



July 13, 2017

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California Fish and Game Commission  
Attention: Marine Resources Committee  
1416 Ninth Street, Room 1320  
Sacramento, CA 95814  
*Via electronic mail: [fgc@fgc.ca.gov](mailto:fgc@fgc.ca.gov)*

Re: EAC Comments re. marine state water bottom leases for purposes of aquaculture, Marine Resources Committee Agenda Item #7A

Dear Commissioners:

On July 7, 2017, the Environmental Action Committee of West Marin (EAC) submitted comments on Agenda Item #7 for the July 20, 2017 Marine Resources Committee meeting. EAC submits these additional comments as a supplement in advance of the July 17, 2017 Shellfish Aquaculture Best Management Practices meeting and the July 20, 2017 Marine Resources Committee meeting.

As discussed in our July 7, 2017 letter regarding Agenda Item 7A, EAC is aware that multiple drafts of best management practices (BMPs) have been presented to the Commission by EAC, the aquaculture industry, and Richard James, many of which are in the public record. Since July 7, 2017, EAC has developed a revised proposed BMP list, attached hereto as Exhibit 1. We have discussed this BMP list with Hog Island Oyster Company and have reached out to other shellfish growers, and we have been able to find common ground in some areas. However, disagreement still remains on other areas, and we plan to continue these discussions.

An additional comment that we would like to raise regarding enforcement of BMPs and marine debris issues is who does a concerned citizen notify if they become aware of a marine debris or other aquaculture issue? This would be helpful information to present at the July 17, 2017 meeting.

Thank you for your work on this important issue and your consideration of these supplemental comments. We hope that Tomales Bay aquaculture can be a leader in the industry for sustainable practices.

Respectfully,

A handwritten signature in black ink, appearing to read 'Ashley Eagle-Gibbs', written in a cursive style.

Ashley Eagle-Gibbs  
Conservation Director

cc:

Susan Ashcraft, Marine Advisor, Fish and Game Commission  
Kirsten Ramey, Marine Aquaculture Coordinator, Department of Fish & Wildlife  
Randy Lovell, State Aquaculture Coordinator, Department of Fish & Wildlife  
John Finger, Hog Island Oyster Company  
Erik Schlagenhauf, Hog Island Oyster Company



PROPOSED BEST PRACTICES REGARDING MARINE DEBRIS FOR  
TOMALES BAY SHELLFISH FARMERS

Once adopted, the below list of proposed best management practices (BMPs) shall be mandatory and legally binding for all aquaculture lessees. The Fish and Wildlife Department and/or the Fish and Game Commission shall include enforcement provisions for instances of lessee non-compliance with the BMPs. Third party inspections shall take place on all lease sites on an annual basis (at a minimum) to ensure compliance with the following BMPs and to suggest potential improvements.<sup>1</sup> Ideally, inspections shall occur at least bi-annually before and after the winter storm season. The finalized and adopted BMPs shall be reviewed and revised on a regular basis, as technology improves (at least every 10 years).

1. Growers<sup>2</sup> shall implement a written training program and processes for their staff<sup>3</sup>, which shall include regular staff education on reducing environmental impacts, practicing environmental stewardship, and marine debris reduction practices, with the goal of marine debris elimination. Growers may be able to partner with other local organizations and agencies regarding implementation of this training program.
2. All staff shall be trained to look for and remove or secure any loose culture gear on or near growing leases on a regular basis.
3. Staff and contractors shall not litter, as littering is illegal.
4. Leases and surrounding areas shall be patrolled for lost and broken gear monthly.<sup>4</sup> Following high winds and storm events, patrols shall occur as quickly as reasonably possible or within two weeks.
5. Growers shall organize or participate in quarterly bay clean ups, which include walking the bay shoreline and wetlands, in order to get to hard to reach areas. The volume of all debris collected, including non-shellfish related debris, shall be recorded and documented, with the goal being to continually reduce that volume.
6. Growers will aim to work with other coastal clean-up people and/or local organizations to coordinate quarterly bay wide clean-up efforts. All trash shall be collected (including non-shellfish items) at all times.
7. A monthly grower self-monitoring and inspection program shall be established to ensure BMP compliance. This program shall include monitoring and recording of marine debris

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<sup>1</sup> The Department of Fish and Wildlife is an appropriate entity to conduct these inspections.

