Project is subject to the Annual Post Discharge Monitoring Fee, then the Applicant shall also notify the Regional Water Board at the end of the monitoring period to request termination of the fee and receive a “Notice of Project Complete Letter.” The Applicant may be required to submit completion reports at the end of each of these phases. Regional Water Board staff may request site visits at the end of each Project phase to confirm Project status and compliance with this certification.

13. The Applicant is prohibited from discharging waste to waters of the state, unless explicitly authorized by this certification. For example, no debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete washings, oil or petroleum products, or other organic or earthen material from any construction or associated activity of whatever nature, other than that authorized by this certification, shall be allowed to enter into or be placed where it may be washed by rainfall into waters of the state. When operations are completed, any excess material or debris shall be removed from the work area.

14. The Applicant is liable and responsible for the proper disposal, reuse, and/or recycling of all Project-generated waste in compliance with applicable state and federal laws and regulations.

15. The Applicant shall provide Regional Water Board staff access to the Project site to document compliance with this certification.

16. If, at any time, an unauthorized discharge to surface water (including wetlands, lakes, rivers or streams) occurs, or any water quality problem arises, the associated Project activities shall cease immediately until adequate BMPs are implemented including stopping work. The Regional Water Board shall be notified promptly and in no case more than 24 hours after the unauthorized discharge or water quality problem arises.

17. Prior to implementing any change to the Project that may be a material change as defined in California Water Code section 13260(c) as a proposed change in character, location, or volume of the discharge, the Applicant shall obtain prior written approval of the Regional Water Board Executive Officer. If the Regional Water Board is not notified of the material change to the discharge, it will be considered a violation of this certification, and the Applicant may be subject to Regional Water Board enforcement action(s).

18. All Project activities shall be implemented as described in the submitted certification application package and the findings and conditions of this certification. Subsequent Project changes that could significantly impact water quality shall first be submitted
to Regional Water Board staff for prior review, consideration, and written concurrence. If the Regional Water Board is not notified of a significant alteration to the Project, it will be considered a violation of this certification, and the Applicant may be subject to Regional Water Board enforcement actions.

19. The Applicant shall provide a copy of this certification and State Water Resources Control Board (SWRCB) Order No. 2003-0017-DWQ to any contractor(s), subcontractor(s), and utility company(ies) conducting work on the Project, and shall require that copies remain in their possession at the work site. The Applicant shall be responsible for ensuring that all work conducted by its contractor(s), subcontractor(s), and utility companies is performed in accordance with the information provided by the Applicant to the Regional Water Board.

20. Work in flowing or standing surface waters, unless otherwise proposed in the certification application project description and approved by the Regional Water Board, is prohibited.

21. Fueling, lubrication, maintenance, storage, and staging of vehicles and equipment shall not result in a discharge or threatened discharge to any waters of the state including dry portions of the shoreline. At no time shall the Applicant or its contractors allow use of any vehicle or equipment, which leaks any substance that may impact water quality.

22. The Applicant shall not use leaking vehicles or equipment within State waters or riparian areas. Vehicles and equipment used within State waters shall be checked for leaks at the beginning of each work day.

23. 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 applicable state or federal law. For the 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. In response to a suspected violation of any condition of this certification, the State Water Board may require the holder of any federal permit or license subject to this certification to furnish, under penalty of perjury, any technical or monitoring reports the State Water Board deems appropriate, provided that the burden, including costs, of the reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. In response to any violation of the conditions of this certification, the Regional Water Board may add to or modify the conditions of this certification as appropriate to ensure compliance.
24. The Regional Water Board may add to or modify the conditions of this certification, as appropriate, to implement any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act.

25. In the event of any change in control of ownership of land presently owned or controlled by the Applicant, the Applicant shall notify the successor-in-interest of the existence of this certification by letter and shall email a copy of the letter to the following email address: NorthCoast@waterboards.ca.gov.

The successor-in-interest shall email the Regional Water Board Executive Officer at: NorthCoast@waterboards.ca.gov to request authorization to discharge dredged or fill material under this certification. The request must contain the following:

i) Effective date of ownership change;
ii) Requesting entity's full legal name;
iii) The state of incorporation, if a corporation;
iv) The address and phone number of contact person; and
v) A description of any changes to the Project or confirmation that the successor-in-interest intends to implement the project as described in this certification.

26. Except as may be modified by any preceding conditions, all certification actions are contingent on:

i) The discharge being limited to and all proposed mitigation being completed in strict compliance with the Applicant’s Project description and CEQA documentation, as approved herein; and
ii) Compliance with all applicable water quality requirements and water quality control plans including the requirements of the Water Quality Control Plan for the North Coast Region (Basin Plan), and amendments thereto.

27. The authorization of this certification for any dredge and fill activities expires on March 6, 2022. Conditions and monitoring requirements outlined in this certification are not subject to the expiration date outlined above, and remain in full effect and are enforceable.

**Condition 7 is a requirement for information and reports.** Any requirement for a report made as a condition to this certification is a formal requirement pursuant to California Water Code section 13267, and failure or refusal to provide, or falsification of such required report is subject to civil liability as described in California Water Code, section 13268.
If you have any questions or comments, please call Brendan Thompson of my staff, at (707) 576-2699, or via e-mail at Brendan.Thompson@waterboards.ca.gov.

Original to: Mr. Jack Crider, Humboldt Bay Harbor, Recreation, and Harbor District, PO Box 1030, Eureka CA 95502-1030, JCrider@HumboldtBay.org

cc: State Water Resources Control Board, StateBoard401@waterboards.ca.gov
    Ms. Jennifer Siu, EPA Region 9, Siu.Jennifer@epa.gov
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