



**DEPARTMENT OF THE ARMY**  
SAN FRANCISCO DISTRICT, U.S. ARMY CORPS OF ENGINEERS  
1455 MARKET STREET, 16<sup>TH</sup> FLOOR  
SAN FRANCISCO, CALIFORNIA 94103-1398

NOVEMBER 22, 2017

Regulatory Division

SUBJECT: File Number 2016-00401N

Mr. George Williamson  
Humboldt Bay Harbor, Recreation and Conservation District  
601 Startare Drive  
Eureka, CA 95501

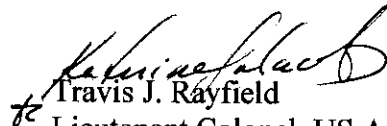
Dear Mr. Williamson:

Enclosed is your signed copy of a Department of the Army permit (Enclosure 1) to place up to eight 12-inch diameter concrete or metal pilings within one of three project areas to facilitate mooring for a total of 3.08 acres of shellfish and macroalgae aquaculture on three areas of submerged lands within Humboldt Bay, near the City of Eureka, Humboldt County, California. This infrastructure would be used for Humboldt Bay Harbor District leases to individuals or businesses to carry out aquaculture activities.

Please complete the appropriate parts of "Project Status" form (Enclosure 2), and return it to this office as your work progresses. You are responsible for ensuring that the contractor or workers executing the activity authorized herein are knowledgeable of the terms and conditions of this authorization.

Should you have any questions regarding this matter, please call L. Kasey Sirkin of our Regulatory Division at 707-443-0855. Please address all correspondence to the Regulatory Division and refer to the File Number at the head of this letter. If you would like to provide comments on our permit review process, please complete the Customer Survey Form available online at <http://www.spn.usace.army.mil/Missions/Regulatory.aspx>.

Sincerely,

  
Travis J. Rayfield  
Lieutenant Colonel, US Army  
District Engineer

Enclosures

Copy Furnished (w/encl 1 only):

US EPA, San Francisco, CA Attn: Jennifer Siu

US FWS, Arcata, CA

US NMFS, Arcata, CA

CA CC, San Francisco, CA Attn: Cassidy Teufel

CA DFW, Eureka, CA Attn: Rebecca Garwood

CA NCRWQCB, Santa Rosa, CA Attn: Brendan Thompson



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DEPARTMENT OF THE ARMY PERMIT

PERMITTEE: Humboldt Bay Harbor, Recreation and Conservation District, 601 Startare Drive, Eureka, CA 95501

PERMIT NO.: 2016-00401N

ISSUING OFFICE: San Francisco District

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate District or Division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below:

**PROJECT DESCRIPTION:** The project includes placement of a total of 3.08 acres of shellfish and macroalgae aquaculture structures, within three areas of submerged subtidal lands totaling 21.2 acres in the Central Bay of Humboldt Bay, near the City of Eureka, Humboldt County, California. The three project areas are 6 acres, 6.6 acres and 8.6 acres in size and will support a maximum of 0.87 acres, 0.96 acres, and 1.25 acres of aquaculture activities, respectively. This infrastructure will be used for Humboldt Bay Harbor District (Harbor District) leases to individuals or businesses to carry out aquaculture activities. Aquaculture activities within each project area will include installation and operation of two types of floating shellfish aquaculture structures and one type of submerged algae cultivation structure. All of these structures will be constructed offsite and towed to their installation sites for mooring.

The shellfish structures to be installed by lessees will be floating upwelling systems ("FLUPSYs") for growing young shellfish; and "nursery rafts" for growing small, immature shellfish that will be sold or transferred elsewhere for grow-out to consumer sizes. The algae cultivation structures will be submerged "longlines" held in the water column by anchors on the seafloor and buoys at the surface. Floating walkways and mooring systems will also be installed and used to facilitate aquaculture operations. Shellfish species proposed to be cultivated on these structures will be limited to Pacific oysters (*Crassostrea gigas*), Kumamoto oysters (*Crassostrea sikamea*), and Manila clams (*Tapes philippinarum*). Cultivated macroalgae will be limited to native red algae such as *Chondracanthus*, *Gracilaria*, *Palmaria*, and *Porphyra* species.

Maximum thresholds for the size and intensity of aquaculture activities have been set within the three project areas. For the three project areas, the combined maximum thresholds per acre will be 6,322 square feet of aquaculture operations; 19,357 cubic feet of aquaculture equipment in the water column; 102 square feet of structures (footprint of piles, anchors and mooring systems); and 216 pounds (dry weight) of cultured shellfish biomass. The maximum threshold for each project area – based on its acreage – is shown in the table below.

