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## **9.0 COMMUNITY PROFILES**

### **9.1 Introduction**

The Magnuson-Stevens Act requires, among other things, that all FMPs include a fishery impact statement intended to assess, specify, and describe the likely effects of the measures on fishermen and fishing communities (§303(a)(9)).

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” (§102(2)(A)). Moreover, agencies need to address the aesthetic, historic, cultural, economic, social, or health effects, which may be direct, indirect, or cumulative. Consideration of social impacts is a growing concern as fisheries experience increased participation and/or declines in stocks. The consequences of management actions need to be examined to better ascertain and, if necessary and possible, mitigate regulatory impacts on affected constituents.

Social impacts are generally the consequences to human populations resulting from some type of public or private action. Those consequences may include alterations to the ways in which people live, work or play, relate to one another, and organize to meet their needs. In addition, cultural impacts, which may involve changes in values and beliefs that affect people’s way of identifying themselves within their occupation, communities, and society in general are included under this interpretation. Social impact analyses help determine the consequences of policy action in advance by comparing the status quo with the projected impacts. Community profiles are an initial step in the social impact assessment process. Although public hearings and scoping meetings provide input from those concerned with a particular action, they do not constitute a full overview of the fishery.

The Magnuson-Stevens Act outlines a set of National Standards (NS) that apply to all fishery management plans and the implementation of regulations. Specifically, NS 8 notes that:

“Conservation and management measures shall, consistent with the conservation requirements of this Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities in order to: (1) provide for the sustained participation of such communities; and, (2) to the extent practicable, minimize adverse economic impacts on such communities.” (§301(a)(8)). See also 50 CFR §600.345 for NS 8 Guidelines.

“Sustained participation” is defined to mean continued access to the fishery within the constraints of the condition of the resource (50 CFR §600.345(b)(4)). It should be clearly noted that NS 8 “does not constitute a basis for allocation of resources to a specific fishing community nor for providing preferential treatment based on residence in a fishing community” (50 CFR §600.345(b)(2)). The Magnuson-Stevens Act further defines a “fishing community” as:

“...a community that is substantially dependent upon or substantially engaged in the harvest or processing of fishery resources to meet social and economic needs, and

includes fishing vessel owners, operators, crew, and fish processors that are based in such communities.” (§301(16))

Likewise, specific to development and amendment of HMS FMPs, the Magnuson-Stevens Act, paragraph 304(g)(1)(C), requires the Secretary to:

- Evaluate the likely effects, if any, of conservation and management measures on participants in the affected fisheries; and,
- Minimize, to the extent practicable, any disadvantage to U.S. fishermen in relation to foreign competitors.

NMFS (2001) guidelines for social impact assessments specify that the following elements are utilized in the development of FMPs and FMP amendments:

1. The size and demographic characteristics of the fishery-related work force residing in the area; these determine demographic, income, and employment effects in relation to the work force as a whole, by community and region.
2. The cultural issues of attitudes, beliefs, and values of fishermen, fishery-related workers, other stakeholders, and their communities.
3. The effects of proposed actions on social structure and organization; that is, on the ability to provide necessary social support and services to families and communities.
4. The non-economic social aspects of the proposed action or policy; these include life-style issues, health and safety issues, and the non-consumptive and recreational use of living marine resources and their habitats.
5. The historical dependence on and participation in the fishery by fishermen and communities, reflected in the structure of fishing practices, income distribution and rights.

## **9.2 Methodology**

### **9.2.1 Previous community profiles and assessments**

A complete description of the updated community profiles and assessments can be found in Chapter 6 of the 2008 SAFE Report (NMFS, 2008) for current HMS fisheries. Chapter 6 of the 2008 SAFE Report consolidated all of the communities profiled in previous HMS FMPs or FMP amendments and updated the community information where possible. Of the communities profiled in the 2008 SAFE Report, ten were originally selected due to the proportion of HMS landings in the town, the relationship between the geographic communities and the fishing fleets, the existence of other community studies, and input from the HMS and Billfish Advisory Panels. The remaining 14 communities, although not selected initially, have been identified as communities that could be impacted by changes to the current HMS regulations because of the number of HMS permits associated with these communities, and their community profile

