

## NEW ENGLAND FISHERY MANAGEMENT COUNCIL AQUACULTURE POLICY

WHEREAS, aquaculture is encompassed within the Magnuson-Stevens Fishery Conservation and Management Act's broad definition of fishing which includes the catching or taking of fish, the harvesting of fish and any other activity or at-sea operations in support of such activity, and

WHEREAS, the NEFMC has an obligation under the Magnuson-Setevens Act to make comment concerning aquaculture projects which may affect fishery habitat; and

WHEREAS, many activities associated with EEZ-based aquaculture cannot be undertaken without modification to certain elements of existing FMP's under the NEFMC's jurisdiction; and

WHEREAS, several federal agencies are involved in reviewing and permitting EEZ-based aquaculture projects although no agency has been delegated lead responsibility for management, and

WHEREAS, the NEFMC has the necessary expertise, experience and statutory authority to effectively address the issues attendant to aquaculture development in the EEZ:

NOW THEREFORE BE IT RESOLVED that the NEFMC recognizes that it has a responsibility to develop management measures that will facilitate EEZ-based aquaculture development, and

BE IT FURTHER RESOLVED that it is the NEFMC's policy to encourage biologically and environmentally sound aquaculture projects and to develop management strategies that maximize opportunities for the aquaculture industry's productive coexistence with the traditional commercial fisheries of the New England region.

ACCORDINGLY, the NEFMC will facilitate the aquaculture permitting process through the following policy objectives:

- (1) The NEFMC will address those issues that are clearly germane to the Council's fishery management role and will work with other federal agencies involved in aquaculture to identify and minimize or eliminate areas of potential overlap.
- (2) The NEFMC will position itself as a point of contact for aquaculture developers, to provide information and federal permit application materials, and to provide recommendations to developers which may help avoid projects or elements of those projects that would otherwise pose conflicts with the Council's management activity.
- (3) The NEFMC will seek advice and guidance from representatives of both the aquaculture and fishing industries, the conservation community and other resource management agencies in formulation of aquaculture management strategies so as to minimize or eliminate the potential for user conflicts.



## **NEW ENGLAND FISHERY MANAGEMENT COUNCIL AQUACULTURE REVIEW AND EVALUATION CRITERIA**

In reviewing an aquaculture project proposal and during any subsequent FMP amendment that may be necessitated, the Council should have established standards for evaluation of individual projects. Appropriate standards would relate to the competing use issues, the potential impact to management objectives or fishery habitat, and the nature of the project and capabilities of the applicant.

### **Competing Use.**

1. The proposed activity should not unreasonably interfere with other uses of the area, considering such factors as the number of individuals that participate in commercial or recreational fishing, the type of fishing gear utilized, the number of actual fishing days and the amount of fisheries resources harvested from the area.
2. Projects requiring less exclusivity, given the nature of other uses in or near the area including the number, size, location and type of other aquaculture uses of the area, should be encouraged.
3. If a project proposes to foreclose the fishing rights of others, a single entity should not receive excessive benefits with respect to other user groups and projects that propose to enhance harvesting opportunities for displaced fishermen should be encouraged.
4. Projects proposed by displaced fishermen and projects that are owner-operated should receive preferential treatment.
5. In the event that competing projects are submitted for review, a first come first serve review policy should be adopted.
6. Projects that maximize biological, social and economic values should be encouraged.

### **Management Objectives and Habitat Considerations.**

1. A project must be consistent with objectives of Magnuson-Stevens, extant FMPs for the area or species in question, and other applicable law.
2. The project should present acceptable biological, social and economic impacts (direct, indirect and cumulative).
3. Projects that remove pressure from or enhance wild stocks or that create fishing opportunities directly or indirectly should receive preferential treatment.
4. A project should be compatible with the long term ability of the area to support ecologically significant flora and fauna, marine vegetation, and disrupt fish migration.

