

Gulf of Mexico Generic Aquaculture Amendment Update October 17, 2007

The following provides a summary of interdisciplinary planning (IPT) team changes made to the Generic Aquaculture Amendment since the August 2007 Gulf of Mexico Fishery Management Council (Council) meeting. Also included is a list of revisions and substantive comments that still need to be addressed by the IPT. Lastly, suggested revisions to the amendment are provided for Council discussion and consideration.

The public hearing draft has been reviewed by the IPT, the Southeast Regional Office's National Environmental Protection Act coordinator, and NMFS' regulatory writers. Additionally, the amendment was provided to NOAA General Counsel on August 9, 2007, for review. A revised version of the amendment was provided to NOAA General Counsel for review on October 11, 2007. The most recent draft of the amendment was completed on October 18, 2007.

IPT changes to the Amendment:

- Additional rationale was provided in the Purpose and Need pertaining to the objectives of each of the Council's fishery management plans and the ten National standards for fishery conservation and management (see pages 13-15).
- In Action 3, Alternative 3(e)(ix) conflicted with Alternative 3(e)(v). Alternative 3(e)(v) stated: "If harvesting equipment is similar to commercial fishing gear the operational permit will specify the conditions under which such gear may be deployed, retrieved, and stored" Alternative 3(e)(ix) stated: "Any type of fishing gear or the possession of any wild fish aboard any marine aquaculture facilities and/or its transport and service vessels, vehicles, or aircraft are prohibited." Alternative 3(e)(v) was modified as follows: "The aquaculture operational permit shall specify the conditions under which aquaculture harvesting gear or any type of fishing equipment shall be deployed, retrieved, and stored." Alternative 3(e)(ix) was modified to read as follows: "The possession of any wild fish aboard any marine aquaculture facilities and its transport and service vessels, vehicles, or aircraft is prohibited." (see page 24)
- In Action 8, Alternative 2(d)(ii) was determined to be redundant with Alternative 2(c). Alternative 2(c) stated: "Report all incidents of any disease or parasites impacting greater than 10% of the swimming stock immediately after diagnosis to NOAA Fisheries Service with percent of swimming stock infected; a plan of action for managing the disease outbreak with treatment and consultations with marine fish disease specialists." Alternative 8(d)(ii) stated: "Notify NOAA Fisheries Service of any of the following events: (ii) a reportable disease outbreak as defined by NOAA Fisheries Service (i.e., 10% of the swimming stock). Alternative 2(d)(ii) was deleted and replaced with the language in 2(c). (see page 52)
- The discussion of National Standards was revised and expanded (pages 182-188)
- Discussions of Magnuson-Stevens Act National Standards were added to each of the actions and alternatives described in Sections 4 and 6.

- Sections 6.11 through 6.17 were added to the amendment. The sections include a discussion of mitigation measures, the cumulative effects analysis, and a discussion of significance factors (see pages 188-205).
- Agencies with authority to regulate various siting criteria were corrected in Table 6.7-1 (see pages 167-169).
- Numerous citations included in the document were added to the Reference section (see pages 268-288) .
- Suggested revisions provided by the U.S. Fish and Wildlife Service were added throughout the document.

Substantive comments and changes still needing to be addressed:

- Social and economic sections throughout the amendment still need to be revised. These revisions are based on NMFS regional office economists' comments discussed during a meeting with the contractors in late-May 2007. A conference call between SERO and Council staff and the contractors is scheduled for the week of October 22-26 to provide an update on what changes have been made and when revisions will be completed.
- The NOAA NEPA coordinator provided the following comments, which have yet to be addressed:
 - A more comprehensive analysis of the adverse environmental effects which cannot be avoided should be included in the amendment. This analysis is started on pages 200-201, but needs to be much more comprehensive. Some considerations for this analysis could include an in depth analysis of aquaculture species, locations of aquaculture operations, and densities of aquaculture systems.
 - The analysis of CEQ's ten significance factors is generally adequate (pp. 203-205), but needs to be expanded to include those additional criteria in NAO 216-6, which were identified via email on August 13, 2007.
 - There needs to be a more thorough analysis of the reasonable alternatives not within the jurisdiction of the lead agency. The main analysis in this regard could be the National Offshore Aquaculture Act of 2007.
 - There needs to be a more thorough analysis of the possible conflicts/controversy involved should the proposed action be implemented. User conflicts are briefly discussed throughout the document and on page 204, but more analysis is needed.
 - Ensure that all required permits are listed and analyzed, including permits issued by other agencies such as the Environmental Protection Agency and Army Corps of Engineers
 - The Summary still needs to stress major conclusions in the environmental impact statement, areas of controversy, and issues to be resolved including the choice among alternatives.
 - An environmental Justice analysis (EO 12898) is currently not included in the amendment.

