7 Fishery Impact Statement and Social Impact Assessment

7.1 Fishery Impact Statement

Environmental Effects

Economic Effects

Social Effects

The proposed harvest restrictions on red snapper and other snapper grouper species, if implemented, would be expected to result in potentially substantial short-term adverse social effects on affected fishermen, their families, and associated shore-side businesses and communities. These effects may include, but not be limited to, increased crew and dockside worker turnover; increased time at sea (potentially leading to increased risk to the safety of life and boat); decreased access to recreational activities; demographic population shifts; displacement and relocation as a result of loss of income and the ability to afford to live in coastal communities; changes in household income source; business failure; declining health and social welfare; and increased gentrification of coastal communities. These adverse effects are expected to be concentrated in Georgia and north Florida. Fishermen and associated shore-side businesses and communities in other areas of the South Atlantic may experience increased social benefits as a result of enhanced fishing opportunities, transferred business, and transferred tourism. Occurrence and persistence of any adverse social effects may be sector/entity specific, with some sectors/entities having greater flexibility to adjust to the restrictions and find alternate sources or income, product, recreation, etc. While the long-term social effects of resource recovery are expected to be positive, those who bear the short-term losses in social benefits may not be the same entities that receive the benefits of the recovered resource. Total possible adverse social effects may be reduced by the proposed adoption of the longest possible rebuilding timeframe because this should allow the greatest flexibility to recover red snapper while minimizing any adverse social effects on associated fisheries and communities. Additional social benefits would be expected to accrue to the resource protection afforded by the proposed requirement to use circle hooks and the implicit recognition, as translated into the geographic coverage of the circle hook requirement, that circle hooks may be inappropriate for some species.

Safety at Sea Effects

7.2 Social Impact Assessment

7.2.1 Introduction

Mandates to conduct Social Impact Assessments (SIA) come 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 section 102 (2) (a)]. Under the Council on Environmental Quality=s (CEQ, 1986) Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act, a clarification of the terms Ahuman environment@ expanded the interpretation 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 (Interorganizational Committee on Guidelines and Principles for Social Impact Assessment, 1994).

Under the Magnuson-Stevens Act, fishery management plans (FMPs) must A...achieve and maintain, on a continuing basis, the optimum yield from each fishery@ [Magnuson-Stevens Act section 2 (b) (4)]. When considering "…a system for limiting access to the fishery in order to achieve optimum yield…@ the Secretary of Commerce and Regional Fishery Management Councils are to consider both the social and economic impacts of the system [Magnuson-Stevens Act section 303 (b) (6)]. Recent amendments to the Magnuson-Stevens Act require that FMPs address the impacts of any management measures on the participants in the affected fishery and those participants in other fisheries that may be affected directly or indirectly through the inclusion of a fishery impact statement [Magnuson-Stevens Act section 303 (a) (9)]. National Standard 8, requires that FMPs must consider the impacts upon fishing communities to assure their sustained participation and minimize adverse economic impacts upon those communities [Magnuson-Stevens Act section 301 (a) (8)].

7.2.2 Problems and Methods

Social impacts are generally the consequences to human populations that follow from some type of public or private action. Those consequences may include alterations to A...the ways in which people live, work or play, relate to one another, organize to meet their needs and generally cope as members of a society...@ (Interorganizational Committee on Guidelines and Principles for Social Impact Assessment, 1994:1). Social impact analyses can be used to determine possible consequences management actions may have on fishing dependent communities. In order to do a full social impact analysis it is necessary to identify community participants who depend upon the fisheries in that area and to identify the amount of dependency they have upon a given fishery. Further it is necessary to understand the other opportunities for employment that exist within the community should fishery management measures become so restrictive that participants must switch their focus to other fisheries or other jobs outside of the fishing industry. Public hearings and scoping meetings may provide input from those concerned with a particular action, but they do not constitute a full overview of those that depend on the fishing industry.

In attempting to assess the social impacts of the proposed amendment it must be noted that there is not enough data on all participants who are involved with the snapper grouper fishery at the community level to do a complete overview of the fishery; therefore, analyses cannot predict all social impacts. However, secondary data such as landings data, license data, permits data, and information on communities such as Census data, can help to describe the communities involved in the snapper grouper fishery in the South Atlantic.

