Amendment 7

to the Fishery Management Plan for the Dolphin and Wahoo Fishery of the Atlantic

and Amendment 33

to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic

Provision to allow dolphin and wahoo fillets to be brought into the U.S. Exclusive Economic Zone from The Bahamas and related issues for dolphin wahoo and snapper grouper species

May 2014

Definitions, Abbreviations, and Acronyms Used in the Document

ABC	acceptable biological catch
ACL	annual catch limits
AM	accountability measures
ACT	annual catch target
B	a measure of stock biomass in either weight or other appropriate unit
B_{MSY}	the stock biomass expected to exist under equilibrium conditions when fishing at F_{MSY}
B_{OY}	the stock biomass expected to exist under equilibrium conditions when fishing at F_{OY}
B_{CURR}	the current stock biomass
CPUE	catch per unit effort
DEIS	draft environmental impact statement
EA	environmental assessment
EEZ	exclusive economic zone
EFH	essential fish habitat
F	a measure of the instantaneous rate of fishing mortality
$F_{30\%SPR}$	fishing mortality that will produce a static SPR = 30%
F_{CURR}	the current instantaneous rate of fishing mortality
F_{MSY}	the rate of fishing mortality expected to achieve MSY under equilibrium conditions and a corresponding biomass of B_{MSY}
F_{OY}	the rate of fishing mortality expected to achieve OY under equilibrium conditions and a corresponding biomass of B_{OY}
FEIS	final environmental impact statement
FMP	fishery management plan
FMU	fishery management unit
M	natural mortality rate
MARMAP	Marine Resources Monitoring Assessment and Prediction Program
MFMT	maximum fishing mortality threshold
MMPA	Marine Mammal Protection Act
MRFSS	Marine Recreational Fisheries Statistics Survey
MRIP	Marine Recreational Information Program
MSFCMA	Magnuson-Stevens Fishery Conservation and Management Act
MSST	minimum stock size threshold
MSY	maximum sustainable yield
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
OFL	overfishing limit
OY	optimum yield
PSE	proportional standard error
RIR	regulatory impact review
SAFMC	South Atlantic Fishery Management Council
SEDAR	Southeast Data, Assessment, and Review
SEFSC	Southeast Fisheries Science Center
SERO	Southeast Regional Office
SIA	social impact assessment
SPR	spawning potential ratio
SSC	Scientific and Statistical Committee

Amendment 7 to the Fishery Management Plan for the Dolphin and Wahoo Fishery of the Atlantic and Amendment 33 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic

Including an Environmental Assessment (EA), Regulatory Impact Review (RIR), and Fishery Impact Statement (FIS)

Responsible Agencies and Contact Persons:

National Marine Fisheries Service
Southeast Regional Office
263 13th Avenue South
Saint Petersburg, Florida 33701
727-824-5305
727-824-5308 (fax)
http://sero.nmfs.noaa.gov
Contact: Nikhil Mehta
nikhil.mehta@noaa.gov

South Atlantic Fishery Management Council
4055 Faber Place Dr., Suite 201,
North Charleston, South Carolina 29405
843-571-4366
813-769-4520 (fax)
http://www.safmc.net
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brian.cheuvront@safmc.net

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SUMMARY

Amendment 7 to the Fishery Management Plan for the Dolphin and Wahoo Fishery of the Atlantic and Amendment 33 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic

Why is the South Atlantic Council Taking Action?

The South Atlantic Fishery Management Council (South Atlantic Council) was approached by recreational fishermen who requested a change in the regulations that currently make it illegal to bring filleted dolphin and wahoo into the U.S exclusive economic zone (EEZ) from Bahamian waters. Fishermen contend that storing fish safely with head and fins intact is difficult and impractical due to the size of the fish. The purpose of Amendment 7 to the Fishery Management Plan (FMP) for the Dolphin and Wahoo Fishery of the Atlantic (Dolphin Wahoo Amendment 7) and Amendment 33 to the FMP for the Snapper Grouper Fishery of the South Atlantic (Snapper Grouper Amendment 33) is to allow recreational fishermen to bring dolphin and wahoo fillets from The Commonwealth of The Bahamas (The Bahamas) into the U.S. exclusive economic zone (EEZ), and update regulations allowing recreational fishermen to bring snapper grouper fillets from The Bahamas into the U.S. EEZ.

Regulations at 50 C.F.R. § 622.186 (b) currently allow fillets of snapper grouper species from The Bahamas to be brought into the U.S. EEZ. The need for this action is to increase the social and economic benefits to recreational fishermen by removing impediments to the possession of fish in the U.S. EEZ that were legally harvested in Bahamian waters.

What would Dolphin Wahoo Amendment 7 and Snapper Grouper Amendment 33 do?

