

2010 Gulf and Caribbean Fisheries Institute MEETING

San Juan, Puerto Rico



Development of Sustainable Aquaculture Practices for Marine Cage Culture Operations in the U.S. Caribbean

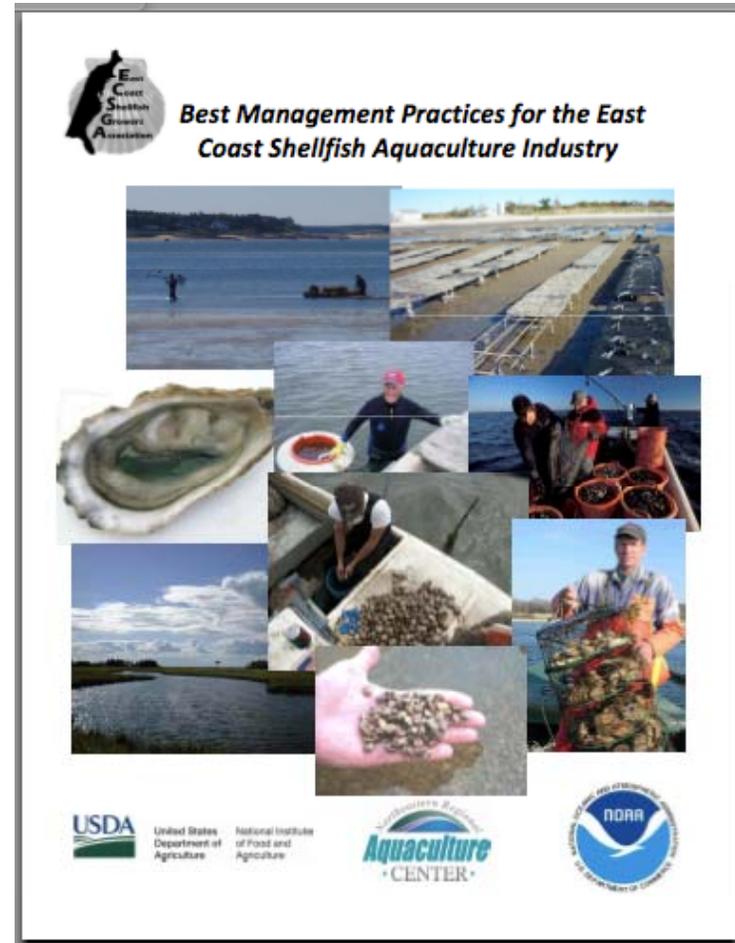


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Purpose

Regulators, scientists and those with industry experience meet to:

1. Identify scientific and regulatory needs for permitting marine cage culture operations
1. Create list of key elements for BMPs



Coral Reefs

- BMPs for the sustainable practice of mariculture in 9 nautical miles jurisdictional waters of PR--> *special emphasis on offsetting any potential impacts of marine cage culture operations sited near coral reef ecosystems*
- Coral Reef Taskforce Meeting (Nov. 2009)
- Coral Bleaching- use DNER Ranger Corps Command Center hotline for reporting coral bleaching events observed by users as increased according to monitoring done by Coral Reef Watch (CRW)

Economic Potential

- Industry as job source in PR, which faces an unemployment rate of 16.1% (US Bureau of Labor Statistics, Aug 2010)
- Food security and potential revenue lost- More than 97% of fisheries products in Puerto Rico are imported, which represents a loss of around \$185,587,645 to the local economy (Cortés en Curbelo & González, 2005 data).
- We are left with the question of how to stimulate the growth of open ocean cage culture industry while simultaneously protecting the environment?

Marine Cage Culture Operations in PR

To date few attempts:

- Snapperfarm in Culebra
- Borinquen Aquaculture
open ocean lobster cages



Marine Cage Culture Operations in PR

- Possible source of employment for displaced commercial fisherman. Caveat- irregular schedules vs. steady work commitment
- MOU with local fisherman- Snapperfarm with Culebra Association of Fisherman agreeing to employ 80% of locals during the day-to-day operation, commitment to perform educational events for the community, among others to assure cooperation

Source: *Environmental and Social Impact of Sustainable Offshore Cage Culture Production in Puerto Rican Waters* by: Dallas E. Alston, Alexis Cabarcas, Jorge Capella, Daniel D. Benetti, Sarah Keene-Meltzoff, Janet Bonilla, and Ricardo Cortés. NOAA grant. 2005.

“Knowledgeable residents near the project had a positive attitude concerning the open-aquaculture project; however, 55% of the members of the general community of Culebra did not have general or specific knowledge about the open-ocean aquaculture project and did not have specific information about the advantages or disadvantages in relation to the impact on economy, fishing, fishermen, or community life. It is important to increase their knowledge by developing an informative program.”

Marine Cage Culture Operations in PR

- Currently there is local interest in the
- Protocols and guidelines must be developed and implemented prior to development, in order to help to ensure the sustainable expansion of marine cage culture in U.S. Caribbean

Thanks!

Your input and expertise is needed. The sessions and panels during this workshop are designed to facilitate information exchange- a critical step in the development of regulatory protocols and BMPs for marine cage culture operations.

We appreciate your willingness to participate in this workshop and look forward to working with all of you in this effort.