Today, more fisheries are managed by quotas and/or have restrictions on the number of participants. This limits the other opportunities fishermen who fish for species in the snapper-grouper complex to target other species to make up for reduced harvests of the snapper-grouper species.

Based on an analysis of secondary data, there are not any communities in the South Atlantic region that are completely dependent on the snapper-grouper fisheries, although several are heavily involved with the commercial or recreational snapper-grouper fishery. Any reduction in harvest has the potential to put fishermen and fishing dependent businesses out of business. Some recreational and commercial fishermen may decide it is not worth fishing for very limited bag limits, reduced TACs or for only a few species. Decisions on whether to stay in the fishery or to leave for another type of employment often depends on the circumstances of the individual such as whether or not they own their fishing boat, how much longer they intended to fish before retirement, if there is other family income, etc. At this time, there is insufficient information on fishermen to be able to fully describe what they may do with reduced catches, shorter fishing seasons, and/or closed areas.

In the future, fishermen, fishing dependent businesses, and communities involved in the snapper-grouper fisheries will benefit when overfishing is stopped and the fishery is rebuilt. However, for the short-term, the closing of specified areas, seasonal closures, reduced catch limits, and other measures that are necessary to stop overfishing and rebuild stocks, will all have negative impacts on those involved in the fishery. The average age of commercial fishermen is increasing, and fewer young people are becoming commercial fishermen. A fishery that is rebuilt in 15, 20, or even 25 years may be of no help to fishermen who will be impacted now by new regulations because they may be too old to fish when the fishery is rebuilt. Because fewer young people are choosing to fish, there may be the possibility that there may not be many commercial fishermen to harvest quotas once the fishery is rebuilt.

Communities that depend on the fishing industry throughout the South Atlantic are facing increasing challenges due to increased regulations that reduce catch for both the recreational and commercial fishing sector. If commercial catches are reduced, there can be a reduction in fish houses and processors, or a loss of jobs in the processing sector. Some fishermen may decide they can no longer make a living in the fishing industry and leave the industry for other jobs. Overall, fewer young people are becoming fishermen due to the difficulty of making a living fishing. If the harvest levels are reduced for recreational sector, this will have a negative impact on

charter and party boat operators, private boat owners, and businesses such as bait shops, marinas, hotels, and restaurants that cater to recreational fishermen.

Communities are also facing increasing challenges due to development and gentrification. As more water front property is developed for non-fishing uses such as locations for condominiums, hotels, restaurants, etc., fishing related businesses are in competition over land. Development often increases taxes which make it difficult for fishing docks, processors, and other businesses to stay near the water. In the last few decades more fishermen have had to move inland due to the rising cost of housing and taxes for water front property. This has changed the dynamics of some areas that were once built around the fishing industry.

Profiles of the communities expected to be affected by the actions in this proposed amendment are provided in Section 3.8.3, while a discussion of the expected social effects of each alternative considered is provided in Section 4.

7.2.3 Environmental Justice Considerations

Executive Order 12898 requires federal agencies conduct their programs, policies, and activities in a manner to ensure individuals or populations are not excluded from participation in, or denied the benefits of, or subjected to discrimination because of their race, color, or national origin. In addition, and specifically with respect to subsistence consumption of fish and wildlife, federal agencies are required to collect, maintain, and analyze information on the consumption patterns of populations who principally rely on fish and/or wildlife for subsistence. This executive order is generally referred to as environmental justice (EJ).

Persons employed in the snapper-grouper fishery and associated businesses and communities along the South Atlantic coast, particularly those in Georgia and north Florida, would be expected to be affected by this proposed action. Information on the race and income status for groups at the different participation levels (vessel owners, crew, dealers, processors, employees, employees of associated support industries, etc.) is not available. County level data, however, for certain communities have been assessed to examine potential EJ concerns. Because this proposed action would be expected to affect fishermen and associated industries in numerous communities along the South Atlantic coast and not just those profiled, it is possible that other counties or communities have poverty or minority rates that exceed the EJ thresholds.

In order to identify the potential for EJ concern, the rates of minority populations (non-white, including Hispanic) and the percentage of the population that was below the poverty line were examined. The threshold for comparison that was used was 1.2 times the state average such that, if the value for the community or county was greater than or equal to 1.2 times the state average, then the community or county was considered an area of potential EJ concern. Census data for the year 2000 was used Estimates of the state minority and poverty rates, associated thresholds, and community rates are provided in Table 7-1.