<sup>2</sup> The term "Growers" is defined to include aquaculture farmers, growers, and their staff.

<sup>3</sup> The term "Staff" is defined to include all contractors, employees, volunteers, workers, personnel, owners, and operators of each aquaculture lease(s).

<sup>4</sup> For intertidal leases, patrols shall occur at both high and low tides to ensure gear buried in the mud is promptly collected.

collected (including date, time, location, and grower responsible where possible), as well as recording of the dates of monthly self-lease inspections and education trainings. The goal of this self-monitoring program will be to increase the percentage of recoverability and decrease the volume of lost gear and debris.

8. Growers shall strive to continually improve gear, so that breakage and scattering of debris are minimized. The quest being for zero lost gear.
9. Growers shall strive to avoid the use of single-use materials.<sup>5</sup> Growers shall minimize waste generation, practicing the principles of reduction, re-use, recycling, and recovery. Growers shall purchase materials with a long life span, preferably re-usable, but at least recyclable.<sup>6</sup>
10. Growers shall strive to phase out the use of plastic wrapped blue foam floats and/or floats that are easily degraded by ultraviolet rays or pecked by birds in search of food.
11. Growers shall secure all buoys and/or floats and floating gear properly in order to minimize and ideally eliminate lost gear.
12. When tossing out loose bags or bundles of lightweight seed bags, growers shall ensure that all bags are either heavy enough to not to drift away<sup>7</sup> or are secured or anchored to prevent drifting or movement. All loose bags that might drift shall be secured as soon as possible, but at a minimum within 2 weeks of being tossed out.
13. Growers shall avoid leaving tools, loose gear, and construction materials on leases and surrounding areas for long periods of time (i.e. longer than 1 week).<sup>8</sup> All materials staged on leases shall be kept neat, and secured, to prevent movement and/or burial.
14. If a culture method is being discontinued, all materials (including but not limited to culture structures and other items) shall be promptly removed (within 1 year).
15. A review of lease escrow accounts shall occur on a regular basis (at least annually) to ensure that adequate funds are available to clean up abandoned leases. Growers shall retain the right to perform the clean up of any abandoned leases themselves, so as to not decrease the balance in the escrow account. Grower led clean-ups shall be subject to third party inspections.
16. All gear shall be uniquely and clearly identified with the unique company name and phone number.<sup>9</sup>
17. Care shall be taken to avoid propeller cuts in eelgrass.
18. Annual proof of use forms shall be completed and timely filed with the Department of Fish and Wildlife. *See Exhibit A.* Forms shall be made publicly available.

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<sup>5</sup> i.e. copper wires, zip ties and other single-use materials

<sup>6</sup> i.e. stainless halibut clips or other re-usable and recyclable materials

<sup>7</sup> Growers shall securely tie large groups of non-floating bags together when deploying bags for future securing to anchor lines to ensure the bags do not drift.

<sup>8</sup> Ideally, tools and other equipment should be removed daily after working on lease areas, including: fencepost drivers, gloves, water bottles, PVC pipes, wires, and ropes.

<sup>9</sup> Possible means of uniquely marking gear include: unique colors of bags, wires, PVC pipes, rope, non-toxic buoy paint, and “branding info into gear.”

State of California  
The Resources Agency  
**DEPARTMENT OF FISH AND WILDLIFE**

**ANNUAL PROOF-OF-USE REPORT FOR AQUACULTURE**

Report Period: January 1, \_\_\_\_\_ to December 31, \_\_\_\_\_

Annual verification of planting and harvesting activities on all State water bottom aquaculture leases is required by Title 14, California Code of Regulations, Section 237, and must be submitted to the Department's Marine Region Aquaculture Coordinator on or before February 1 each year, for the preceding year (January 1 - December 31). Failure to submit the required Proof-of-Use report on or before the due date will result in the delinquent lessee being required to appear before the Fish and Game Commission to show cause why the lease should not be declared abandoned.

