

## 10.0 Social Impact Assessment

This fishery management plan has been prepared primarily in response to the requirements of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). This integrated Red Crab FMP document contains all elements of the Fishery Management Plan and the Environmental Impact Statement (EIS) (which is required by NEPA), including the Social Impact Assessment. This chapter addresses the components of the Social Impact Assessment (SIA). Some of the components of the SIA are discussed in the body of the FMP and are not repeated here. Section and page references are provided. In other cases, the SIA element is not found elsewhere and is addressed fully in this chapter. The table of contents for the SIA is provided to aid reviewers in referencing the appropriate corresponding sections of the FMP.

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## **10.1 Introduction**

Mandates to conduct a social impact assessment (SIA) comes from both the National Environmental Policy Act (NEPA) and the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). NEPA requires Federal agencies to consider the interactions of natural and human environments by using a “systematic, interdisciplinary approach which will ensure the integrated use of the natural and social sciences . . . in planning and decision-making” (NEPA § 102 A). The Council on Environmental Quality (CEQ), in their *Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act* (CEQ 1986), clarified the term “human environment” to include the relationship of people with their natural and physical environment (40 CFR 1508.14). Moreover, agencies need to address the aesthetic, historic, cultural, economic, social, or health effects which may be direct, indirect, or cumulative.

Under the Magnuson-Stevens Act, fishery management plans (FMPs) must “achieve and maintain, on a continuing basis, the optimum yield from each fishery” (MSCMA § 301(a)(1)). When considering “a system for limiting access to the fishery in order to achieve optimum yield,” the Secretary of Commerce and the Regional Fishery Management Councils are to consider both the social and economic impacts of the system, and other factors (MSMFC § 303(b)(6)). Consideration of social impacts is a growing concern as fisheries experience increased participation and/or declines in stocks. With an increasing need for management action, the consequences of such changes need to be examined in order to mitigate the negative impacts experienced by the populations concerned.

## **10.2 Statement of the Problem**

For a statement of the problem associated with this SIA, please see Section 2.2 of the FMP.

## **10.3 Management Goals and Objectives**

For a description of the management goals and objectives associated with this SIA, please see Section 3.1 of the FMP.

## **10.4 Identification of Social and Cultural Entities Involved in the Fishery**

### **10.4.1 Fishing Vessel Owners/Operators**

For an identification of the social and cultural entities involved in the red crab fishery, particularly the fishing vessel owners and operators, please see Section 8.4.1 and Appendix B of the FMP.

### **10.4.2 Fishing Vessel Crew**

For an identification of the social and cultural entities involved in the red crab fishery, particularly the fishing vessel crew, please see Section 8.4.2 and Appendix B of

the FMP.

#### **10.4.3 Processors**

For an identification of the social and cultural entities involved in the red crab fishery, particularly the processors, please see Section 8.4.3 and Appendix B of the FMP.

#### **10.4.4 Fishery-Dependent Service Industries**

For an identification of the social and cultural entities involved in the red crab fishery, particularly the fishery-dependent service industries, please see Section 8.4.4 and Appendix B of the FMP.

#### **10.4.5 Fishing Communities**

For an identification of the social and cultural entities involved in the red crab fishery, particularly the fishing communities, please see Section 8.4.5 and Appendix B of the FMP.

### **10.5 Description of the Baseline Social Characteristics of the Fishery**

#### **10.5.1 Harvesting Sector**

For a description of the baseline social characteristics of the red crab fishery, particularly the harvesting sector, please see 8.6.1 Appendix B of the FMP.

#### **10.5.2 Processing Sector**

For a description of the baseline social characteristics of the red crab fishery, particularly the harvesting sector, please see Section 8.6.2 and Appendix B of the FMP.

#### **10.5.3 Fishery-Dependent Service Industries**

For a description of the baseline social characteristics of the red crab fishery, particularly the harvesting sector, please see Section 8.6.3 and Appendix B of the FMP.