Among the communities examined, based on available demographic information, only the poverty rates for Daytona Beach and St. Augustine, Florida suggest potential EJ concern. As noted above, however, additional communities beyond those profiled would be expected to be affected by the actions in this proposed amendment. Because these communities have not been profiled, the absence of additional potential EJ concerns cannot be assumed and the total number of communities that exceed the thresholds in unknown.

However, while some communities expected to be affected by this proposed amendment may have minority or economic profiles that exceed the EJ thresholds and, therefore, may constitute areas of concern, no EJ issues have been identified or are expected to arise as a result of this proposed amendment. No adverse human health or environmental impacts are expected to accrue to this proposed amendment. While adverse social and economic consequences are expected to accrue to fishermen in the snapper-grouper fishery and associated industries and communities due to the reduction of expenditures and revenues associated with changes in fishing behavior and harvest levels, the environmental consequences of this proposed amendment are expected to be positive. This proposed amendment is expected to reduce the take and mortality of an overfished species, red snapper, and also result in the possible reduction in the mortality of other species. Protection of red snapper would be expected to assist in the rebuilding of this resource and the reduced mortality of additional species would be expected to increase the environmental benefits these species contribute to the marine environment and the general health and condition of this environment. These measures are also not expected to result in increased risk or exposure of affected individuals to adverse health hazards. Thus, the proposed actions are not expected to result in any negative environmental consequences.

Because the proposed actions are not expected to result in any negative environmental consequences, the EJ issues of fair treatment and meaningful involvement regardless of race, color, national origin, or income are not relative. However, as stated above, it is acknowledged that affected fishermen and shore-side workers and their families are expected to experience adverse economic effects due to reduced fishery-related expenditures and revenues. Such effects would be expected to be proportionate to participation in or dependence on the affected fisheries and not as a result of any racial, ethnic, or other criteria. While the relative effect of the loss of any particular amount of income is a function of total income (the loss of $1,000 is relatively more significant to a person earning $20,000 per year than to a person earning $200,000 per year), the management measures apply to all participants in the affected area, regardless of minority status or income level, and information is not available to suggest that minorities or lower income persons are, on average, more dependent on the affected species than non-minority or higher income persons. Further, because the regulated fisheries are prosecuted offshore (see Section 3.8 for information on the economic performance of the sectors), few dependant participants are, on average, expected to depend on these species for subsistence or likely to have income rates that fall below the poverty thresholds. Nevertheless, while it is true that lowered income reduces the ability to maintain

nutritional diets and adequate healthcare, the proposed actions are not expected to increase the risk of or exposure to health risks or environmental concerns.

Finally, the length of time during which this amendment has been in development, beginning in approximately January 2008, the series of scoping meetings and public hearings in affected communities, the opportunities for public comment on the DEIS, the FEIS, and the subsequent proposed and final rules, and the general participatory process used in the development of fishery management measures has provided substantial opportunity for meaningful involvement by affected individuals to participate in the development process of this amendment and have their concerns factored into the decision process.

Table 7-1. Environmental Justice Thresholds (2000 U.S. Census data).

State	Community	Minority Rate	Minority Threshold*	Poverty Rate	Poverty Threshold*
Florida		34.60	41.52	12.50	15.00
	Cape Canaveral	8.10		11.60	
	Daytona Beach	39.7		23.6	
	Fernandina Beach	20.0		10.2	
	Jacksonville Beach	11.0		7.2	
	St. Augustine	20.7		15.8	
Georgia		37.40	44.88	13.00	15.60
	Townsend**	39.10		14.60	
South Carolina		33.90	40.68	14.10	16.92
	Little River	9.10		7.50	
North Carolina		29.80	35.76	12.30	14.76
	Atlantic City	2.60		7.30	
	Beaufort	25.40		16.60	
	Hatteras Village	6.60		10.00	
	Morehead City	19.20		14.60	
	Sneads Ferry	9.70		13.50	
	Wanchese	3.30		8.10	

*Calculated as 1.2 times the state rate.
**Values are for entire McIntosh County.