- Liquefied natural gas (LNG) development in the Gulf of Mexico is increasing to help meet the growing national energy demand. This development includes deepwater port operations, gravity based structures, LNG carrier ships, pipelines, and land-based terminals. There needs to be a thorough analysis of the interactions between aquaculture operations and the LNG activities as they relate to water quality, biological resources, socioeconomics, transportation, and recreation.
 - The EIS shall state how alternatives considered in it and decisions based on it will or will not achieve the requirements of sections 101 and 102(1) of NEPA and other environmental laws and policies.
- Some citations still need to be added to the References section (see pages 268-288).
 - Action 3, Alternative 3(c) requires fin clips from broodstock to be submitted. The IPT is currently checking with OLE regarding who and where these fin clips will be submitted. OLE has also been asked to advice on whether or not specific procedures for submitting fin clips need to be described in regulations. (see page 24)
 - The description of Currently Operating and Proposed Offshore Aquaculture Facilities in the U.S. on pages 8-11 needs to be updated with more current information.
 - The Index needs to be completed (see page 293)
 - NOAA General Counsel is still investigating whether NOAA Fisheries Service has the authority to require an assurance bond, as specified in Action 3, Alternative 3(a). (see page 24)
 - During the July 2007 Standing Scientific and Statistical Committee meeting it was suggested that the figures be updated with more recent information on hard bottom habitat, artificial reefs, and oil and gas platforms. Jeff Rester is in the process of updating these figures with more recent information.

Suggested changes to alternatives:

- Action 3, Alternative 3(c) states NOAA OLE must be notified of the time, date, and port of landing at least 3 hours prior to landing. Alternative 3(e)(vi) states that a “permittee must notify NOAA Fisheries Service Office for Law Enforcement (OLE) prior to removal and transport of aquaculture fish from the facility to shore.” (see page 24).

Recommendation: To increase enforcement efficiency and effectiveness, the IPT suggests a 3-hour call in notification prior to removal and transport of cultured fish.

- Action 3, Alternative 3(e)(iii) states an “applicant must agree to maintain a locating device on at least two corners of each pen or enclosure and immediately notify NOAA Fisheries Service in the event the pen or any retention aquaculture enclosure is lost at sea.” (see page 24)

Recommendation: There is no requirement for facilities to mark aquaculture systems (e.g., cages, net pens) with buoys, although this may be required for navigational purposes by the U.S. Coast Guard. The IPT suggests the Council discuss whether or not to require aquaculture systems to be marked. NOAA Fisheries Service has authority to specify marking requirements for fishing gear, such as invertebrate traps.

- Action 3, Alternatives 3 (e)(i) and (e)(vi) both say to notify NMFS OLE, for changes in company/vessel information (e)(i), and in the case of removal or transport of harvest from a facility (e)(iv) (see page 24).

Recommendation: The IPT suggests deleting the reference to law enforcement in both alternatives.

- Part 622 of the Code of Federal Regulations includes regulations on aquacultured live rock. Aquacultured live rock is mentioned in the Generic Aquaculture amendment in Section 2.2 Management History, however, it is not addressed in terms of how to incorporate the current regulations with the new offshore aquaculture regulations.

Recommendation: The IPT recommends providing an exemption for live rock in Action 4 (see page 35).

- Action 8, Alternative states: “Report all incidents of any disease or parasites impacting greater than 10 percent of the swimming stock immediately after diagnosis to NOAA Fisheries Service. Information reported would include percent of swimming stock infected; a plan of action for managing the disease outbreak with treatment and consultations with marine fish disease specialists.” (see page 52)

Recommendation: Swimming stock does not refer to sessile organisms, such as oysters, mussels, clams, corals, etc. The IPT suggests replacing the term “swimming stock” with “cultured organisms.”

- Table 6.7.1 includes a detailed list of siting criteria that may be considered by NOAA Fisheries Service when siting a facility (see pages 167-169). The following table is offered as an alternative in an effort to simplify the siting criteria that would be used by NOAA Fisheries Service to site an aquaculture facility.

Alternate Table 6.7-1

Criterion	Agency	Is this prohibition required by existing regulations?
Dissolved oxygen consistently high enough to sustain life.	EPA	No
Current sufficient to remove waste materials but not high enough to damage structures	EPA, NOAA Fisheries Service, Army Corps of Engineers (Corps)	Yes
Water depth and clearance sufficient for proposed system	Corps, NOAA Fisheries Service	No
Sediment type meets the mooring needs for proposed system	Corps, NOAA Fisheries Service	No
Not located in, within a certain distance of, or “up current” from a(n):		
dredge spoil disposal area	Corps	Yes
oil or gas platform, unless owner agrees, but the Energy Policy Act of 2005 specifically addresses aquaculture on oil and gas platforms, Regulations are being developed by MMS	Mineral Management Service (MMS)	No
Federally recognized marine reserve, marine protected area, habitat area of particular concern, government or public artificial reefs	National Ocean Service (NOS); NOAA Fisheries Service	No
Ecologically important habitat (e.g., coral reefs, hard bottom)	HCD, NOAA Fisheries Service	No
“No Activity Zones”	MMS, NOAA Fisheries Service	Yes
shipping fairway, navigational channels, federal channels, anchoring areas, lightering area	US Coast Guard (USCG)	Yes
traditionally important fishing area	NOAA Fisheries Service	No
area of frequent harmful algal blooms	EPA, NOAA Fisheries Service	No

Criterion	Agency	Is this prohibition required by existing regulations?
seagrass bed	NOAA Fisheries Service	No
military activity zone	Corps, DOD	Yes
historical path of hurricanes	NOAA Fisheries Service	No
oil pipeline	Corps, MMS	Yes
wind farm	Corps, MMS	Yes, but regulations are being developed which may change this
liquefied natural gas facility or pipeline	Corps, MMS	Yes
Important nursery habitat; known spawning areas	NOAA Fisheries Service	No