



California Fish and Game Commission
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Sacramento, CA 95814

STATE OF CALIFORNIA
EDMUND G. BROWN JR., GOVERNOR

NATURAL RESOURCES AGENCY



California Department of Fish and Wildlife
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Shellfish Aquaculture Best Management Practices Stakeholder Discussion May 29, 2018

Santa Barbara Harbor – Marine Center Classroom
132-A Harbor Way, Santa Barbara, CA

Meeting Summary

Meeting Goals

- Communicate California Fish and Game Commission (Commission) intent to consider adopting regulations related to shellfish aquaculture best management practices (BMPs) for state water bottom leases issued by the Commission for purposes of aquaculture (aquaculture leases)
 - Understand the state's rulemaking process and opportunities for public engagement on aquaculture leases
 - Discuss and offer feedback on categories of standard practices and management considerations to address in BMP plans specific to each shellfish growing site
1. **Welcome** – Commission Sea Grant State Fellow Leslie Hart provided a welcome, covered ground rules, and invited all staff and participants to introduce themselves. The following Commission and California Department of Fish and Wildlife (Department) staff and invited speakers were present:
 - Commission Staff**

Susan Ashcraft	Marine Advisor
Leslie Hart	Sea Grant State Fellow
 - Department Staff**

Randy Lovell	State Aquaculture Coordinator
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 - Invited Speakers**

Phoebe Racine	University of California, Santa Barbara (UCSB) Ph.D student
Josh Graybiel	UCSB master's candidate
Sutara Nitenson	UCSB undergraduate student
 2. **Overview of background and milestones** – Presented by Randy Lovell
The impetus for this public meeting, which is jointly convened by Department and Commission staff, originated from community members who raised concerns to the

Commission on the practices of certain current and former aquaculture leaseholders in Tomales Bay, leading to trash and plastic pollution in the bay. Developing good practices in aquaculture fits into a larger picture of stewardship in general, and the purpose of this meeting is to look at the practices of aquaculture leaseholders to determine what criteria need to be considered in a lease BMP plan to promote greater stewardship of the public trust resource. The topic is focused on BMPs for shellfish aquaculture conducted on state water bottom leases issued by the Commission.

The Commission directed staff to begin to identify categories of BMPs that have application to California shellfish farms; staff is working to identify potential core elements or categories of BMPs for that effort, and today's meeting is the second of two public meetings hosted by Department and Commission staff on the topic (the first being held in Marshall, Tomales Bay area, in July 2017).

The focus of the conversation is on leases under the jurisdiction of the Commission and how to best match the strength of regulations with responsible commitment from leaseholders to eliminate contributions to the problem of plastic pollution in the ocean, as well as other areas of responsible management.

The use and application of BMPs is a concept that strives to be nimble, effective, and achieves commitment from both leaseholders and public stakeholders through an adaptive and transparent management approach. The right solution will find a balance between social and economic importance of shellfish aquaculture (i.e., locally grown seafood, working waterfronts, and economics stimulus) and protecting the public trust resource.

3. Staff overview of the regulatory approach for BMPs and State rulemaking process – Presented by Susan Ashcraft

Susan Ashcraft provided an overview of the authority of the Commission to issue state water bottom leases for purposes of aquaculture on all state water bottoms in California, except in Humboldt Bay. The terms of each lease are mandated by the Commission and agreed upon by the lessee before a lease is executed.

The Commission decided to incorporate BMP language into a regulation instead of into the language of the leases themselves in order to allow for implementation of the requirements across all current lease holders. If BMP language was inserted into leases, it would only be reviewed by the Commission when a lease was up for renewal (in the case of current leases, only once every 20-25 years). If a new regulation is adopted to implement BMPs, the regulation would apply to all growers, and would allow for more regular reviews by the Commission.

The Commission recognizes that while some BMPs will broadly apply to all growers, in some instances BMPs will need to be individualized based on the unique conditions on each lease. Therefore, rather than define a standardized set of BMPs, a regulation would specify what categories of BMPs must be included in BMP plans. The regulation would require that growers develop individual BMP plans specialized for their individual lease area(s) that address all BMP categories defined in regulation for approval by the Commission. An overview of the outcomes of the Tomales Bay public meeting in July 2017 was provided, as well as a brief outline of the Commission's rulemaking process, including opportunities for public input.

4. Group Discussion on BMPs

(A) Discuss factors to consider when developing BMP plans

Leslie Hart introduced Phoebe Racine and two other students from the UCSB Bren School of Environmental Science & Management, and invited them to describe the work their group is conducting this year. Under an on-campus grant, the group is funded to review and recommend BMPs for offshore shellfish aquaculture practices in the Santa Barbara Channel. The group's efforts are meant to provide assistance to proposed aquaculture project(s) that may come forward within the Santa Barbara Channel (including federal water jurisdictions), support state rulemaking efforts where relevant, and inform related policies in both instances. The group has reached out to a number of people across agencies and communities, conducted stakeholder interviews, and performed a literature review to identify and compare possible BMP categories. Some identified BMP categories include water quality, site selection, disease prevention and containment, and substrate impact. The group displayed a preliminary website meant to showcase its findings and recommendations; the website is expected to interlink to other relevant websites, including state online resources.

Participants asked questions and shared additional perspectives. Shellfish farmers urged Commission and Department staff to avoid BMPs for activities already addressed under separate requirements (other laws or governance of other agencies).

(B) Group discussion about BMP categories

A variety of ideas were brainstormed by stakeholders, reflecting concerns or suggested areas of focus for BMPs, including:

Concerns

- Displacement of fisherman jobs
- Interference with historical fishing grounds based on siting
- Pollution/clean-up of aquaculture farms
- Competition between California shellfish farmers and imported aquaculture products
- Capacity of the market/economics
- Predator management
- Monitoring/compliance/enforcement
 - Cost of compliance
 - Redundant compliance pathways

Site Selection

- Avoid historical fishing grounds

Material, Operations and Maintenance

- Pollution/clean-up of aquaculture farms
- Establish effective enforcement for clean-up
- Clean-up fund
- Biosecurity

- Frequency of gear updates and maintenance

General

- Adaptive management
- Standards for health, genetics and diversity for seed stock
- Recognize compliance jurisdictions and overlap
- Spatial capacity

(C) Partnership Opportunities

A brief discussion was held about opportunities for growers and researchers to partner together, with emphasis on the UCSB project.

In addition, shellfish growers in the room highlighted a concern related to the need for research and development of new growing methods or species; not only would these offer economic development, but assess whether new practices could lead to better practices before going through lease and permit amendment processes that also require California Environmental Quality Act review. A suggestion was made to develop a permitting mechanism to allow for the conduct of small-scale experiments by lease-holding growers and researchers focusing on issues such as:

- Siting
- Practices
- Species
- Optimization
- Non-natives

5. Next steps

Staff highlighted next steps and opportunities for more public involvement. The Commission's Marine Resources Committee will discuss progress on the BMPs project during its July 17 meeting in San Clemente. Once draft categories and BMP plan requirements are drafted, there will be an additional public review opportunity before the Commission schedules the rulemaking cycle. Staff encouraged participants to reach out to any of the staff present with further thoughts and input.

Adjourn