Dolphin Wahoo Amendment 7 and Snapper Grouper Amendment 33 would allow fillets of dolphin and wahoo lawfully harvested by recreational fishermen from The Bahamas to be brought into the United States EEZ; and update regulations allowing recreational fishermen to bring snapper grouper fillets United States EEZ

The current relevant regulations for dolphin and wahoo found at 50 C.F.R. § 622.276 (Landing fish intact) are:

(a) Dolphin and wahoo in or from the Atlantic EEZ must be maintained with head and fins intact. Such fish may be eviscerated, gilled, and scaled, but must otherwise be maintained in a whole condition.

(b) The operator of a vessel that fishes in the EEZ is responsible for ensuring that fish on that vessel in the EEZ are maintained intact and, if taken from the EEZ, are maintained intact through offloading ashore, as specified in this section.

Current relevant regulations for snapper grouper at 50 C.F.R. § 622.186 (landing fish intact) are:

(a) South Atlantic snapper grouper in or from the South Atlantic EEZ must be maintained with head and fins intact, except as specified in paragraph (b) of this section. Such fish may be eviscerated, gilled, and scaled, but must otherwise be maintained in a whole condition. The operator of a vessel that fishes in the EEZ is responsible for ensuring that fish on that vessel in the EEZ are maintained intact and, if taken from the EEZ, are maintained intact through offloading ashore, as specified in this section.

(b) In the South Atlantic EEZ, snapper grouper lawfully harvested in Bahamian waters are exempt from the requirement that they be maintained with head and fins intact, provided valid Bahamian fishing and cruising permits are on board the vessel and the vessel is in transit through the South Atlantic EEZ. For the purpose of this paragraph, a vessel is in transit through the South Atlantic EEZ when it is on a direct and

Pros and Cons of Dolphin Wahoo Amendment 7/Snapper Grouper Amendment 33

Pros

- Fillets take up less room in a cooler, thus easier to transport safely.
- Regulations would be consistent with what is currently allowed for bringing snapper grouper species from The Bahamas into the U.S. EEZ except that the Council is considering exempting dolphin and wahoo from the U.S. EEZ possession limits when returning from The Bahamas.
- Skin-on provision would help with species identification.

Cons

- A vessel with dolphin, wahoo, snapper, and grouper fillets onboard must be in continuous transit within the U.S. EEZ (i.e., cannot stop or fish).
- Vessels bringing snapper grouper fillets into the U.S. EEZ from The Bahamas are required to have stamped and dated passports to prove that the vessel passengers were in The Bahamas, as well as valid current Bahamian cruising and fishing permits onboard the vessel.
- Law enforcement concerns.

continuous course through the South Atlantic EEZ and no one aboard the vessel fishes in the EEZ.

Dolphin Wahoo Amendment 7 and Snapper Grouper Amendment 33 would allow dolphin and wahoo that are lawfully harvested in Bahamian waters to be exempt from the requirement that they be maintained with head and fins intact in the Atlantic EEZ, provided valid Bahamian fishing and cruising permits are on board the vessel, and the vessel is in transit through the Atlantic EEZ. A vessel is in transit through the Atlantic EEZ when it is on a direct and continuous course through the Atlantic EEZ and no one aboard the vessel fishes in the EEZ. The vessel must also have stamped and dated passports to prove that the vessel passengers were in The Bahamas.

While in Bahamian waters, fishermen would be required to obtain the necessary Bahamian cruising and fishing permits and obey all Bahamian regulations. Dolphin and wahoo would be exempt from the U.S. bag and possession limits when returning to the U.S. through the U.S. EEZ, i.e., consistent with current Bahamian regulations, fishermen would be allowed a total of 18 dolphin or wahoo per vessel. As per current Bahamian law, a total of 60 pounds of snapper and grouper fillets would be allowed into the U.S. through the U.S. EEZ. All the fillets would be required to have the skin on the entire fillet.

Summary of Effects

Action 1: Exempt dolphin and wahoo harvested lawfully in The Bahamas from regulations that require them to be landed with head and fins intact in the U.S. EEZ.

Biological Effects

Dolphin and wahoo move throughout Bahamian waters and the U.S. EEZ. As a result, indirect negative biological impacts on dolphin and wahoo in U.S. waters could result from this action if **Alternative 2** results in an increase in recreational fishing effort for these species in Bahamian waters. However, it is not possible to quantify the possible biological effects of **Alternative 2** because no data are collected on these species in The Bahamas.

Economic Effects

Allowing dolphin and wahoo fillets to be brought into the Atlantic EEZ from The Bahamas would not be expected to have any adverse economic effects on the U.S. Atlantic dolphin wahoo fishery. It is not known whether allowing dolphin and wahoo fillets into the Atlantic EEZ would have an adverse impact on the number of fishing trips in the EEZ, although the expectation is that these trips, and associated economic benefits, would be unaffected. .

Social Effects

The effects of the proposed action on the fishing fleets, and associated businesses and communities, are expected to be minimal. Allowing filets to be brought into the U.S. EEZ could contribute to improved quality of dolphin and wahoo caught on these trips since whole fish would not have to be stored with head and fins intact. This management measure could be beneficial to South Atlantic fishermen harvesting dolphin and wahoo in The Bahamas, particularly for fishermen coming in and out of south Florida and the Florida Keys.