information has been incorporated into the document. The descriptive community profiles in the 2008 SAFE Report are organized by state and include information provided by Wilson, *et al.* (1998), Kirkley (2005), Impact Assessment, Inc. (2004), and recent information obtained from MRAG Americas, Inc. (2008). However, as smooth dogfish are not currently federally managed, community profiles have not been completed for the fishery-related work force residing in communities affected by federal management of smooth dogfish. The preferred alternative F2 in this amendment will act as the first step of permitting and identifying those communities that participate in the smooth dogfish fishery so that community profiles can be completed at a later date.

In addition, please refer to the Description of the Affected Environment in Chapter 3, Environmental Justice analysis in Chapter 4, the Economic Evaluation in Chapter 6, the RIR in Chapter 7, and the FRFA in Chapter 8 of this document for additional information. Furthermore, each of the management alternatives in Chapter 4 includes an assessment of the potential socio-economic impacts associated with the preferred alternatives. The preferred alternatives were selected to minimize economic impacts and provide for the sustained participation of fishing communities, while taking the necessary actions to rebuild overfished fisheries as required by the Magnuson-Stevens Act.

### **9.3 Overview of the Shark Fishery**

The shark fisheries of the Atlantic and Gulf of Mexico extend from Maine to Texas, and include Puerto Rico and the U.S. Virgin Islands. The geographic extent of the shark directed and incidental commercial permit holders is large, but is currently concentrated in the waters off four states; Florida (55 percent of shark permits), New Jersey (11 percent of shark permits), Louisiana (8 percent of shark permits), and North Carolina (6 percent of shark permits). The primary smooth dogfish fishery is currently located from North Carolina to New Jersey. The LCS and SCS shark fishery is notable for the degree of flexibility of the commercial fishing fleet. Of the 502 vessels in the 2009 fleet, 223 vessels (44 percent) held directed shark fishery permits. The remaining 56 percent (279 vessels) held incidental permits that target species other than sharks. Traditionally fishermen who engaged in the directed shark fishery did so on a seasonal basis, depending on area and the length of the fishing season, and they fished for other species at other times of the year. However, under Amendment 2 to the Consolidated HMS FMP, it was NMFS intention to have the fishery stay open year-round, so that fishermen could fish for sharks in an incidental fashion while targeting other species, thus reducing discards of sharks. This would also allow for shark product to be available year round, thus stabilizing the market instead of having short periods of time with large volumes of shark product, as was the case prior to Amendment 2 to the Consolidated HMS FMP.

The SCS fishery is mainly concentrated in South Atlantic. Landings data by state from the Automated Landings Reporting Systems, or ALS, indicate that Florida's east coast accounted for the vast majority of SCS landings (56-94%) during 1995-2005, with the west coast of Florida contributing 1-30%, North Carolina always less than 5%, and South Carolina always less than 2% (Cortés and Neer, 2007). According to the landings data, Alabama started landing SCS in 2002 (4%), and the proportion of landings in that state increased in 2003-2005 (19-23%) (Cortés and Neer, 2007); however, shark fishing is largely incidental to recreational fishing for other species in Alabama (NMFS, 2008). Given the measures in this amendment would affect the SCS

fishery, it is anticipated that communities in these areas would most likely experience the largest socioeconomic impacts. Below, NMFS gives a brief description of a few of the main communities in these areas that could be affected by the preferred SCS measures in this amendment. More information on different communities can be found in Chapter 6 of the 2008 SAFE Report (NMFS, 2008).