### **Scope of Project and Applicant Expertise.**

1. Projects that are large in size and scale and lack thorough justification should be discouraged.
2. A project developer should be able to demonstrate the necessary technical and business expertise to undertake the project.
3. The project developer should be able to demonstrate that there is an available source of the organism to be cultured and, given the nature of the project, that there is a likelihood that the project can receive all necessary and relevant permits.
4. Pilot or demonstration type projects should be encouraged initially to better evaluate impacts and an expedited review process should be used for projects of this nature.

## **JOINT NEFMC/FEDERAL AGENCY AQUACULTURE ADMINISTRATION PROCESS**

### **INTRODUCTION.**

The Aquaculture Policy has been approved by the Committee and will be presented to the full Council at the August meeting. It states that the Council will facilitate the aquaculture permitting process by: 1) addressing those issues that are germane to the Council's fishery management role; 2) work with other involved federal agencies to identify and minimize or eliminate areas of overlap; 3) position itself as a point of contact to provide information and recommendations which may help avoid projects or project elements that would pose conflicts; and 4) seek advice and guidance from aquaculture and fishing industries, the conservation community and other resource management agencies. The purpose of this memo is to outline a process through which the Council can attempt to achieve the above objectives. This process includes an interagency review and permitting procedure and recommended protocols for the Council to consider in reviewing aquaculture proposals.

Some representatives of the sectors identified in objective 4) above have been involved to varying degrees in discussions that have led to the development of the process outlined here. However, the Aquaculture Committee has only very recently identified individuals to serve on its Advisory Committee and that committee has not yet been formally involved in the development of this process.

### **BACKGROUND.**

The U.S. Department of Agriculture has been statutorily charged with lead responsibility for aquaculture in this country. However, with respect to EEZ-based aquaculture operations, no single federal agency has been delegated overall responsibility to administer aquaculture for purposes of permitting, etc. Rather, through authorities derived from various statutes, a number of federal agencies are involved. This situation is somewhat confused from the perspective of project developers who must complete an array of permit applications and meet a variety of requirements, some duplicative, in order to undertake an EEZ-based aquaculture operation. A permit required under Section 10 of the Rivers and Harbors Act, administered by the Army Corps of Engineers (ACOE), is the most comprehensive hurdle that a project developer must overcome and thus the ACOE is by virtue of its authority the *de facto* lead agency.

The advent of proposals to undertake aquaculture research and development projects in the U.S. EEZ raises a number of issues which break along many lines but, as the Council has already experienced, the preemption of bottom and the "privatization" of a public resource are issues which generate significant controversy. From the perspective of an aquaculturist, the inability to secure exclusive or proprietary rights can be a significant deterrent to investors and thus inhibit development. However, no federal agency has the legal authority to convey proprietary rights to the ocean bottom or water column above for the purposes of aquaculture. Allocation of space, therefore, continues to be an unsettled and contentious issue.

Representatives of federal agencies with an involvement in EEZ-based aquaculture, specifically the ACOE, the Environmental Protection Agency (EPA), and the National Marine Fisheries Service (NMFS) have acknowledged that the Council has the necessary expertise and experience to effectively deal with this 'competing use' issue and consider the Council to be a forum within which decisions relative to the allocation of space can be made. Because the Council is a quasi

federal agency, the process outlined here is proposed as an informal means of utilizing the Council's expertise to address potential space allocation conflicts prior to the initiation of formal federal agency permitting processes.

## **ADMINISTRATIVE PROCESS.**

To accomplish the objectives articulated in the Council's Draft Aquaculture Policy, specifically, the objective to work with other involved federal agencies to identify and minimize or eliminate areas of overlap and to position the Council as a point of contact to provide information and recommendations which may help avoid projects or project elements that would pose conflicts, the following process is recommended. This process has evolved through a number of staff level discussions with representatives of the ACOE, EPA and NMFS since a report entitled "Background Information and Recommendations for New England Fishery Management Council Development of an Aquaculture Policy and Management Strategy" was submitted to the Council in September 1995.