Administrative Effects

The management measure in **Alternative 2** of this action would exempt dolphin and wahoo from regulations to maintain head and fins intact, if they were lawfully harvested in The Bahamas and transported to the U.S., thus making regulations consistent with current regulations for snapper grouper species and help reduce confusion among fishermen regarding species that could be brought into the U.S. EEZ from The Bahamas as fillets. In order to gain consistency in regulations, NOAA/OLE recommended removing the current exemption of head and fins intact for snapper grouper species during the discussion of this amendment, and recommended the South Atlantic Council not go forward with exempting dolphin and wahoo from maintaining head and tail intact.

Action 2. Exempt dolphin and wahoo harvested lawfully from The Bahamas from the bag and possession limits in the U.S. EEZ.

Biological Effects

The biological effects for dolphin under **Alternative 2** would be expected to be neutral. **Alternative 3** could result in negative biological effects for wahoo, since the number of wahoo allowed to be lawfully harvested would be increased from 2 per person per day to a maximum of 18 wahoo per vessel, assuming no king mackerel, tuna, or dolphin were retained. The biological effects of **Alternative 3** would depend on how many people are on board the vessel, and which species they choose to lawfully harvest in The Bahamas and transport them into the U.S. EEZ.

Economic Effects

Alternative 2 would not be expected to have any positive or negative economic effects compared to **Alternative 1 (No Action)** because allowing fishermen to keep the Bahamian bag limit of dolphin would not affect the amount of dolphin retained. This is not the case for wahoo (**Alternative 3**). For wahoo the U.S. EEZ possession limit is two wahoo per person per day, whereas in The Bahamas, wahoo is again part of the 18-fish multispecies bag limit. If vessels entering the U.S. EEZ from The Bahamas were required to abide by the U.S. EEZ possession limits, then they would not be able to possess as many wahoo in the U.S. EEZ as they would be allowed to possess in Bahamian waters. Because there are expected to be times when fishermen go to The Bahamas specifically to fish for wahoo, fewer trips may occur if fishermen are not allowed to bring back a Bahamian bag limit into the U.S. EEZ. Therefore, compared to **Alternative 1 (No Action)**, **Alternative 3** would be expected to result in an increase in direct economic benefits associated with increased wahoo harvest and increased number of trips.

Social Effects

The social effects of allowing recreational vessels to be exempt from possession limits for dolphin and wahoo caught in The Bahamas **(Alternatives 2** and **3)**, would be expected to be minimal compared to **Alternative 1 (No Action)**. Any negative social effects would be associated with potential negative biological effects on the stocks for exceeding the bag limit.

Administrative Effects

This action would add to the administrative burden of law enforcement agencies. NMFS OLE has expressed concern over enforcing bag limits of snapper grouper species in the U.S. EEZ, as well as the Lacey Act as it applies to vessels returning from The Bahamas. Because fish fillets are difficult to identify to species, NOAA/OLE has difficulty enforcing species-specific regulations when encountering filleted fish.

Action 3. Require fillets of dolphin, wahoo, and snapper grouper species brought into the U.S. EEZ from The Bahamas to have the skin intact.

Biological Effects

Regulations requiring the skin to be left on the entire fillet under **Preferred Alternatives 2** and **3** could help law enforcement in species identification and enforcing regulations. **Preferred Alternatives 2** and **3** are not expected to have biological effects that are different from **Alternative 1 (No Action)**.

Economic Effects

Alternative 2 would help make it easier to identify snapper grouper species. Additionally, if dolphin and wahoo fillets lawfully harvested from The Bahamas are allowed in the U.S. EEZ, **Amendment 3** would aid in species identification. Having skin on fillets in the U.S. EEZ will help law enforcement in making valid cases regarding possession requirements. Not having skin on the fillets could result in inadequate protection for U.S. managed stocks, which in turn could affect abundance of these species. Negative economic effects could result from inadequate protection.

Social Effects

Preferred Alternative 2 and **3** would not directly affect any U.S. coastal communities in terms of local businesses or social institutions. Requiring the skin to be intact on snapper grouper species **(Preferred Alternative 2)** and dolphin and wahoo **(Preferred Alternative 3)** is expected to enhance the ability of law enforcement officers to identify fillets to species and enforce regulations**,** which would be expected to result in long-term broad social benefits.

Administrative Effects

Regulations requiring the skin to be left on the entire fillet under **Preferred Alternatives 2** and **3** could help law enforcement identify species and enforce regulations. Other administrative burdens that could result from the management measure in this action would take the form of development and dissemination of outreach and education materials for fishery participants and all law enforcement agencies.

Action 4. Require stamped and dated passports to prove that vessel passengers were in The Bahamas in addition to possessing valid Bahamian cruising and fishing permits, if the vessel is in possession of snapper grouper fillets in the U.S. EEZ.

Biological Effects

This action is purely administrative and biological effects are expected to be negligible among the proposed alternatives.