SCS are landed with bottom longline gear; however, the predominate gear used to catch SCS is gillnet gear. The majority of shark gillnetters are located on the east coast of Florida, particularly in Fort Pierce, Florida area (NMFS, 2008). Commercial fishing has grown in this area due to lost dock space for commercial fleets in nearby ports (NMFS, 2008). For instance, Port Selerno, also on the east coast of Florida, used to have concentrations of longline vessels; however, due to gentrification and increasing fishery regulations, commercial fishing infrastructure has shrunk, and currently there is only one commercial facility remaining in the area) (MRAG Americas, Inc., 2008). Dealer and fish processors have consolidated buying and packing operation in Fort Pierce because of the high cost of doing business in more tourism-related coastal communities in Northern and Southern Florida. SCS shark fishing is a primary interest of gillnetters in Fort Pierce whereas bottom longline fishermen typically target LCS. While, these shark fisheries, and in particular, the SCS fishery, are lower in value compared to swordfish and tuna longline fisheries, the SCS fishery is the main fishery for shark gillnet fishermen located in the Fort Pierce, Florida area.

Madeira Beach, Florida, is located on the west coast of Florida. The Madeira Beach fleet is predominately comprised of bottom longline vessels and has been more reliant on the LCS fishery rather than the SCS fishery. Due to LCS shark fishing regulations, shark fishermen have left the shark fisheries altogether, and shark product has declined for dealers, who have experienced stiff competition as overall shark product has decreased (NMFS, 2008). North Carolina has historically been an important shark fishing state with 35 to 60 percent of all South Atlantic region landings coming from North Carolina in recent years (NMFS, 2008). The time/area closure implemented in January 2005, to protect essential fish habitat for sandbar and dusky sharks has forced commercial shark fishermen to seek out other fisheries or other gears to target sharks and other species. Many fishermen claim that the closure has hurt their business (NMFS, 2008). LCS landings, and in particular, sandbar shark landings, came from Hatteras and Wanchese, North Carolina. However, participation in commercial fishing, in general, in these areas has been on the decline due to difficulties in hiring and managing crews and due to high turnover in crews as vessels shift to other fisheries and/or revenues drop (NMFS, 2008). Many of the larger vessels have left these areas to pursue opportunities overseas, and others have left the commercial fishing industry to pursue careers in carpentry and building or the charter fishing business (NMFS, 2008). Finally, South Carolina residents hold approximately the fifth greatest number of shark permits; however, due to the relatively small number of HMS permit holders and landings in South Carolina, no community profiles have been developed for this state at this time (NMFS, 2008).

As mentioned above, the primary smooth dogfish fishery is currently located from North Carolina to New Jersey. However, as smooth dogfish are not currently federally managed, community profiles have not been completed for the fishery-related work force residing in communities affected by federal management of smooth dogfish. The preferred alternative F2 in

this amendment will act as the first step of permitting and identifying those communities that participate in the smooth dogfish fishery so that community profiles can be completed at a later date. In the meantime, NMFS assumes communities from North Carolina and Virginia would have the largest socioeconomic impacts due to smooth dogfish measures as explained below.

As of October 2009, there are 106 federally permitted shark dealers, the majority of which are located in Florida (37 percent). Table 3.29 shows the number of shark dealers permitted in each state as of November 2009. Dealers that possess shark permits also often hold dealer permits for other species such as swordfish, dolphin/wahoo, reef fish and snapper/grouper. The additional permits that the commercial shark fishermen and dealers possess may help mitigate economic and social impacts of the preferred management measures. For additional information on the directed and incidental shark fishery, please refer to Chapter 3, Description of the Affected Environment.

#### **9.4 Summary of Fisheries Impacts**

The following provides a summary of impacts to participants in the shark fishery and fishing dependent communities, including measures taken to minimize adverse social and economic effects and to provide for the sustained participation in the shark fishery. Based on the foregoing assessment and referenced sections of this FEIS, NMFS has determined that the FEIS would have the following impacts on participants in affected fisheries.