Federal regulation of aquaculture in the marine environment has a relatively short history and stems largely from development in coastal state waters where, because of the overlay of various state requirements, the application and permitting process can be extremely complex. To minimize the complexity, several states have or are in the process of developing a cooperative application and review procedure for aquaculture administration. Through agreement with the various state and federal agencies, the lead state agency provides an applicant with a comprehensive package that includes application material and instruction for all the necessary permits. The agency then conducts a review process that meets the standards required by the involved federal agencies. Although each agency ultimately issues its own permit, the process is significantly streamlined. Furthermore, unnecessary and protracted review is avoided in those instances where the state agency makes a preliminary determination that there is not a reasonable likelihood that a proposed project will be approved because it, among other things, unreasonably interferes with fishing.

This cooperative joint approach serves as a model for the application and review procedure proposed here. This process acknowledges that each of the various federal agencies are obligated to discharge separate statutory responsibilities in administering EEZ-based aquaculture development. This process also acknowledges that, although the Council does not have permitting authority for aquaculture *per se*, it does have authority to develop fishery management plan (FMP) recommendations for subsequent Secretarial approval to impose controls upon or sanction the activities of an aquaculture operation. Most importantly, the proposed process acknowledges the Council's preeminent role in addressing aquaculture/fisheries competing use issues and that these issues should be addressed early in the process of reviewing any proposed aquaculture venture.

To adapt the joint state/federal application and review process to the EEZ situation, the following elements are necessary: 1) a joint application of some form; 2) some means of issuing notice to interested and/or affected parties; 3) some type of public meeting or hearing to consider the proposed project; and 4) some form of interagency communication relative to the "findings" of the public meetings. Unlike the state situation where the state resource agency exercises a permitting or leasing function, the Council does not have similar authority and the ultimate permitting decision rests largely with the ACOE. However, the comments of Section 10 review agencies, including those of the Council, are most often adhered to by the Corps and the goal of the process proposed here is to "cull" or modify those projects whose Section 10 application would ultimately be rejected. Early identification of potential "flaws" in a project design or proposal will address problems that lead to protracted and costly consideration of proposals that lack sufficient merit and

should give both project proposers and other interested parties an early and more rational expectation of outcomes.

The essential feature of the procedure proposed is the utilization of what is referred to as a pre-application phase which provides both project proposers and permitting agencies the opportunity to identify unworkable project elements and overcome potential problems prior to initiation of a formal application phase which is constrained by time and regulatory procedures. It is during the pre-application phase that the Council would take the lead role and, as proposed here, this would most appropriately be undertaken by the Council's Aquaculture Committee.

The Joint NEFMC/Federal Agency Aquaculture process contemplates a three-phase approach, including: I) Pre-Application and Review; II) Formal Application; and III) FMP Amendment. Phases II and III can occur simultaneously and Phase III can utilize a Comprehensive Aquaculture Amendment or individual amendments to existing FMPs on an as needed basis to address individual aquaculture project elements.

## **PHASE I - PRE-APPLICATION AND REVIEW.**

**1. Application.** A formal application in the sense of a Section 10 permit is not contemplated here, but rather, a simplified "proposal" form to the agencies would be developed. The proposal would present the who, what, and where of the project and would be used by the several agencies to determine what additional information may be necessary from the proposer in order to commence the review. The proposal format would be "standardized" and contain sections requesting specific information thought relevant to the various agencies responsibilities. The goal here, however, would be a general overview of the proposal in a simple and straightforward manner, but with sufficient detail to enable the agencies and the public to gain an understanding of the proposal and identify the issues that may complicate public acceptance of the project.

**2. Coordination.** The Joint Agency Aquaculture Proposal Form would be available from any of the involved agencies and it would be the responsibility of the applicant to send copies of the completed proposal to all agencies indicated on a cc list. Once a proposal has been received and initially reviewed by the recipient agencies, the Council staff would assume a coordinating role for the purposes of interagency communication to determine whether sufficient information has been received to commence a review. If additional information is sought by an agency, it would be the requesting agency's responsibility to communicate such to the proposer. Any additional information would be made available to the other agencies.