**Please complete this form and send it with the required attachment to:**

Marine Region Aquaculture Coordinator  
CA Department of Fish and Wildlife  
619 Second Street  
Eureka, CA 95501

Lessee: \_\_\_\_\_ Phone: \_\_\_\_\_

Mailing Address: \_\_\_\_\_ City: \_\_\_\_\_ CA Zip: \_\_\_\_\_

Aquaculture Registration Number: \_\_\_\_\_ Aquaculture Lease Number: \_\_\_\_\_

Number of Acres in Lease: \_\_\_\_\_ Annual Rent: \_\_\_\_\_ Date Paid: \_\_\_\_\_

**Planting Schedule:** Date of each plant, amount (single seed, strings or cases of cultch), species planted

<u>Date</u>	<u>Amount</u>	<u>Species</u>
Example: 10/5/2006	50,000 single seed	Pacific oyster
_____	_____	_____
_____	_____	_____
_____	_____	_____
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_____	_____	_____
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_____	_____	_____
_____	_____	_____

Total No. or Quantity Planted: \_\_\_\_\_

Record of Lease Improvement: (See Planting Map Attached)

Minimum Required Planting -Bottom Culture (10,000 seed/acre): \_\_\_\_\_

Minimum Required Planting -Off Bottom Culture (5,000 seed/acre): \_\_\_\_\_

<u>Type of Planting</u>	<u>No. Cases/Single Seed</u>	<u>Acreage Planting Equivalent</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Total Acres Improved: \_\_\_\_\_

**Production Record:** Harvest to be verified by attaching copies of aquaculture lessee's Aquaculture Monthly Tax Report (FG 60) (month of harvest, quantity harvested, species harvested, i.e., oysters - Pacific, sumino, European flat, eastern, or kumamoto; bay mussels, clams, or scallops)

Minimum Required Production (2,000 oysters/acre): \_\_\_\_\_

<u>Month of Harvest</u>	<u>Species</u>	<u>No. or Quantity Harvested</u>
_____	_____	_____
_____	_____	_____
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_____	_____	_____
_____	_____	_____

Total No. or Quantity Harvested: \_\_\_\_\_

**Narrative Report:** (Progress made on lease during the year, i.e. success or failure in meeting planting and harvesting requirements, problems; if any, for the coming year).

Lessees need to determine annually the cost to clean-up their lease(s). The clean-up estimate will include the cost of labor and supplies for the removal of all materials, growing structures, and any other non-natural debris associated with aquaculture activities. This cost estimate shall be included in the narrative portion of your Proof-of-Use Report for each lease.

(Add supplementary pages as needed)





**SAMPLE PROOF-OF-USE REPORT**

State of California  
The Resources Agency

**DEPARTMENT OF FISH AND WILDLIFE**

**ANNUAL PROOF-OF-USE REPORT FOR AQUACULTURE**

Report Period: January 1, 1996 to December 31, 1996

Annual verification of planting and harvesting activities on all State water bottom aquaculture leases is required by Title 14, California Code of Regulations, Section 237, and must be submitted to the Department's Marine Region Aquaculture Coordinator on or before February 1 each year, for the preceding year (January 1 - December 31). Failure to submit the required Proof-of-Use report on or before the due date will result in the delinquent lessee being required to appear before the Fish and Game Commission to show cause why the lease should not be declared abandoned.

**Please complete this form and send it with the required attachment to:**

Marine Region Aquaculture Coordinator  
CA Department of Fish and Wildlife  
619 Second Street  
Eureka, CA 95501

Lessee: Golden Gate Oyster Company Phone: (707) 763-4100

Mailing Address: 500 Lakeville Street, Suite 3318 City: Petaluma CA Zip: 94952

Aquaculture Registration Number: 150 Aquaculture Lease Number: M-430-01

Number of Acres in Lease: 133 Annual Rent: \$133.00 Date Paid: 3/2/1996

**Planting Schedule:** Date of each plant, amount (single seed, strings or cases of cultch), species planted

<u>Date</u>	<u>Amount</u>	<u>Species</u>
Example: 10/5/2006	50,000 single seed	Pacific oyster
<u>1/5/1996</u>	<u>242,000 single seed</u>	<u>Pacific oyster</u>
<u>4/5/1996</u>	<u>113,000 single seed</u>	<u>Pacific oyster</u>
<u>5/20/1996</u>	<u>350,000 single seed</u>	<u>Bay mussel</u>
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>
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Total No. or Quantity Planted: 705,000 single seed

