

CALIFORNIA COASTAL COMMISSION

45 FREMONT, SUITE 2000
SAN FRANCISCO, CA 94105-2219
VOICE AND TDD (415) 904-5200
FAX (415) 904-5400



F14a-d

February 5, 2019

TO: Coastal Commissioners and Interested Parties

FROM: John Ainsworth, Executive Director
Alison Dettmer, Deputy Director
Cassidy Teufel, Senior Environmental Scientist

SUBJECT: Addendum to Staff Report for Coastal Development Permit Amendment
Application Nos.2-81-40-A1, 2-84-2-A1, 2-84-10-A1 and 1-94-55-A1, Hog
Island Oyster Company, Inc.

This addendum provides additions and revisions to the January 24, 2019 staff report on Hog Island Oyster Company's request for after-the-fact approval and expansion of its shellfish aquaculture operation on leased state tidelands in Tomales Bay, Marin County. Additionally, this addendum also responds to concerns about the staff recommendation made by the Environmental Action Committee of West Marin (EAC) in correspondence received by Commission staff on February 1, 2019. This correspondence is provided along with all other correspondence received by Commission staff on this project in a separate document available [here](#).

RESPONSE TO CORRESPONDENCE

In its letter to the Commission on this project, dated February 1, 2019, the Environmental Action Committee of West Marin (EAC) requests clarification of several acreage estimates used in the staff report. The staff report revisions included below clarify and correct these acreage estimates. EAC's letter also expresses concern with the Commission staff's recommendation regarding after-the-fact authorization for shellfish cultivation structures and equipment within eelgrass. To address those concerns, EAC requests that the staff recommendation be modified to require all existing unpermitted cultivation equipment to be removed from eelgrass habitat.

In response to this concern, and as a result of continuing conversations between Commission staff and HIOC, Special Condition 8 has been revised. Special Condition 8 now requires HIOC to remove all existing cultivation structures, gear, and equipment from areas mapped as eelgrass habitat in 2017. This removal would be required to be completed by the start of the next eelgrass growing season on May 1, 2019.

The only exception to the removal requirement in Special Condition 8 would be for a small area of existing rack structures within leases M-430-10 and M-430-11 and several small areas of existing permitted cultivation structures and equipment on lease M-430-15. The equipment within eelgrass habitat in these areas is authorized in HIOC's existing CDPs and there is no available evidence demonstrating that it was originally installed in eelgrass habitat.

REVISIONS

The following are revisions to the Special Conditions and text of the staff report and recommendation. Proposed deletions are marked with ~~strike through~~ text and short additions are marked with underlined text.

SPECIAL CONDITIONS

2. ~~Pre-installation Eelgrass Survey~~ Eelgrass Habitat and New Cultivation Areas. No shellfish cultivation equipment, anchors, or other structures, gear or equipment shall be installed or placed on, in, or over eelgrass habitat, as determined by the Executive Director using the definition of eelgrass habitat in the National Marine Fisheries Service's October 2017 California Eelgrass Mitigation Policy (CEMP) ~~or directly adjacent to areas in which eelgrass is growing.~~ Prior to placing or installing structures or equipment on any shellfish cultivation area not shown on **Exhibit 2** ("existing cultivation areas") HIOC shall submit, for Executive Director review and approval, information collected within the most recent eelgrass growing season (May through September) demonstrating that no eelgrass is present within the area in which installation or placement is proposed. If eelgrass is present or the Executive Director does not approve the information (for example, because it is inconclusive, out of date, of inadequate resolution, or improperly collected), HIOC shall retain the services of a qualified, independent third party to carry out an eelgrass survey of that area. The survey shall be carried out consistent with the methodology and protocols established in the CEMP National Marine Fisheries Service's California Eelgrass Mitigation Policy and shall be carried out during the eelgrass growing season in which installation activities will occur (or the previous growing season if installation will occur after the completion of one growing season and prior to the start of the next). Within 30 days of survey completion, ~~t~~The results of the eelgrass survey shall be provided to the Executive Director for review and approval along with a map or diagram showing the footprint and location of proposed cultivation structures and equipment relative to nearby eelgrass ~~habitat~~beds and demonstrating that installation within ~~or adjacent to eelgrass habitat, as defined in the CEMP,~~ will not occur. While installation of shellfish cultivation structures and equipment shall be prohibited within eelgrass habitat, as defined in the CEMP, if such eelgrass habitat~~beds~~ moves or expands into areas with existing cultivation structures and/or equipment, HIOC may continue to maintain and use these areas for shellfish cultivation.