Economic Effects

Requiring stamped and dated passports for all passengers onboard the vessel as required by **Alternative 2** brings parity between U.S. and Bahamian requirements and poses no additional economic effect compared to **Alternative 1 (No Action)** for those legally participating in the Bahamian snapper grouper fishery. However, **Alternative 2** could prevent adverse impacts to U.S. managed snapper grouper stocks by closing a potential loophole for illegal fishing or filleting of fish caught in the U.S. EEZ as is currently allowed under **Alternative 1 (No Action)**.

Social Effects

Alternative 1 (No Action) and **Alternative 2** would not be expected to result in postitive or negative social effects on coastal communities or fishermen.

Administrative Effects

No new and additional administrative effects are expected from the proposed alternatives under this action.

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Chapter 1.
Introduction

1.1 What Actions Are Being Proposed in Dolphin Wahoo Amendment 7/Snapper Grouper Amendment 33?

Dolphin Wahoo Amendment 7/Snapper Grouper Amendment 33 would:

- Allow fishermen to bring dolphin and wahoo fillets from The Bahamas into the U.S. exclusive economic zone (EEZ).
- Exempt fishermen from the U.S. bag and possession limits for dolphin and wahoo when returning to the U.S. through the U.S. EEZ.
- Retain skin on the entire fillet for fillets of snapper, grouper, dolphin, and wahoo from The Bahamas into the U.S. EEZ.

1.2 Who is Proposing the Management Measure?

The South Atlantic Fishery Management Council (South Atlantic Council) is proposing this management measure. The South Atlantic Council recommends management measures and submits them to the National Marine Fisheries Service (NMFS) who ultimately approves, disapproves, or partially approves, and implements the actions in the amendment through the development of regulations on behalf of the Secretary of Commerce. NMFS is an agency in the National Oceanic and Atmospheric Administration within the Department of Commerce.

South Atlantic Fishery Management Council

- Responsible for conservation and management of fish stocks in the South Atlantic Region
- Consists of 13 voting members: 8 appointed by the Secretary of Commerce, 1 representative from each of the 4 South Atlantic states, the Southeast Regional Director of NMFS and 4 non-voting members
- Responsible for developing fishery management plans and amendments under the Magnuson-Stevens Act; recommends actions to NMFS for implementation
- Management area is from 3 to 200 miles off the coasts of North Carolina, South Carolina, Georgia, and east Florida through Key West with the exception of Mackerel which is from New York to Florida, and Dolphin-Wahoo, which is from Maine to Florida

1.3 Where is the Project Located?

Management of the federal dolphin and wahoo fishery located off the eastern United States (Atlantic) in the 3-200 nautical miles U.S. EEZ is conducted under the Dolphin Wahoo FMP (SAFMC 2003) (**Figure 1-1**).

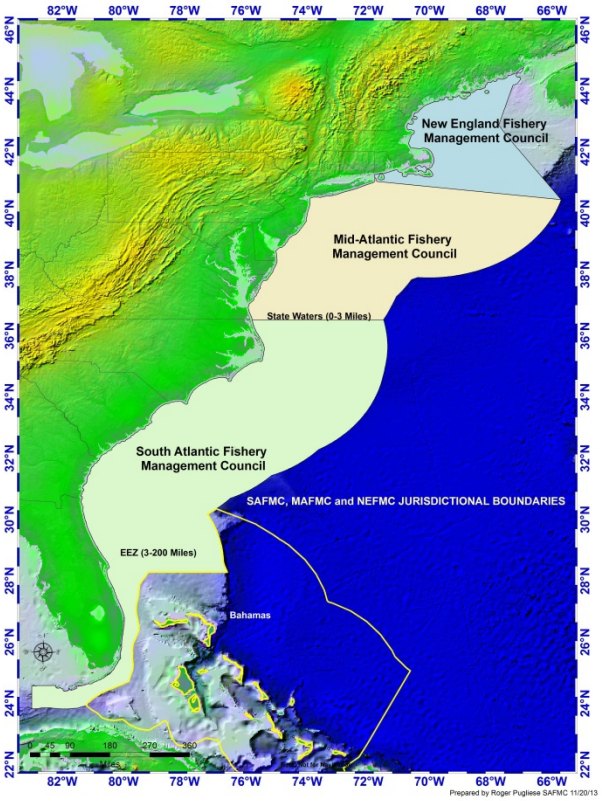

Figure 1-1. The EEZ of The Bahamas and jurisdictional boundaries of the Dolphin and Wahoo Fishery Management Plan for the Atlantic as managed by the South Atlantic Fishery Management Council.

1.4 Why are the Council and NMFS Considering this Action?

In spring of 2013, the South Atlantic Council was approached by recreational fishermen who requested changes to regulations that currently make it illegal to bring filleted dolphin and wahoo into the EEZ from Bahamian waters. The fishermen contend that storing fish safely with head and fins intact is difficult and impractical. Regulations currently allow fillets of snapper grouper species from The Bahamas to be brought into the U.S. EEZ. Inconsistent regulations for snapper grouper and dolphin wahoo is confusing to fishermen and a law enforcement concern.