**SAMPLE PROOF-OF-USE REPORT**

Record of Lease Improvement: (See Planting Map Attached)

Minimum Required Planting -Bottom Culture (10,000 seed/acre): \_\_\_\_\_

Minimum Required Planting -Off Bottom Culture (5,000 seed/acre): \_\_\_\_\_ 665,000 \_\_\_\_\_

<u>Type of Planting</u>	<u>No. Cases/Single Seed</u>	<u>Acreage Planting Equivalent</u>
Stake	350,000 single seed	3
Rack	242,000 single seed	100
Rack	113,000 single seed	5

Total Acres Improved: \_\_\_\_\_ 108 \_\_\_\_\_

Production Record: Harvest to be verified by attaching copies of aquaculture lessee's Aquaculture Monthly Tax Report (FG 60) (month of harvest, quantity harvested, species harvested, i.e., oysters - Pacific, sumino, European flat, eastern, or kumamoto; bay mussels, clams, or scallops)

Minimum Required Production (2,000 oysters/acre): \_\_\_\_\_ 266,000 oysters and/or mussels \_\_\_\_\_

<u>Month of Harvest</u>	<u>Species</u>	<u>No. or Quantity Harvested</u>
January	Bay mussels (3,000 lbs@20/lb)	60,000
January	Pacific oysters	9,500
February	Pacific oysters	20,000
March	Pacific oysters	10,000
September	Pacific oysters	30,000
October	Pacific oysters	20,000
October	Bay mussels (5,000lbs@20/lb)	100,000
November	Pacific oysters	6,000
December	Pacific oysters	25,000

Total No. or Quantity Harvested: \_\_\_\_\_ 280,500 \_\_\_\_\_

### SAMPLE PROOF-OF-USE REPORT

**Narrative Report:** (Progress made on lease during the year, i.e. success or failure in meeting planting and harvesting requirements, problems; if any, for the coming year).

Lessees need to determine annually the cost to clean-up their lease(s). The clean-up estimate will include the cost of labor and supplies for the removal of all materials, growing structures, and any other non-natural debris associated with aquaculture activities. This cost estimate shall be included in the narrative portion of your Proof-of-Use Report for each lease.

*During the period commencing January 1, 1996 and ending December 31, 1996, Golden Gate Oyster Company purchased 680 strings of Pacific oyster seed in Willapa Bay, Washington; 210 bags of Pacific oyster cultch from Coos Bay, Oregon; and caught 50,000 wild bay mussel spat on our own setting medium in Tomales Bay. All areas planted and the types of plantings made are shown on the enclosed planting map.*

*During the period January 1, 1996 to December 31, 1996, a total of 280,500 oysters and mussels were harvested from our lease M-430-01 (2,109 shellfish per acre). This figure represents a 25% increase in production over our 1994-95 harvest. Approximately 57% of our production this year was made up of bay mussels. However, we do not know if our mussel production will be as great next year, as we have not been able to obtain a sufficient quantity of mussel seed this year to sustain the same level of production.*

*Survival of our oyster stock has been good except that some loss, due to siltation, was observed in our culture area last spring during a period of heavy rainfall. Growth rate of stake cultured oysters on the east end of the lease was less than anticipated, as the stakes appear to have been set too close together. We will continue to experiment with our stake culture to determine the optimum distance between stakes that will promote the most rapid rate of growth and survival.*

*We plan to contract with Ostrea Mariculture in Eureka this year for our oyster seed, instead of bringing seed in from out-of-state. We will also try to locate an additional source of mussel seed to augment our own seed collecting effort.*

*Currently there are nine longlines in production. Golden Gate Oyster Company estimates around \$300 to remove one longline for a total clean-up estimate for lease M-430-01 to be \$2700.*

(Add supplementary pages as needed)