**3. Notice.** Once all agencies have agreed that sufficient information has been received, the review process would be commenced with the Council issuing some form of "notice" utilizing its established networks; either advisory committee lists, interested parties list, notice in trade journals or papers of record, etc. This notice would announce that the agencies are reviewing an aquaculture proposal; it would state briefly what the project is, where it is proposed to be located, who is proposing it, and what the Council's role is. The notice would also indicate how an interested person could obtain or view the full proposal and how to communicate with the Council, including when and where public meetings will be held.

**4. Public Meeting.** The public meetings contemplated in this process would be informal in that they would not relate directly to any permitting authority. While both the ACOE and EPA can cause a hearing to be held relative to the permits they issue, it is assumed here that applications for these permits have not been filed and, therefore, formal hearings under these authorities would not yet be available. However, according to representatives of the ACOE and the EPA, the meetings

held by the Council at this stage could be considered sufficient to obviate the need for formal agency hearings once the formal application phase has been initiated. What is contemplated in this process is an informational meeting conducted under the aegis of the Council's Aquaculture Committee principally for the purposes of obtaining information and comments relative to those issues deemed germane to the Council's role.

Past experience demonstrates that germaneness is a relative term in Council sponsored meetings and this reality is acknowledged in this process as beneficial. The Council is principally concerned with fishery interactions, the potential effect of an aquaculture project on management objectives of extant plans, space allocation, resource utilization, cost-benefit comparisons, and fishery habitat impacts. However, other issues are likely to be raised including, design of surface structures and mooring systems, water column chemistry, genetic interactions, etc. While these issues are more appropriately considered by agencies other than the Council, it is appropriate that they be raised at the front end of the process so as to provide developers and permitting agencies with an understanding of issues needing to be addressed from the public's perspective.

Accordingly, while the proposed public meetings would be conducted under the aegis of the Council, representatives of the other agencies would also be present and could be called upon to address issues attendant to their agency's area of responsibility. A proposed format for such a meeting is as follows: opening presentation by meeting moderator; presentation and explanation of the project by the proposer; comments, questions, and recommendations from the audience including permitting agency representatives.

**5. Council Review.** Following the public meetings, the Council, via staff, advisory committee, and/or Aquaculture Committee representation, would work with project proposers to address Council germane issues of concern raised during public meetings. Through this effort, the Council would attempt to assuage proposers to make modifications that would ameliorate fishery interaction concerns. This is a very important component of the overall process in that it affords an opportunity to negotiate modification outside the formal Section 10 process. The incentive for the proposer to resolve issues at this stage is significant because the findings the Council forwards to the other agencies, particularly the ACOE, would have influence in the ultimate disposition of the project.

**6. Council Findings.** Once the Council has completed its review of the project and concluded negotiations with the proposer, it would forward its "findings" to the other agencies involved in the process, making recommendations concerning the overall project or project elements. It is important to recognize that a project proposer legally has to right to submit a Section 10 application at any time, prior to or during the process proposed here. However, because the *ACOE has expressed a desire to involve the Council in decisions relative to aquaculture/fishery interactions issues*, submitting a Section 10 permit application before this joint NEFMC/Federal Agency process is complete will not necessarily expedite the process. In fact, because an agency "clock" is initiated once the Section 10 application is received, a failure to resolve aquaculture/fishery issues could ultimately lead the ACOE to close the proceeding or deny the permit.

## **PHASE II - FORMAL APPLICATION.**

The information provided below outlines the authorities, permits, and formal review procedures required by several federal agencies for aquaculture ventures proposed in the EEZ.