3. Pre-installation Lease Line Survey. Within 120 days of permit issuance, and prior to installation of any new shellfish cultivation structures or equipment, HIOC shall coordinate with staff of the California Department of Fish and Wildlife (CDFW) to retain the services of a qualified, independent third party surveyor or pursue other similar methods preferred by CDFW to determine the location and configuration of HIOC's State water bottom leases by December 31, 2019. These deadlines may be extended by the Executive Director upon request from HIOC and CDFW. The results of the lease delineation efforts~~surveys~~ and discussions with CDFW staff shall be provided to the Executive Director and used to determine the GPS coordinates for the

corners of HIOC's leases, ~~and~~ HIOC shall mark these locations using PVC stakes or buoys within 30 days of ~~survey~~ completion of lease delineation efforts. If the results indicate that any of HIOC's existing cultivation areas, structures or equipment are located outside of its leases, HIOC shall relocate or remove these cultivation areas within 90 days of ~~survey~~ completion of lease delineation efforts. Placement or use of cultivation structures or equipment outside of designated lease areas shall be prohibited.

4. Amendment of State Water Bottom Lease. Prior to installation or expanded use of any cultivation method and/or species not already included in the State Water Bottom Lease associated with this permit, HIOC shall submit to the Executive Director evidence that this lease has been amended by the California Fish and Game Commission (FGC) to allow these species and/or method(s) to be used. Without such evidence, HIOC's operations on the lease associated with this permit shall be limited to the species and methods that the Fish and Game Commission specifically allows on that lease. Any cultivation methods or species currently being used on the lease associated with this permit that have not been approved for that lease by the FGC shall be removed unless or until such approval is granted by the FGC. Such removal shall begin within 60 days and be completed within 120 days of permit issuance. If HIOC or FGC staff provides the Executive Director with evidence that the FGC allows certain methods or species to continue to be used pending a lease amendment review, HIOC may continue to use those methods and/or species on that lease.

6. Clam Cultivation and Harvest.

...

To limit turbidity and dispersal of disturbed sediments during harvest or collection of existing unconfined Manila clams removed pursuant to this condition, harvest/collection shall be carried out using non-motorized hand tools at tidal heights when the cultivation areas are fully exposed out of the water and all harvest/collection areas shall be fully encircled with a perimeter turbidity curtain. The turbidity curtain shall be maintained in place for two tidal cycles or until the water within the harvest area is visually similar to surrounding waters, whichever is longer. If turbidity curtains cannot be adequately maintained in place for this duration (due to currents, wind, etc.), they may be removed early with the approval of the Executive Director. Collected Manila clams that are not mature enough for harvest or cannot be harvested due to California Department of Public Health closures may be re-planted in approved areas using clam bags or cultivation trays.

8. Removal and Replacement of Cultivation Methods Eelgrass Habitat and Existing Cultivation Areas. Those areas in which cultivation structures or equipment are present within eelgrass shown on the Greater Farallones National Marine Sanctuary's 2017 eelgrass map (as shown in **Exhibit 2 and Exhibit 6**) shall be cleared of all existing cultivation structures, gear, and/or equipment by May 1, 2019. Existing cultivation gear on lease M-430-15 and cultivation racks on leases M-430-10 and M-430-11 shall be exempt from this removal requirement.

~~The removal of cultivation structures and equipment within those portions of cultivation beds that overlap areas identified as eelgrass habitat in the 2017 eelgrass survey of Tomales Bay (as shown on **Exhibit 2**) shall be conducted outside of the May through September active growth period for eelgrass in northern California. The installation of new cultivation equipment within these areas shall be carried out consistent with the requirements of **Special Condition 2**. For areas where cultivation structures or equipment are removed and new cultivation equipment is~~

Addendum to Staff Report for CDP Amendment Nos. 2-81-40-A1, 2-84-2-A1, 2-84-10-A1 and 1-94-55-A1 (Hog Island Oyster Company)

~~planned, the eelgrass surveys required pursuant to **Special Condition 2** shall be carried out prior to the removal of existing cultivation structures and equipment. However, if more than one eelgrass growing season passes between removal and placement of new equipment, a new eelgrass survey shall be required pursuant to **Special Condition 2**.~~

Findings and Declarations

The following text would be added or modified to various elements of the staff report's Findings and Declarations section, as detailed below.