##### *Summary of Impacts*

As explained in Chapters 3 and 4, this amendment could impact the 502 directed and incidental shark permit holders and 106 federally permitted shark dealers through SCS quota reductions. In addition, an estimated 223 fishermen could be affected by the inclusion of smooth dogfish under federal management. Many of the current shark permit holders would also be affected by smooth dogfish management measures as many federal shark fishermen currently fish for smooth dogfish but are not required to hold a federal permit in order to retain them. NMFS does not anticipate large, negative socioeconomic impacts on a large number of fishermen and fishing communities as a result of the measures in this amendment as NMFS would allow gillnets to continue to be an authorized gear for Atlantic sharks, and recreational fishermen would continue to be allowed to retain blacknose sharks. Finally, since there were no recommendations for shortfin mako adopted at ICCAT in 2009, there are no regulatory changes for this species at this time, and thus, no anticipated impacts to pelagic shark fishermen. Future social and economic impacts would be dependent on measures adopted through international fisheries management organizations, such as ICCAT.

Due to SCS quota reductions, this amendment could impact communities dependent on the SCS fishery, such as entities that deal with the processing and sale of SCS products. The communities most likely affected are mentioned above. Quota reductions could translate into negative socioeconomic impacts due to reduced revenues as well as changes in fishing practices as fishermen and entities dealing with shark products (*i.e.*, dealers and processors) would have to switch to other fisheries once the reduced SCS quotas are met to make up for lost revenues in the SCS fishery. Based on state landings, the SCS fishermen that would be affected by this

amendment are primarily located in Florida, North Carolina, South Carolina, and Alabama whereas most of the shark dealers are located in Florida.

In addition, besides a permit requirement for smooth dogfish, federal smooth dogfish permit holders would be prohibited from processing smooth dogfish at sea and would be required to offload smooth dogfish with all their fins naturally attached. This would be a change to how the fishery is currently prosecuted, resulting in negative socio-economic impacts as it may increase handling time of smooth dogfish once the fishing vessel is dockside and could change how smooth dogfish product is processed and stored. Increased dockside processing time could also lead to conflicts among user groups. The primary smooth dogfish fishery is currently located from North Carolina to New Jersey with a large concentration of smooth dogfish fishermen in North Carolina and Virginia. NMFS anticipates these communities would experience the largest impacts from this amendment.

#### *Minimization of Adverse Impacts*

NMFS minimized adverse impacts to fishermen and fishing communities by increasing the proposed SCS quotas from the DEIS to the FEIS based on revised data and public comment and analyses indicating fishermen could effectively target certain shark species while minimizing bycatch of blacknose sharks. While NMFS has increased the proposed SCS quotas, NMFS has also proposed a framework action that would allow NMFS to reduce the non-blacknose SCS and blacknose quotas, as appropriate, if blacknose shark discards become too high or if the status of the species changes. In addition, based on public comment regarding fishermen's ability to target certain species of sharks, in the FEIS, NMFS changed its preferred alternative from B3 to B1, which would continue to allow gillnet gear as an authorized gear for sharks. These measures would allow blacknose sharks to rebuild while minimizing adverse impacts to fishermen and fishing dependent communities.

As for smooth dogfish, NMFS increased the proposed quota for smooth dogfish between the DEIS and FEIS to account for the uncertainty in current landings of smooth dogfish, given fishermen and dealers are not required to report smooth dogfish landings at this time and public comment indicating the proposed quota would result in closures. In addition, NMFS has chosen to delay implementation of the smooth dogfish measures until the beginning of the 2012 fishing season. This delay would allow NMFS to consider and evaluate implications of the final smooth dogfish BiOp, have additional discussions with fishery participants regarding the fins attached requirement, and implement the permit requirements.

#### *Effects on Domestic Fishermen*

Typically, the main driver for the United States and international shark fisheries is the fins of large coastal sharks. The fins of SCS and smooth dogfish have a relatively low value compared to other shark species, and therefore, are used more for domestic product. However, smooth dogfish meat is often exported. Thus, in order to not disadvantage domestic fishermen in relation to foreign competitors, NMFS is delaying the implementation of the smooth dogfish management measures until the beginning of the 2012 fishing season in order to have additional discussions with fishery participants regarding the fins attached requirement for smooth dogfish. In addition, for shortfin mako sharks, which do have an international fishery component, NMFS

is specifically taking a multilateral approach to end overfishing of shortfin makos where other nations that contribute to shortfin mako mortality can also help end overfishing of this species, thus not disadvantaging U.S. fishermen.