### **10.6 Summary of the Impact Assessment**

The social impact analysis and assessment conducted for the Red Crab FMP employed the use of specific social impact factors that were evaluated for each management measure and alternative under consideration. The social impact factors were developed based in part upon the issues of concern identified by groundfish fishermen and their communities (NEFMC 2000a), tailored to represent the most significant issues of concern to red crab fishermen and their communities. The factors considered included: (1) changes in occupational opportunities; (2) changes in community infrastructure; (3) safety; (4) support for the management program; and (5) flexibility, stability, and uncertainty. While it is understood that there are differences among fisheries in what are perceived to be social impacts, there are some issues that are

considered universal to all fisheries (i.e., safety at sea). While these are not the only factors that could or should be considered, they are largely indicative of the types of social issues that should be considered in the decision-making process. There may be other social issues which may affect fishermen and their communities, but they are even more difficult to define.

There are no data available with which to evaluate the potential impacts of this measure on the social and cultural aspects of New England and Mid-Atlantic fishing communities. The small size, few participants, and distributed nature of this fishery, however, suggests that any social or cultural impacts to these fishing communities will be negligible. For example, there is one red crab vessel based in Gloucester, Massachusetts. Relative to the other fishing activities based in Gloucester, any impacts to this red crab vessel, its owners and operators, crew, fishing-related support services, and their families, that arise as a result of the measures proposed in this FMP are unlikely to significantly affect the community of Gloucester.

Based on information provided by members of the red crab fishing industry in response to a survey collecting baseline information on the fishery, few consider the communities in which they live to be fishing communities, and fewer still consider their communities to be significantly dependent upon fishing activities (see Appendix B). The implementation of new management programs for the red crab fishery, therefore, would not be expected to significantly disrupt the social frameworks of these communities.

Two of the proposed management measures (incidental catch limits and males-only) are not expected to have any social impacts on the fishermen involved in the directed red crab fishery or their communities, as these proposed measures would not change their current fishing practices but simply codify self-enforced measures that have been utilized in the fishery for many years. A couple of the proposed measures (target TAC and days-at-sea limits) are expected to provide positive social benefits to the fishermen involved in the directed red crab fishery (at least, those authorized to participate in the fishery at directed levels) by preventing a derby fishery and allowing them more flexibility and stability, while reducing any uncertainty they feel associated with the fishery.

The remaining measures (butchering/processing restrictions, trap limits, gear requirements/restrictions, trip limits, and a controlled access system) may provide positive social benefits, have no effect, or cause adverse social impacts on the fishermen involved in the directed fishery, depending on the specific option selected and the status of the individual fishermen. In some cases, a single option may have positive social benefits for some members of the red crab fishery and negative social impacts for other members.

The proposed processing restrictions are expected to have positive social impacts on the fishermen involved in the directed red crab fishery. Trap limits could have adverse social impacts if the trap limit selected is significantly below the level of traps currently used in the directed fishery. The gear requirements options generally offer potential social benefits, assuming the proposed prohibition on all fishing gear other than

traps is selected. Otherwise, this measure would have no social effects.

The TAC measure may have adverse social impacts if it is set significantly lower than the level of landings to which the current fishery participants are accustomed. Also, without other complementary controls, the establishment of a TAC could create a derby-type fishery, with undesirable social consequences. Depending upon the option selected and the level of the trip limit set for the directed red crab fishery, trip limits may be expected to have a positive social impact on members of the red crab fishery by mitigating some of the potential negative social impacts associated with a hard TAC. A controlled access system will provide positive social impacts on the vessels authorized to participate in the directed red crab fishery, but may result in adverse social impacts to any vessels excluded from the directed fishery.

The relative social and cultural impacts to fishermen and their communities of each management alternative under consideration are compared against those of two baselines: Alternative 1, the emergency action alternative, and Alternative 10, the no action alternative. Although in large part dependent upon the specific options selected for each proposed measure, the management alternatives that involve DAS allocations (either with or without trip limits) or an IVQ-type system would most likely result in the most positive social benefits. Alternatives that rely on a hard TAC (either with or without trip limits) may provide some social benefits, but these benefits may be limited by the probability of the fishery to develop into a derby-type fishery. Neither the no action alternative, nor the emergency rule alternative offer potential social benefits to the members of the directed red crab fishery. Overall, implementing any management program for the red crab fishery that reduces the probability of overfishing and reduces the likelihood of the fishery becoming overcapitalized will have a positive effect on the social and cultural aspects of the fishery.

## **10.7 Social Impacts of the Proposed Measures and Alternatives**

For a description of the social impacts of the proposed measures and the management alternatives under consideration in this FMP, including the preferred alternative, please see Section 5.0 of the FMP.