

**Gulf of Mexico Fishery Management Council**  
**Mariculture Policy**  
**November 2003**

The Gulf of Mexico Fishery Management Council (Council) defines mariculture as the cultivation of marine plants or animals for food or other purposes. Recognizing that mariculture presents both potential benefits as well as potential negative impacts, it is the policy of the Council to encourage environmentally responsible mariculture; the Council encourages consideration of the following guidelines:

a. Cultured Species:

The Council recommends that genetic stocks native to the Gulf of Mexico and the geographic area in which they would be cultured receive priority as candidate culture species. Non-native species should be used only after thorough investigation has demonstrated no detrimental impacts on native species. The Council opposes use of non-native species in mariculture systems unless demonstrated there would be no detrimental impacts on native species. The Council particularly opposes use of non-native species in open water environments where escapement can occur. The Council opposes the collection of juvenile native species for grow out.

Collection of native wild brood stock should be regulated in order to prevent overfishing cultured species stocks, and provision should be made to aid enforceability of possession, landing, and marketing of fish that would be illegal if wild caught fish.

Strategies should be adopted to minimize the potential that the genetic fitness (including both genetic variation and genetic composition) of wild populations would be diminished by mariculture activities and escapement from mariculture activities.

An invoice should accompany all cultured species through each sales transaction, including transactions at the place of the final sale to the consumer to verify the origin of the cultured species.

b. Habitat:

To ensure that mariculture activities are environmentally responsible, the following considerations should be made with respect to habitat in that:

1. Existing inland and offshore habitats important to marine fisheries should be protected from physical alterations or degradation;
2. A baseline assessment should be conducted as part of the permitting process; and
3. Sensitive areas, including habitat areas of particular concern, should be avoided.

c. Research:

The Council recommends the mariculture industry demonstrate, in part, its stewardship of Gulf waters by:

1. Actively educating its member institutions about necessary regulations and permits;
2. Actively participating in research and monitoring to improve the understanding of mariculture's relationship to coastal and marine ecosystems; and
3. Participating in cooperative research to enhance knowledge of cultured species.

d. Location, Design, and Operation:

Mariculture operations should be located, designed, operated, and monitored to prevent adverse impacts to estuaries, marine habitats and native fishery stocks. Impacts that cannot be prevented must be fully mitigated in-kind.

Conditions should be maintained to sustain healthy, diverse, native biological communities without the production of nuisance, toxic, or oxygen-demanding conditions.

Standard operating procedures should contain methods to prevent escapement, accidental transport, or release of cultured organisms.

Mariculture operations should be conducted in accordance with a management plan that incorporates a routine monitoring program. The plan should be approved prior to the beginning of operations as part of the permitting process and modified as needed in accordance with adaptive management principles and based on the results of the monitoring program.

Mariculture operations should develop an "emergency plan" that covers natural disasters such as tropical storms, floods, and hurricanes.

Ingress and egress of native wild organisms in natural and public waters should not be impeded by physical or water quality barriers.

Mariculture operations in the EEZ should minimize disruption of navigation in natural or public waters.

Mariculture facility locations should avoid areas of high commercial and recreational fishing activities.

Mariculture facilities should avoid or at least minimize conflicts with or restrictions on recreational, for-hire, or commercial fishing activities.

When designing land-based mariculture facilities, settling ponds, man-made wetlands, or other appropriate technologies should be used to allow for suspended solids to settle out, allow the nutrient load to dissipate, and reduce overall discharge velocities prior to being discharged into the receiving water body.

As part of the permit process, measures should be established to deal with intentional or unintentional facility or property abandonment or other environmental liability to ensure that sites can be reclaimed without public expense and with minimal risk of long-term impact.

As part of the permitting process procedures should be established to deal with: removal of damaged equipment from the permitted site; recovery of equipment that may be unintentionally transported from the permitted site; and restoration of habitats that may be damaged by mariculture activities, whether at the permitted site or elsewhere.

Mechanisms should be developed to ensure that mariculture facilities and operations avoid harmful effects to both wild aquatic and terrestrial organisms.

e. Water Quality:

Mariculture facilities should be designed, maintained, and operated in such a manner that avoids impacts to the local environment by utilizing water conservation practices and discharging effluent that protects existing designated use of receiving water and meets applicable state and federal water quality guidelines.

Mariculture facilities should develop, implement, and monitor best management practices to conserve water and improve effluent water quality.

Comprehensive mariculture facility waste management practices should be required to minimize negative impacts of discharge from the facility.

f. Health Management and Disease Control:

Mariculture activities should:

1. Minimize impacts of disease outbreaks if they occur;
2. Create and implement health evaluation programs and policies that prevent the importation or release of disease pathogens or parasites of regulatory concern. These policies should support development and utilization of technologies to identify and control disease organisms;
3. Develop effective disease control, quarantine, and inventory destruction procedures to prevent the spread of disease to public waterways, native species, and other mariculture facilities;

4. Create and implement health management strategies for mariculture organisms in cooperation with states, federal agencies, industry, veterinarians, and scientists; and
5. Use only FDA approved therapeutic and chemical treatments as part of best management practices.

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