The purpose of these management measures is to allow recreational fishermen to bring dolphin and wahoo fillets from The Bahamas into the U.S. EEZ and update regulations allowing recreational fishermen to bring snapper grouper fillets from The Bahamas into the U.S. EEZ. The management measures are needed to increase the social and economic benefits to recreational fishermen by removing impediments to the possession of fish in the U.S. EEZ that were legally harvested in Bahamian waters.

Purpose for Action

The purpose of these management measures is to allow recreational fishermen to bring dolphin and wahoo fillets from The Bahamas into the U.S. EEZ and update regulations ~~allowing~~ that currently allow recreational fishermen to bring ~~back~~ snapper grouper fillets from The Bahamas into the U.S. EEZ.

Need for Action

The management measures are needed to increase the social and indirect economic benefits to recreational fishermen by removing impediments to the possession of fish in the U.S. EEZ that were legally harvested in Bahamian waters.

1.5 What are the Regulations for Snapper Grouper Species Regarding Fillets Being Brought from The Bahamas?

Current regulations for snapper grouper at 50 C.F.R. § 622.186 (landing fish intact) are:

(a) South Atlantic snapper grouper in or from the South Atlantic EEZ must be maintained with head and fins intact, except as specified in paragraph (b) of this section. Such fish may be eviscerated, gilled, and scaled, but must otherwise be maintained in a whole condition. The operator of a vessel that fishes in the EEZ is responsible for ensuring that fish on that vessel in the EEZ are maintained intact and, if taken from the EEZ, are maintained intact through offloading ashore, as specified in this section.

(b) In the South Atlantic EEZ, snapper grouper lawfully harvested in Bahamian waters are exempt from the requirement that they be maintained with head and fins intact, provided valid Bahamian fishing and cruising permits are on board the vessel and the vessel is in transit through the South Atlantic EEZ. For the purpose of this paragraph, a vessel is in transit through the South Atlantic EEZ when it is on a direct and continuous course through the South Atlantic EEZ and no one aboard the vessel fishes in the EEZ.

1.6 What are the Regulations in The Bahamas?

Current Bahamian regulations state that: "any migratory fishery resource (such as kingfish, dolphin, tuna, or wahoo) that is caught shall not in total exceed 18 fish aboard the vessel at any time." Bahamian regulations do not prohibit filleting these species. Snapper grouper species are covered under demersal fish, and Bahamian regulations allow 60 pounds or 20 fish per vessel. For more information, see: http://laws.bahamas.gov.bs/cms/images/LEGISLATION/SUBORDINATE/1986/1986-0010/FisheriesResourcesJurisdictionandConservationRegulations_1.pdf

Inward Declaration and Application for Cruising Permit
Under customs regulation, captains sailing pleasure vessels not carrying cargo and operated for pleasure and recreation only, who are not sailing for reward or remuneration or for business purposes, must provide an inward declaration and apply for a cruising permit in order to sail from island to island within The Bahamas.

Eligibility
Captains sailing pleasure vessels operated for pleasure and recreation only.

Process
1. Complete the required forms.
2. Present forms to the Customs Officer at the point of arrival at your port of entry in The Bahamas.
3. Once the form is processed, a copy of the processed form will be given to you and will serve as your Cruising Permit.

Application Form(s)
1. Inward Declaration and Application for Cruising Permit (Form C2A)
2. Maritime Declaration of Health Form

Supporting Documents
- **Proof of citizenship/Identification for the captain (Passport) and other crew and passengers.**

Turn-around time
At the time of application once all documents are approved.

Deadline

This process must be completed within 24 hours after arrival into Bahamian waters. No passengers or crew are to disembark until the process is completed.

Obtaining a Recreational Fishing Permit
A Sport Fishing Permit is a licence granted to authorize foreign-owned vessels to be engaged in sport fishing exercises while in Bahamian waters. Current regulations state that both Customs and Immigration formalities must be completed before the license can be issued. Permits can be obtained from the Bahamian Customs Officer at the time of entry or from the Department of Marine Resources after entry. There are no eligibility criteria for this service.

Process:
At the time of entry into the Bahamas.

1. Complete the relevant application form.
2. Submit completed application form, along with the required supporting documents, to the Bahamian Customs Officer.
3. Pay the required fee.
4. Permit will then be issued to applicant.

From the Department of Marine Resources

1. Complete the relevant application form.
2. Submit completed application form, along with the required supporting documents, to the Department of Marine Resources.
3. Pay the required fee.
4. Permit will then be issued to the applicant.

