

State of California
Department of Fish and Wildlife

Memorandum

Date: November ²⁰10, 2014

To: Sonke Mastrup
Executive Director
Fish and Game Commission

From: Charlton H. Bonham
Director



Subject: Consent Calendar Item for December 3, 2014, Fish and Game Commission Meeting Re: Request by Cove Mussel Company to Sublease a Portion of State Water Bottom Lease M-430-06 to Mr. Christopher Starbird in Tomales Bay

The Department of Fish and Wildlife (Department) is providing the following comments in regard to a request by Mr. Scott Zahl, Cove Mussel Company, for Fish and Game Commission (Commission) authorization to sublease state water bottom lease M-430-06 to Mr. Christopher Starbird. The existing lease, held by Cove Mussel Company encompasses 10 acres of state water bottoms in Tomales Bay. Mr. Starbird is requesting to sublease one acre near the west boundary of state water bottom lease M-430-06 (see attached map).

Mr. Starbird is proposing to grow Pacific oysters and European flat oysters within the sublease area using floating rafts. The proposed project would install six rafts measuring at total length of 330 feet by 145 feet wide. There are no eelgrass beds in the vicinity of the proposed project (see attached map); thus no damage to this resource would accrue from the anchoring or from shading by the oyster rafts. In addition, the project proposes to install bird and seal exclusion devices to prevent interaction with these species. The project has been reviewed by the Marine Region's Environmental Review and Water Quality Project.

All of Mr. Starbird's proposed activities, including species and culture methods, are entirely consistent with the provisions of the existing lease held by Cove Mussel Company. For this reason, the Department recommends that the Commission approve the request to sublease one acre of state water bottom lease M-430-06 to Mr. Christopher Starbird.

Should you have further questions or need additional information, please contact Dr. Craig Shuman, Regional Manager of the Department's Marine Region at (805) 568-1246.

Attachments

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cc: Department of Fish and Wildlife

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Sublease of State Water Bottoms Lease (M-430-06) in Tomales Bay, Marin County, to
Starbird Mariculture

Description of Proposed Project

Lease M-430-06, located on the attached map, is near Marconi Point on the east side of Tomales Bay. The main lease, comprising 10 acres, is for the purpose of cultivating Pacific oysters (*Crassostrea gigas*), European flat oysters (*Ostrea edulis*), and bay mussels (*Mytilus edulis*). Approved culture methods include racks, trays, buoyed long lines, and rafts.

The sublease area would measure approximately 145 feet wide by 330 feet long, totaling one acre. The proposed sublease would be used to produce Pacific and European flat oysters in suspension using rafts.

Each raft would consist of aluminum channel that is 8 inches wide with a dimension of 24 feet long by 8 feet wide (Figure 1). Floats measuring 4 feet by 8 feet are secured to each end of the raft with bolts. Three rafts are secured together (Figure 2) by a 10 foot long chain (3/8 in.), extending the entire three raft set to 92 feet long by 8 feet wide. The profile of the rafts is approximately 8-12 inches above the surface of the water. The proposed project would install two sets of rafts. The ends of each set would be secured to the substrate using a 300 lb. Danforth anchor. The anchor line would consist of 3/8 in. chain and would extend 100 feet to the anchor weight (Figure 3).

Each raft consists of stacks of trays that are suspended using 0.5 inch nylon rope from the aluminum frame approximately 4 feet below the surface. Each raft is capable of holding 20 stacks that are made up of 6 trays each for a total of 120 trays per raft. The proposed project would install six rafts (in two sets of three) consisting of 720 trays total.

The depth of the sublease area ranges between approximately 12 to 18 feet at mean low water. There are no eelgrass beds in the vicinity of the proposed project; thus no damage to this resource would accrue from the anchoring or from shading by the oyster rafts. The project proposes to outfit each raft with a 6 foot Bird Spider® that have proven effective at keeping birds and seals off boats and similar rafts (Figure 4), thereby reducing the likelihood of birds attempting to roost on the floating structures or seals attempting to haul out on them.



Figure 1. Aluminum raft frame.



Figure 2. Photo of a set of three rafts chained together.