**Army Corps of Engineers.** The ACOE authority stems from Section 10 of the River and Harbors Act of 1899, Section 404 of the Clean Water Act, and Section 103 of the Marine,

Protection, Research and Sanctuaries Act. The Corps' traditional and primary role relates to the potential impact of activities upon the navigable waters of the U.S. and, with regard to aquaculture, it is particularly concerned with structures and the mooring systems used to anchor these structures within the navigable waters. However, its authority extends to a full range of other considerations including those related to the environment and its permit certifies that the project will not impede navigation or negatively affect environmental quality.

Applicants seeking an ACOE permit to install and maintain aquaculture facilities are required to provide general information about the proposed project, siting and operational information, an environmental description and impact assessment of the proposed project area, and the applicant may be required to complete environmental monitoring of the site. The information required by the Corps is also used by Section 10 review agencies such as the National Marine Fisheries Service (NMFS), the U.S. Fish and Wildlife Service (USFWS), the Environmental Protection Agency (EPA), the Coast Guard, and the Council.

Permits for EEZ-based aquaculture are administered by the ACOE Regional Division in Waltham, Massachusetts. A public hearing is not required, however, hearings will be held if it is determined by the District Engineer to be necessary or appropriate given the specifics of a particular project. Other federal agencies such as NMFS, USFWS, EPA, the U.S. Coast Guard, and the Council, serving as review agencies under provisions of Section 10 do not have "veto" authority, however, their comments and recommendations are usually adopted by the Corps as conditions and restrictions of the permit.

**Environmental Protection Agency.** Section 402 of the Federal Water Pollution Control Act established the National Pollutant Discharge Elimination System (NPDES) to ensure that point source discharges would not impair the nation's water quality. The EPA, which has statutory authority to administer NPDES permits, has determined that floating fish pens constitute "concentrated aquatic animal production facilities" under the Act and are thus subject to permit requirements. The agency has also determined that the Ocean Disposal Criteria of section 403(c) of the Act applies, thus mandating an environmental effects review of aquaculture projects proposed for offshore waters.

Currently, the EPA requires an NPDES permit for fish pen operations only; shellfish or other "low impact" aquaculture operations are administratively exempt, however, a broad interpretation of the Act's "concentrated aquatic animal production facilities" language could be construed to apply to these operations as well.

A "general" NPDES permit is not currently available for offshore aquaculture operations although there has been some discussion within EPA towards that end. A "common permit" was available for offshore oil and gas exploratory drilling facilities in the 1980s and a "general permit" is available for inshore aquaculture facilities, thus a precedent does exist in this regard. Until such time as a common permit is established, individual projects are required to seek a permit from the EPA Region I office in Boston, Massachusetts. The time frame for completion of the permitting process can be several months and, although a hearing is not required, the Region can cause one to be held should it appear necessary.

**National Marine Fisheries Service.** The National Marine Fisheries Service has regulatory authority to enforce measures adopted pursuant to Council or Secretarial FMPs. The harvest of Atlantic salmon in the EEZ, for example, is currently prohibited under provisions of a Council FMP and the taking of other species is restricted in a variety of ways including minimum size restrictions and vessel permit requirements which are enforced and administered by NMFS. As

aquaculture facilities are subject to the Magnuson-Stevens Fishery Conservation and Management Act, the Service does have direct regulatory control over aquaculture, albeit incidental to management plans for other fisheries at this time.

In the absence of an aquaculture focused FMP, the Service's principal role vis-a-vis aquaculture is with respect to its statutory authority to administer the Marine Mammal Protection Act, its statutorily shared responsibility with the U.S. Fish and Wildlife Service to administer the Endangered Species Act, and its prerogatives as a review agency under Section 10 of the Rivers and Harbors Act, the Fish and Wildlife Coordination Act, and the National Environmental Policy Act.

As a review agency, the Service can provide comments regarding interactions with marine mammals and other protected species, impacts to the benthic environment and water quality, the possibility of deleterious genetic impacts and disease transmission to wild stocks. The Service has requested that ACOE permits be conditioned to require that salmon aquaculture facilities comply with protocols established by the North Atlantic Salmon Conservation Organization, of which the United States is a member, and the guidelines established by the New England Salmonid Health Committee. Depending upon the source of smolt used in salmon aquaculture, a fish health certificate and importation permit may be required.