Note: The duration of the permit is determined by the applicant. A permit can either be issued on a "per trip basis" or an "annual basis"

This service can be accessed at the following locations:
Ports of Entry throughout The Bahamas
or:

Department of Marine Resources
East Bay Street
P.O. Box N-3028
Nassau, New Providence
The Bahamas
Tel. (242) 393-1777
Fax. (242) 393-0238
E-mail: fisheries@bahamas.gov.bs

For more information on cruising permits and fishing permits, see:
http://www.bahamas.gov.bs/wps/portal/public/gov/

1.7 What are the Regulations in Florida State Waters?

In Florida, dolphin, wahoo, and snapper grouper species are required to be landed whole in State waters. Current regulations in the State of Florida (Atlantic side) for dolphin are a bag limit of 10 fish per person or 60 per vessel (whichever is less), a size limit of 20 inch fork length, and no seasonal closure. For more information, see:
https://www.flrules.org/gateway/ChapterHome.asp?Chapter=68B-41

Wahoo has a 2 fish per person bag limit, no minimum size limit, and no seasonal closure. For more information, see:
https://www.flrules.org/gateway/ChapterHome.asp?Chapter=68B-57

For snapper grouper species, see:
https://www.flrules.org/gateway/ChapterHome.asp?Chapter=68B-14

1.8 What is the History of Management for Dolphin, Wahoo, and Snapper Grouper Species?

Dolphin and wahoo were originally a part of the Fishery Management Plan for Coastal Pelagic Resources in the Gulf of Mexico and Atlantic Region. Under that plan, a control date of May

21, 1999, for possible future limited entry was established for the commercial dolphin and wahoo fishery in the South Atlantic.

Dolphin and wahoo regulations were first implemented in 2003 through a separate Fishery Management Plan for the Dolphin and Wahoo Fishery of the Atlantic (SAFMC 2003). That plan established:

1. A separate management unit for dolphin and wahoo in the U.S. Atlantic.
2. A dealer permit.
3. For-hire and commercial vessel permits.
4. For-hire and commercial operator permits.
5. Reporting requirements.
6. Maximum Sustainable Yield (MSY) and Optimal Yield (OY).
7. Defined overfishing.
8. A management framework.
9. Prohibit recreational sale of dolphin or wahoo except by for-hire vessels with a commercial permit.
10. A 1.5 million lb or 13% of the total catch soft cap for the commercial sector.
11. A recreational bag limit of 10 dolphin per person, 60 dolphin per vessel maximum.
12. A minimum size limit of 20 inches fork length off Georgia and Florida.
13. A commercial trip limit of 500 lb of wahoo with no at-sea transfer.
14. A recreational bag limit of 2 wahoo per person, per day.
15. Allowable gear for dolphin and wahoo in the Atlantic EEZ as longline; hook and line gear including manual, electric, or hydraulic rod and reels; bandit gear; handline; and spearfishing gear (including powerheads).
16. A prohibition on the use of surface and pelagic longline gear for dolphin and wahoo within any "time or area closure" in the South Atlantic Council's area of jurisdiction (Atlantic Coast) which is closed to the use of pelagic gear for highly migratory pelagic species.
17. The fishing year of January 1 to December 31 for the dolphin and wahoo fishery.
18. Essential Fish Habitat (EFH) for dolphin and wahoo as the Gulf Stream, Charleston Gyre, and Florida Current.
19. Essential Fish Habitat-Habitat Areas of Particular Concern (EFH-HAPC) for dolphin and wahoo in the Atlantic to include The Point, The Ten-Fathom Ledge, and Big Rock (North Carolina); the Charleston Bump and The Georgetown Hole (South Carolina); The Point off Jupiter Inlet Florida); The Hump off Islamorada, Florida; The Marathon Hump off Marathon, Florida; and The "Wall" off of the Florida Keys.

The Fishery Management Plan for Pelagic Sargassum Habitat in the South Atlantic Region (SAFMC 2002) and the Comprehensive Ecosystem-Based Amendment 1 (SAFMC 2009a) designated additional EFH and EFH-HAPCs for dolphin and wahoo.

The Comprehensive Annual Catch Limit (ACL) Amendment (SAFMC 2011) established the acceptable biological catch (ABC) control rule, ABC, annual catch limits, OY, and accountability measures in the dolphin and wahoo fishery. The Comprehensive ACL Amendment also set an annual catch target for the recreational sector dolphin and wahoo.

Snapper grouper regulations in the South Atlantic were first implemented in 1983. See **Appendix D** of this document for a detailed history of management for the snapper grouper fishery.

Chapter 2. Proposed Actions

2.1 Action 1: Exempt dolphin and wahoo harvested lawfully in The Bahamas from regulations that require them to be landed with head and fins intact in the U.S. EEZ. This action applies only to the recreational sector as there is no commercial harvest of dolphin and wahoo by U.S. vessels allowed in Bahamian waters.

Alternative 1 (No Action): Dolphin and wahoo in or from the Atlantic EEZ must be maintained with head and fins intact. Such fish may be eviscerated, gilled, and scaled, but must otherwise be maintained in a whole condition.

Alternative 2: Allow dolphin and wahoo lawfully harvested in The Bahamas and brought into the U.S. EEZ from The Bahamas as fillets. ~~The vessel must have stamped and dated passports to prove that the vessel passengers were in The Bahamas, as well as valid current Bahamian cruising and fishing permits onboard the vessel.~~ The vessel must be in continuous transit in the U.S. EEZ when dolphin and/or wahoo fillets are onboard. A vessel is in transit through the South Atlantic EEZ when it is on a direct and continuous course through the South Atlantic EEZ and no one aboard the vessel fishes in the EEZ.