Corrected text in the final paragraph of page 2:

The remaining acres of its proposed expansion (~~nearly 38 acres~~) would be new proposed development for which HIOC seeks the Commission's approval through amendments to its four permits.

Additional text to be included prior to the first full paragraph on page 3:

For HIOC, an important aspect of its proposed project is the establishment of an efficient and expeditious process for obtaining regulatory authorization for future changes to its operations. For example, HIOC anticipates that in the future, it may want to substitute one type of shellfish growing method for another within the proposed cultivation areas shown on **Exhibit 3**. If it does so, HIOC would like the flexibility to be able to carry out such substitutions without a lengthy regulatory review. The Commission shares HIOC's interest in using the most efficient and effective regulatory process for considering future changes to its operations. As such, whenever the Executive Director determines that such changes can be accomplished consistent with all relevant Special Conditions and without potential adverse impacts to coastal resources or public access, they would be processed as immaterial permit amendments.

Corrected text to be inserted within the first paragraph on page 7:

Except for Special Condition 7, which applies only to Coastal Development Permit Amendment 2-84-2-A1-~~2-84-82-A1~~, the following Special Conditions will be included on CDP Amendment numbers...

Corrected text to be inserted within the final paragraph on page 15:

Of HIOC's approximately 25 acre existing operation, at least ~~17~~ 14 acres of it are focused on shellfish species and/or the use of cultivation methods, structures, and equipment that were not considered or approved in its CDPs.

Corrected text to be inserted within the second paragraph of page 21:

These areas combined with other approved methods that would continue to be used at existing levels make up approximately ~~15 of the 54~~ 14 of the ~~56~~ acre expanded operation.

Corrected text to be included within the last paragraph of page 22:

This expansion, from the roughly 25 acres currently in use to a proposed ~~54~~ 56 acres, would be spread throughout HIOC's four leases but would be concentrated primarily within leases M-430-12 and M-430-15.

Addendum to Staff Report for CDP Amendment Nos. 2-81-40-A1, 2-84-2-A1, 2-84-10-A1 and 1-94-55-A1 (Hog Island Oyster Company)

Within the final paragraph on page 23, Table 6 on page 24, and the first full paragraph on page 24, references to California mussel are changed to Mediterranean mussel: California Mediterranean mussels (Mytilus californianus galloprovincialis).

Corrected text to be included within the second paragraph of page 25:
HIOC anticipates installing cultivation structures and equipment within its proposed 28.6 ~~34~~ acres of expansion areas incrementally over approximately the next seven years.

Corrected text to be included within the fourth paragraph of page 29:
As HIOC's operations expand across the 54 ~~56~~ proposed acres, it estimates that the level of activity would increase by approximately 50%, resulting in two to six vessel trips per day and 15 to 30 per week on Tomales Bay.

Modified text to be included within the final two paragraphs on page 47:
...Accordingly, it is reasonable to assume that HIOC's CDPs allow it to continue using cultivation areas within eelgrass habitat as long as (1) that habitat was not present at the time the cultivation areas were initially installed; and (2) to the extent feasible, the continuing use of those cultivation areas is carried out in a manner that minimizes damage and disturbance of eelgrass. However, HIOC was not permitted to install new types of equipment in particular areas, and after-the-fact authorization for that equipment should account for the fact that, even if no eelgrass was present when the unpermitted equipment was first installed, eelgrass is present now.