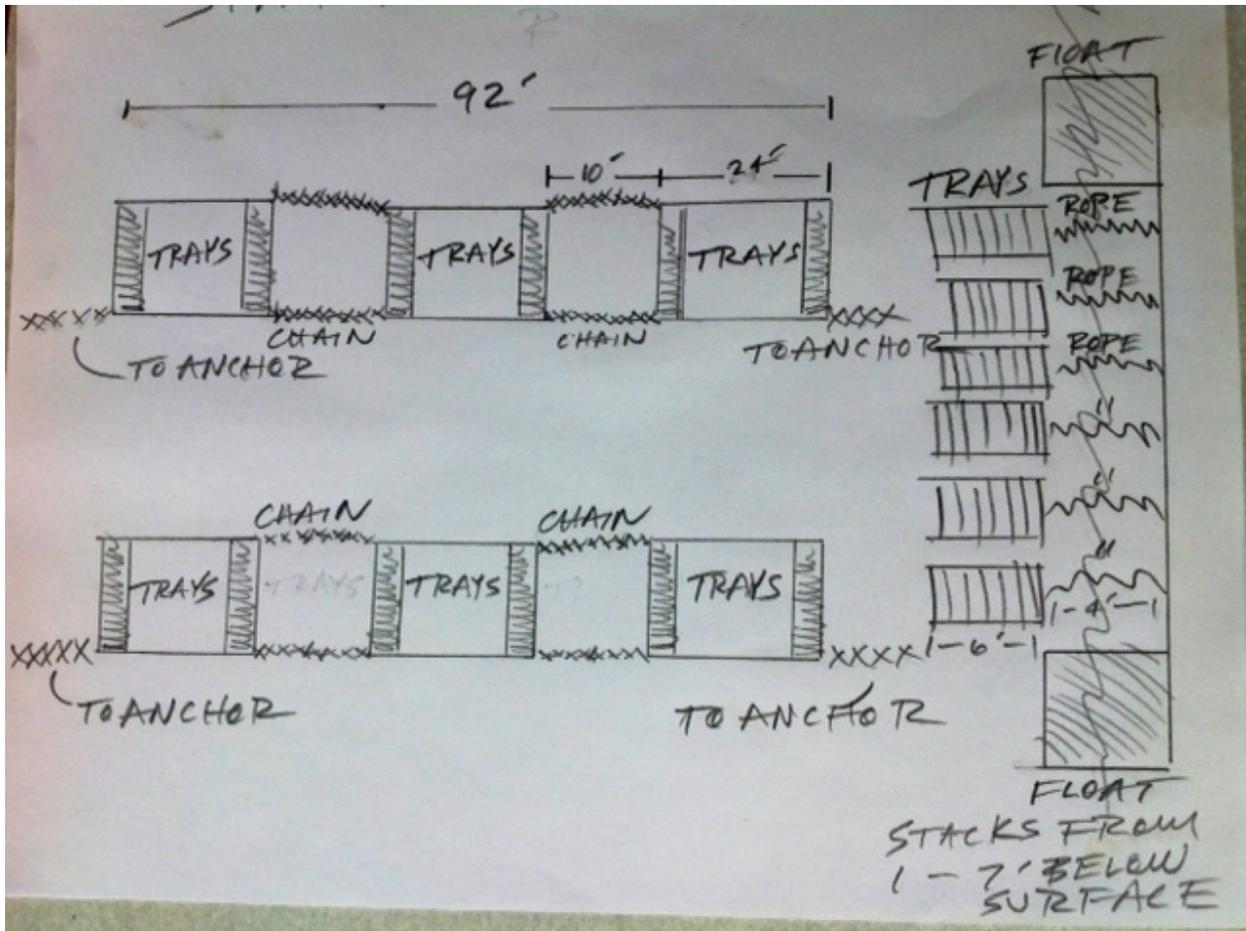


Figure 3. Schematic of raft design.

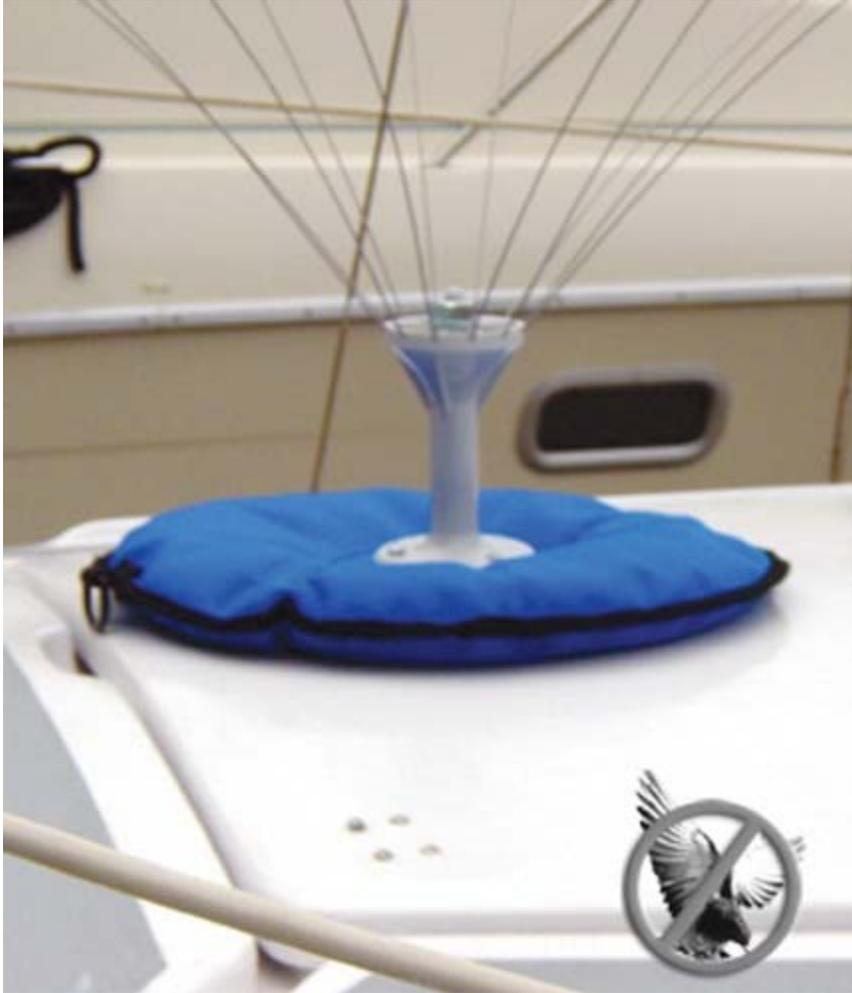


Figure 4. Bird Spider® similar to those that will be installed on the floating rafts.

State Water Bottom Lease M-430-06
Tomales Bay, Marin County, CA



0 0.125 0.25 0.5 Miles

Map prepared by
CA Dept. Fish and Game
30 January 2012

Proposed Sublease on State Water Bottom Lease
M-430-06 (Cove Mussel Company)
Tomales Bay, CA



Legend

- proposed sublease corners
- proposed sublease area
- ▨ 2013 Eelgrass Habitat