Two fillets of dolphin or wahoo, regardless of the size of the fillet will count as 1 fish towards the possession limit.

The IPT recommends adding language regarding "lawfully harvested in The Bahamas" as part of the IPT recommends that the language regarding the documentation required be removed from **Alternative 2.** A detailed description in terms what documentation is currently required would be placed in the text of the analysis. In the future, if Bahamian requirements change, U.S. regulations would not have to be changed, as well.

2.1.1 Comparison of Alternatives

2.2 Action 2. Exempt dolphin and wahoo harvested lawfully from The Bahamas from the bag and possession limits in the U.S. EEZ. Vessels may possess onboard 2 wahoo per person and 10 dolphin per person with a maximum of 60 dolphin.

Alternative 1 (No Action): The bag limit for the possession of dolphin and wahoo lawfully harvested from the Bahamas, is 10 dolphin (60 dolphin per boat)/2 wahoo per person per day, in the U.S. EEZ.

Alternative 2: Exempt dolphin lawfully harvested in The Bahamas from regulations for bag limits in the U.S. EEZ.

Alternative 3: Exempt wahoo lawfully harvested in The Bahamas from regulations for bag limits in the U.S. EEZ.

2.2.1 Comparison of Alternatives

2.3 Action 3. Require fillets of dolphin, wahoo, and snapper grouper species brought into the U.S. EEZ lawfully harvested from The Bahamas to have the skin intact.

Alternative 1 (No Action): Snapper grouper fillets possessed in the U.S. EEZ from The Bahamas are currently not required to have skin intact.

Preferred Alternative 2: Snapper grouper fillets brought into the U.S. EEZ from The Bahamas must have the skin intact.

Preferred Alternative 3. Dolphin and wahoo fillets brought into the U.S. EEZ from The Bahamas must have the skin intact.

2.3.1 Comparison of Alternatives

2.4 Action 4. In addition to possessing valid Bahamian cruising and fishing permits, require

stamped and dated passports to prove that vessel passengers were in The Bahamas if the vessel is in possession of snapper grouper fillets in the U.S. EEZ.

Alternative 1 (No Action): Vessels bringing snapper grouper fillets into the U.S. EEZ from The Bahamas are required to have valid current Bahamian cruising and fishing permits onboard the vessel.

Alternative 2: Vessels bringing snapper grouper fillets into the U.S. EEZ from The Bahamas are required to have stamped and dated passports to prove that the vessel passengers were in The Bahamas, as well as valid current Bahamian cruising and fishing permits onboard the vessel.

The IPT recommends removing Action 4 from the document because requiring fishermen to "lawfully harvest" in The Bahamas is already required. A detailed description in terms what documentation is currently required would be placed in the text. If the Council chooses **Alternative 2**- as a preferred alternative, U.S. regulations would need to be changed if Bahamian regulations change in the future.

2.4.1 Comparison of Alternatives

Chapter 3 Affected Environment

Dolphin Wahoo Amendment 7 and Snapper Grouper Amendment 33 addresses fillets of dolphin,wahoo, and snapper grouper species lawfully harvested in Bahamian waters. The reader is referred to Dolphin Wahoo Amendment 5 (SAFMC 2013) and Regulatory Amendment 4 to the Snapper Grouper FMP (SAFMC 2014b) for details on the affected environment for these species in the Atlantic EEZ, and is summarized below.

3.1 Habitat Environment

Information on the habitat utilized by dolphin and wahoo in the Atlantic, and snapper grouper species in the South Atlantic Region is included in Volume II of the Fishery Ecosystem Plan (SAFMC 2009b) and incorporated here by reference. The Fishery Ecosystem Plan can be found at: http://www.safmc.net/ecosystem-management/fishery-ecosystem-plan-1. Dolphin and wahoo are migratory pelagic species occurring in tropical and subtropical waters worldwide. They are found near the surface around natural and artificial floating objects, including *Sargassum* (in the Atlantic).

Many snapper grouper species utilize both pelagic and benthic habitats during several stages of their life histories; larval stages of these species live in the water column and feed on plankton. Most juveniles and adults are demersal (bottom dwellers) and associate with hard structures on the continental shelf that have moderate to high relief (e.g., coral reef systems and artificial reef structures, rocky hard-bottom substrates, ledges and caves, sloping soft-bottom areas, and limestone outcroppings). Juvenile stages of some snapper grouper species also utilize inshore seagrass beds, mangrove estuaries, lagoons, oyster reefs, and embayment systems. In many species, various combinations of these habitats may be utilized during daytime feeding migrations or seasonal shifts in cross-shelf distributions.