The Service's parent agency, the National Oceanic and Atmospheric Administration (NOAA), also administers the Coastal Zone Management Act, which requires a consistency determination with approved state coastal zone management programs for federally permitted activities that affect land, water, or natural resources of the coastal zone; and the Marine Protection, Research, and Sanctuaries Act which prohibits certain activities within areas designated as National Marine Sanctuaries and requires consultation with NOAA's National Ocean Service in some instances.

**U.S. Coast Guard.** U.S. vessels, including barges, that support aquaculture facilities and that measure five net tons or larger must obtain Coast Guard documentation. Beyond vessel documentation requirements, the Coast Guard's interests pertain to navigational issues, including the design, placement, anchorage, and marking of structures within navigable waters. A Private Aid to Navigation Permit is required as is documentation confirming that applicants have read the applicable regulations pursuant to 14 U.S.C. 83 - 85. Permits are available from the 1st Coast Guard District in Boston.

**Other Federal Agency Involvement.** Beyond the agencies and activities outlined above, there are several other federal agencies that may have involvement with EEZ-based aquaculture depending upon the nature of the venture. These agencies include the U.S. Fish and Wildlife Service as a review agency under Section 10 addressing issues somewhat related to those that would be of concern to the NMFS and the U.S. Food and Drug Administration if the use of medicated feeds is contemplated.

### **PHASE III - FMP AMENDMENT AND FRAMEWORK ADJUSTMENT.**

Many activities associated with aquaculture cannot be undertaken without modification to certain elements of existing fishery management plans. Should the Council find that a proposed aquaculture project has merit and if project element are in conflict with management provisions such as minimum fish size restrictions etc, the Council will be called upon to amend one or more FMPs to enable the venture. As mentioned above, Phase III of the process outlined here can

occur in parallel with federal permitting Phase II. However, the Council must decide upon an

amendment strategy.

The preferred management approach to minimize the burden on the Council to amend existing FMPs separately for each aquaculture project proposed would be through the development of one overarching aquaculture FMP. Through this Aquaculture FMP, permissions or exemptions for aquaculture activities that are otherwise prohibited in all existing FMPs would be addressed comprehensively and prospectively. Once this is accomplished, individual aquaculture project proposals can be administered by the Council without need for FMP amendment and, thus, Phase III as contemplated in this process would be unnecessary. Unfortunately, this approach is not currently available to the Council because of Magnuson-Stevens Act prohibitions on the use of FMPs for principally administrative or process oriented purposes. It is recommended that the Council seek the advice of NOAA General Council as to the most appropriate way in which to communicate to the U.S. Congress the need to amend the Act to enable the development of an Aquaculture FMP.

Until such time as the Council has the statutory ability to develop an Aquaculture FMP, the alternative is to develop a comprehensive FMP amendment similar to that for the Multispecies, American Lobster, and Atlantic Sea Scallop Fishery Management Plans for resolving gear conflict in the Gulf of Maine, Georges Bank, and Southern New England. An amendment of this nature, with framework provisions included, will enable the Council to address individual project elements without requiring iterative amendment to other FMPs each time a new aquaculture project is proposed. With a comprehensive amendment of this nature in place, the Council would use framework provisions to address individual aquaculture project elements during Phase III. Without a comprehensive amendment, the Council would develop necessary amendments to existing FMPs to enable specific project elements during Phase III.

To address the aquaculturists need for some degree of proprietary access, the Council can ascribe a modicum of exclusivity to certain uses of an area through establishment of Special Management "Zones" as authorized in Section 303(b)(2) of the Magnuson-Stevens Act. The Council should also consider the designation of "aquaculture zones" to enhance planning and development of aquaculture sites or, alternatively, to identify productive fishing grounds as areas that would not be suitable as aquaculture sites.