Site Name	Size of Site (acres)	Surface Area of Aquaculture (ft <sup>2</sup> /acre)	Volume of Aquaculture (ft <sup>3</sup> )	Fill/Mooring Footprint (ft <sup>2</sup> )	Shellfish Biomass (lbs – dry weight)
Subtidal 1	6.6	41,752/0.96	127,756	673	1426
Subtidal 2	8.6	54,370/1.25	166,472	878	1859
Subtidal 3	6.0	37,932/0.87	116,142	612	1296
TOTAL	21.2	134,054/3.08	410,370	2,163	4,581

The total amount of water surface area allowed by these combined structures is 41,752 square feet (0.96 acres) at Subtidal Site 1, 54,370 square feet (1.25 acres) at Subtidal Site 2, and 37,054 square feet (0.87 acres) at Subtidal Site 3 for a combined total of approximately 3.08 acres. The structures installed under this threshold will be connected to the existing or proposed piling, pier, or wharf within each of the three project areas by way of floating gangways, cables, and chains. The nursery rafts, FLUPSYs, and macroalgae longlines are expected to be placed in Humboldt Bay as one or more joined floating structures. The maximum size for each joined structure will be 10,000 square feet and any single or joined structure of that size will have a buffer around it of at least ten feet of open surface water. Walkways may be located

between structures but will be limited to no more than three feet in width and will be grated to allow light penetration of at least 50%.

To facilitate the mooring of aquaculture structures within Subtidal Site 3, the Harbor District will install up to eight 12-inch diameter steel or concrete piles. These piles will be installed in the deeper waters of this project site and will be configured to provide maximum mooring space. Installation of the piles will be carried out using either vibratory installation methods (using a machine that vibrates the pile at high speeds to liquefy the adjacent substrate while simultaneously applying downward pressure) or a more traditional impact pile driver. To help ensure that piling installation activities do not adversely affect marine wildlife as a result of elevated levels of underwater noise, the Harbor District shall employ a marine wildlife monitor to install hydroacoustic monitoring equipment during the first five pile driving events to determine the sound levels being generated and the appropriate monitoring distances, and to implement maximum underwater sound threshold levels for both marine mammals and special status fish species. Additionally, the Harbor District shall remove 21 existing derelict piles to provide mitigation for impacts to benthic substrate habitat. Six existing 12-inch diameter piles will be removed from subtidal site 1, and 15 12-inch diameter piles will be removed from subtidal site 2. The piles will be removed by barge and crane.

All work shall be completed in accordance with the plans and drawings titled "USACE File #2016-00401N, Humboldt Bay Mariculture Pre-Permitting Project – Project Description Subtidal Leases", dated February 2017, in 15 pages provided as enclosure 1 and will adhere to all minimization measures and conservation recommendations as described in the U.S. Fish and Wildlife Service and National Marine Fisheries Service Letters of Concurrence (enclosures 2 and 3).

The Harbor District is responsible for ensuring that all authorized work done by their personnel or within the project area is addressed and completed in accordance with the terms and conditions of this permit. Any lessee working under this permit is responsible for ensuring that all work they or their contractors undertake is in accordance with the terms and conditions of this permit. The Harbor District is responsible for providing appropriate guidance to the lessee and the required annual reports to the Corps. However, the Corps is the authority on determining if an activity is authorized by this permit.

**PROJECT LOCATION:** Central Humboldt Bay, City of Eureka, Humboldt County, California

**PERMIT CONDITIONS:**

**GENERAL CONDITIONS:**

1. The time limit for completing the work authorized ends on October 31, 2022. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. For your convenience, a copy of the water quality certification or waiver is attached. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.
7. You understand and agree that, if future operations by the United States require the removal, relocation or other alteration of the structure or work authorized herein, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, you will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

**SPECIAL CONDITIONS:**

1. The Harbor District will provide to the Corps copies of all new aquaculture leases with a location map, a summary of the surface area affected, and proposed work plan for each new lessee within one week of signing the lease. New work may not commence until the Corps has confirmed receipt of the lease information.
2. The Harbor District will provide an annual compliance report by December 31 of each year that details all structures installed in jurisdictional waters, active lease sites and any lessee changes. The report will describe actions taken to avoid adverse effects to listed species and provide photo documentation of current site conditions.
3. If a lessee does not carry out work in compliance with project design standards and specifications, including the previously agreed upon terms and conditions, the Harbor District will notify the lessee and work directly with them to resolve the problem. If the lessee still fails to comply, the Harbor District will notify the lessee that their activities are no longer covered by the Pre-permitting Program's permit and agreements. The lessee will then be responsible for obtaining regulatory review and individual permits from the appropriate regulatory agencies and will be held liable for all violations. The Harbor District will notify the Corps of any projects that are no longer covered under the Pre-permitting Program's permit.
4. The USFWS and NMFS concurred with the determination that the project was not likely to adversely affect tidewater goby (*Eucyclogobius newberryi*), coastal cutthroat trout (*Oncorhynchus clarkii clarkia*), coho salmon (*O. kisutch*), steelhead (*O. mykiss*), Chinook salmon (*O. tshawytscha*), longfin smelt (*Spirinchus thaleichthys*), green sturgeon (*Acipenser medirostris*) and eulachon (*Thaleichthys pacificus*) and designated critical habitat for these species. This concurrence was premised, in part, on project work restrictions outlined in enclosure(s) 2 and 3. These work restrictions are incorporated as special conditions to this authorization for your project to ensure unauthorized incidental take of species and loss of critical habitat does not occur.
5. A post construction report shall be submitted 45 days after the conclusion of construction activities for the mooring facilities and pile removal. The report shall document construction activities and contain as-built drawings (if different from drawings submitted with application) and include before and after photographs.
6. Removal of the 21 pilings identified for mitigation will occur only at high tides (preferably tides exceeding 4.0 feet) so that any likelihood of prop wash or prop scarring effects to eelgrass are avoided.