### *Social Impact Assessment*

This amendment conforms to the following guidelines for social impact assessments (as outlined above):

- NMFS describes the demographic characteristics of the fishery-related work force residing in communities affected by fishery management in Chapter 6 of the 2008 SAFE Report (NMFS, 2008). In particular, the demographic, income, and employment effects in relation to the work force as a whole by community and region are discussed in this chapter of the 2008 SAFE report. However, as smooth dogfish are not currently federally managed, community profiles have not been completed for the fishery-related work force residing in communities affected by federal management of smooth dogfish. The preferred alternative F2 in this amendment will act as the first step of permitting and identifying those communities that participate in the smooth dogfish fishery so that community profiles can be completed at a later date.
- The preferred SCS and smooth dogfish alternatives could change the cultural issues of attitudes, beliefs, and values of fishermen, fishery-related workers, other stakeholders, and their communities if fishermen choose to leave the SCS and/or smooth dogfish fisheries as a result of the management measures in this amendment, particularly in areas such Fort Pierce, Florida, where shark gillnet fishermen rely heavily on SCS or in North Carolina to New Jersey where the primary smooth dogfish fishery occurs. Thus, SCS quota reductions and smooth dogfish management measures could have negative social impacts on fishermen, fishery-related workers, other stakeholders, and their communities. Reduced SCS quotas would translate into decreased revenues and potential changes in fishing behaviors as fishermen, fishery-related workers, other stakeholders, and their communities look to other fisheries to make up for lost revenues or decide to leave the fishery altogether. Unfortunately, as described in Section 4.9 of Chapter 4, many fisheries that shark fishermen also participate in are experiencing increased restrictions as well, which will make it difficult for fishermen to make up lost revenues resulting from new measures in this amendment. New management measures for the smooth dogfish fishery could result in increased handling and processing time, which could result in changes in fishing practices and time spent at the dock. If this creates conflicts with other user groups, then smooth dogfish fishermen could experience negative social impacts, such as deciding to leave the fishery or only fish for smooth dogfish in states waters where federal permits and other requirements are not required.
- The preferred SCS and smooth dogfish actions should not affect the social structure and organization, such as the ability to provided necessary social support and services for families and communities. However, due to the preferred

measures, if fishermen chose to leave the SCS or smooth dogfish fishery, there may be an increased need for social support and services for fishermen's families provided that they were unable to redirect effort into other fisheries.

- The preferred actions should not affect the non-economic social aspects of the proposed action, such as lifestyle issues, health and safety issues, and the non-consumptive and recreational use of living marine resources and their habitats. The proposed actions would affect commercial fishing practices; however, SCS quota reductions and smooth dogfish management measures should have no impacts on lifestyle or health and safety issues. In addition, the preferred measures for the recreational blacknose shark fishery does not change measures from the current status quo where the current federal minimum size of 54 inch FL creates a *de facto* retention prohibition of blacknose sharks in federal waters since blacknose sharks rarely reach a size greater than 54 inches. In addition, since no new measures were adopted for shortfin mako sharks during the 2009 ICCAT meeting, currently there are no changes to the recreational shortfin mako shark fishery. The other preferred management measure would encourage the release of shortfin mako sharks brought to fishing vessels alive; however, this would only encourage rather than require recreational fishermen to practice catch and release of shortfin mako sharks.
- The preferred action could affect the historical dependence on and participation in the fishery by fishermen and communities, reflected in the structure of fishing practices, income distribution, and rights. As mentioned above, reduced SCS quotas would translate into decreased revenues and potential changes in fishing behaviors and/or historical participation in the SCS fishery. In addition, new federal management measures for smooth dogfish could result in fishermen leaving the smooth dogfish or choosing to fish for smooth dogfish in only state waters. These changes could result in lost revenues and negative social impacts as fishermen would have to look to other fisheries to make up for lost revenues or leave the SCS and/or smooth dogfish fisheries altogether.

## Chapter 9 References

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