~~Following this reasoning and without evidence to contradict HIOC's statements that none of its existing cultivation structures were initially installed in or adjacent to eelgrass habitat, HIOC's request for after the fact approval for those portions of its cultivation beds currently within eelgrass habitat hinges on whether or not its use of those areas has been carried out in a manner that minimizes damage and disturbance. Based on the results of 2018 field visits to several of these sites by Commission staff — which confirmed the continuing presence and health of eelgrass within them — as well as HIOC's commitments — memorialized in Accordingly, Special Conditions 7 and 8 — to require HIOC to discontinue its use of cultivation methods and areas with some of the highest potential to result in eelgrass disturbance and/or damage, and to remove equipment that was installed without authorization in areas that now contain eelgrass habitat. Specifically, Special Condition 8 requires floating lines and overlapped racks to be removed from within approximately 0.56 acre and 0.34 acre areas of mapped eelgrass, respectively. Additionally, on leases M-430-10 and M-430-11, Special Condition 8 requires mesh bottom bags to be removed from a total of approximately 0.28 acres of mapped eelgrass. Each of these areas are shown in Exhibit 6. HIOC's appears to have carried out its operation in a manner that minimizes damage and disturbance to eelgrass and to be dedicated to continuing to do so.~~

Corrected text to be included within the first paragraph on page 57:
Of the other four species, two are one is native to California waters – the Olympia oyster and California mussel – and therefore raises no concern about invasion or establishment. The other ~~three~~ two species – Mediterranean mussel, Atlantic/Eastern oyster and Kumamoto oyster - are species of oysters that may have been considered by the Commission in the two of HIOC's CDPs that authorize the cultivation of unspecified types of oysters (CDP Nos. 2-84-2 and 1-94-55). It

Addendum to Staff Report for CDP Amendment Nos. 2-81-40-A1, 2-84-2-A1, 2-84-10-A1 and 1-94-55-A1 (Hog Island Oyster Company)

is difficult to know for certain because both of these CDPs simply refer generally to the cultivation of “oysters” without describing the particular species of oyster.

Corrected text to be included in the final paragraph on page 57:

Assuming that these CDPs authorized the same oyster species described in the original lease documents, the only types of shellfish HIOC is proposing to cultivate that are not already authorized for use by at least one of its CDPs are the non-native Kumamoto oyster and Mediterranean mussel and the native Olympia oyster ~~and California mussel~~. As previously noted, the Olympia oyster ~~and California mussel~~ are is a species native to and present within many of California’s marine ecosystems are will therefore not be discussed further. Potential adverse impacts to coastal resources associated with cultivation of the Kumamoto oyster and Mediterranean mussel are further discussed below.

Additional text to be included prior to the first paragraph on page 57:

Mediterranean mussels

Similar to the Pacific oyster, this is a species that is not native to California that has been brought here and many other places throughout the world for aquaculture. In California, the Mediterranean mussel has already become well established and extremely abundant in the wild. Surveys by Suchanek et al. (1997) demonstrate that it is now among the most abundant mussel species between Marin County and San Diego, and research by Geller (1999) suggests that since the 1900s, the Mediterranean mussel may have completely replaced and/or hybridized with the native blue mussel (*Mytilus trossulus*) between Monterey Bay and San Diego.

Given the existing abundance of this species throughout both the project area and the wider California coastline, the proposed cultivation efforts by HIOC would have an insignificant contribution to the continued presence of the species in the area. The proposed location of HIOC’s mussel cultivation areas (subtidal portions of leases M-430-10, M-430-12, and M-430-15) does not introduce a source of reproductive material to current systems and larval transport pathways that are not currently available to the species. Several existing aquaculture leases in Tomales Bay already include Mediterranean mussels as an approved species (including HIOC’s lease M-430-11). The water column at the project site is therefore likely to already contain Mediterranean mussel larvae from both wild and cultivated populations and the proposed project is therefore unlikely to result in the release of reproductive material for this species in an area in which none currently exists.

Exhibits

The following Exhibit 6 would be included with the staff report and referenced in the Table of Contents.

Exhibit 6

On the following figures, the results of the National Marine Sanctuary's 2017 eelgrass survey are indicated in green, the approximate boundaries of cultivation beds are shown in white and existing cultivation gear, structures, and equipment is shown in the underlying aerial photograph.

Existing Cultivation Gear and Eelgrass on Leases M-430-10 and M-430-11



Existing Floating Cultivation Gear and Eelgrass on Lease M-430-12



Existing Overlapped Racks and Eelgrass on Lease M-430-12