**FURTHER INFORMATION:**

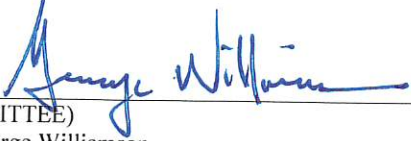
1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:
  - (X ) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. Section 403).
  - ( ) Section 404 of the Clean Water Act (33 U.S.C. Section 1344).
  - ( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. Section 1413).
2. Limits of this authorization:
  - a. This permit does not obviate the need to obtain other Federal, State, or local authorizations required by law.

- b. This permit does not grant any property rights or exclusive privileges.
  - c. This permit does not authorize any injury to the property or rights of others.
  - d. This permit does not authorize interference with any existing or proposed Federal project.
3. Limits of Federal Liability: In issuing this permit, the Federal Government does not assume any liability for the following:
- a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
  - b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
  - c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
  - d. Design or construction deficiencies associated with the permitted work.
  - e. Damage claims associated with any future modification, suspension, or revocation of this permit.
4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.
5. Reevaluation of Permit Decision: This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:
- a. You fail to comply with the terms and conditions of this permit.
  - b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate. (See Item 4 above.)
  - c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 C.F.R. § 325.7 or enforcement procedures such as those contained in 33 C.F.R. §§ 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 C.F.R. § 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

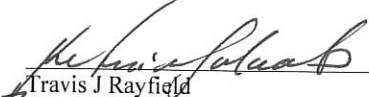
6. Extensions: General Condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

  
\_\_\_\_\_  
(PERMITTEE)  
Mr. George Williamson  
Humboldt Bay Harbor, Recreation and Conservation District

11-13-2017  
\_\_\_\_\_  
(DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

  
\_\_\_\_\_  
Travis J Rayfield  
Lieutenant Colonel, U.S. Army  
District Commander

27 November 2017  
\_\_\_\_\_  
(DATE)

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

\_\_\_\_\_  
(TRANSFEREE)

\_\_\_\_\_  
(DATE)

## PROJECT STATUS

Please use the forms below to report the dates when you start and finish the work authorized by the enclosed permit. Also if you suspend work for an extended period of time, use the forms below to report the dates you suspended and resumed work. The second copy is provided for your records. If you find that you cannot complete the work within the time granted by the permit, please apply for a time extension at least one month before your permit expires. If you materially change the plan or scope of the work, it will be necessary for you to submit new drawings and a request for a modification of your permit.

(cut as needed) -----

Date: \_\_\_\_\_

**NOTICE OF COMPLETION OF WORK** under Department of the Army Permit No. 2016-00401N

TO: District Engineer, US Army Corps of Engineers, Regulatory Division, 1455 Market Street, 16th Floor, San Francisco, CA 94103-1398

In compliance with the conditions of Permit No. 2016-00401N, this is to notify you that work was completed on \_\_\_\_\_.

Permittee: Humboldt Bay Harbor, Recreation and Conservation District, Attn: George Williamson  
Address: PO Box 1030 Eureka, California 95502-1030

(cut as needed) -----

Date: \_\_\_\_\_

**NOTICE OF RESUMPTION OF WORK** under Department of the Army Permit No. 2016-00401N

TO: District Engineer, US Army Corps of Engineers, Regulatory Division, 1455 Market Street, 16th Floor, San Francisco, CA 94103-1398

In compliance with the conditions of Permit No. 2016-00401N, this is to notify you that work was completed on \_\_\_\_\_.

Permittee: Humboldt Bay Harbor, Recreation and Conservation District, Attn: George Williamson  
Address: PO Box 1030 Eureka, California 95502-1030

(cut as needed) -----

Date: \_\_\_\_\_

**NOTICE OF SUSPENSION OF WORK** under Department of the Army Permit No. 2016-00401N

TO: District Engineer, US Army Corps of Engineers, Regulatory Division, 1455 Market Street, 16th Floor, San Francisco, CA 94103-1398

In compliance with the conditions of Permit No. 2016-00401N, this is to notify you that work was completed on \_\_\_\_\_.

Permittee: Humboldt Bay Harbor, Recreation and Conservation District, Attn: George Williamson  
Address: PO Box 1030 Eureka, California 95502-1030

(cut as needed) -----

Date: \_\_\_\_\_

**NOTICE OF COMMENCEMENT OF WORK** under Department of the Army Permit No. 2016-00401N

TO: District Engineer, US Army Corps of Engineers, Regulatory Division, 1455 Market Street, 16th Floor, San Francisco, CA 94103-1398

In compliance with the conditions of Permit No. 2016-00401N, this is to notify you that work was completed on \_\_\_\_\_.

Permittee: Humboldt Bay Harbor, Recreation and Conservation District, Attn: George Williamson  
Address: PO Box 1030 Eureka, California, 95502-1030