3.1.1 Essential Fish Habitat

Essential fish habitat (EFH) is defined in the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) as "those waters and substrates necessary to fish for spawning, breeding, feeding, or growth to maturity" (16 U.S. C. 1802(10)). EFH for dolphin and wahoo is the Gulf Stream, Charleston Gyre, Florida Current, and pelagic *Sargassum.*

Note: This EFH definition for dolphin was approved by the Secretary of Commerce on June 3, 1999, as a part of the South Atlantic Fishery Management Council's (South Atlantic Council) Comprehensive Habitat Amendment (SAFMC, 1998). Dolphin was included within the Fishery Management Plan for the Coastal Migratory Pelagic Resources in the Gulf of Mexico and Atlantic Region (Coastal Migratory Pelagics FMP). This definition does not apply to extra-jurisdictional areas.

For snapper grouper species, specific categories of EFH identified in the South Atlantic, which are utilized by federally managed fish and invertebrate species, include both estuarine/inshore and marine/offshore areas. Specifically, estuarine/inshore EFH includes: Estuarine emergent and mangrove wetlands, submerged aquatic vegetation, oyster reefs and shell banks, intertidal flats, palustrine emergent and forested systems, aquatic beds, and estuarine water column. Additionally, marine/offshore EFH includes: live/hard

bottom habitats, coral and coral reefs, artificial and manmade reefs, *Sargassum* species, and marine water column.

EFH utilized by snapper grouper species in this region includes coral reefs, live/hard bottom, submerged aquatic vegetation, artificial reefs, and medium to high profile outcroppings on and around the shelf break zone from shore to at least 183 meters [600 ft (but to at least 2,000 ft for wreckfish)] where the annual water temperature range is sufficiently warm to maintain adult populations of members of this largely tropical fish complex. EFH includes the spawning area in the water column above the adult habitat and the additional pelagic environment, including *Sargassum*, required for survival of larvae and growth up to and including settlement. In addition, the Gulf Stream is also EFH because it provides a mechanism to disperse snapper grouper larvae.

For specific life stages of estuarine-dependent and near shore snapper grouper species, EFH includes areas inshore of the 30 meter (100-ft) contour, such as attached macroalgae; submerged rooted vascular plants (seagrasses); estuarine emergent vegetated wetlands (saltmarshes, brackish marsh); tidal creeks; estuarine scrub/shrub (mangrove fringe); oyster reefs and shell banks; unconsolidated bottom (soft sediments); artificial reefs; and coral reefs and live/hard bottom habitats.

3.1.2 Habitat Areas of Particular Concern

EFH-habitat of particular concern (HAPCs) for dolphin and wahoo in the Atlantic include The Point, The Ten-Fathom Ledge, and Big Rock (North Carolina); The Charleston Bump and The Georgetown Hole (South Carolina); The Point off Jupiter Inlet (Florida); The Hump off Islamorada, Florida; The Marathon Hump off Marathon, Florida; The "Wall" off of the Florida Keys; and Pelagic *Sargassum*.

Note: This EFH-HAPC definition for dolphin was approved by the Secretary of Commerce on June 3, 1999 as a part of the South Atlantic Council's Comprehensive Habitat Amendment (SAFMC 1998)(dolphin was included within the Coastal Migratory Pelagics FMP).

EFH-HAPC for species in the Snapper Grouper Fishery Management Unit (FMU) includes medium to high profile offshore hard bottoms where spawning normally occurs; localities of known or likely periodic spawning aggregations; near shore hard bottom areas; The Point, The Ten Fathom Ledge, and Big Rock (North Carolina); The Charleston Bump (South Carolina); mangrove habitat; seagrass habitat; oyster/shell habitat; all coastal inlets; all state-designated nursery habitats of particular importance to snapper grouper (e.g., Primary and Secondary Nursery Areas designated in North Carolina); pelagic and benthic *Sargassum*; Hoyt Hills for wreckfish; the Oculina Bank Habitat Area of Particular Concern; all hermatypic coral habitats and reefs; manganese outcroppings on the Blake Plateau; South Atlantic Council-designated Artificial Reef Special Management Zones (SMZs); and deep-water MPAs.

Areas that meet the criteria for EFH-HAPCs include habitats required during each life stage (including egg, larval, postlarval, juvenile, and adult stages).

In addition to protecting habitat from fishing related degradation though fishery management plan regulations, the South Atlantic Council, in cooperation with National Marine Fisheries Service (NMFS), actively comments on non-fishing projects or policies that may impact essential fish habitat. With guidance from the Habitat Advisory Panel, the South Atlantic Council has developed and approved policies on: energy exploration, development,

transportation and hydropower re-licensing; beach dredging and filling and large-scale coastal engineering; protection and enhancement of submerged aquatic vegetation; alterations to riverine, estuarine and near shore flows; offshore aquaculture; and marine invasive species and estuarine invasive species.

See **Appendix I** for detailed information on EFH and EFH-HAPCs for all Council managed species.

3.2 Biological and Ecological Environment

The marine environment in the Atlantic management area affected by actions in this environmental assessment is defined by two components (**Figure 3-1**). Each component is described in detail in Chapter 3 of Dolphin Wahoo Amendment 5 (SAFMC 2013).

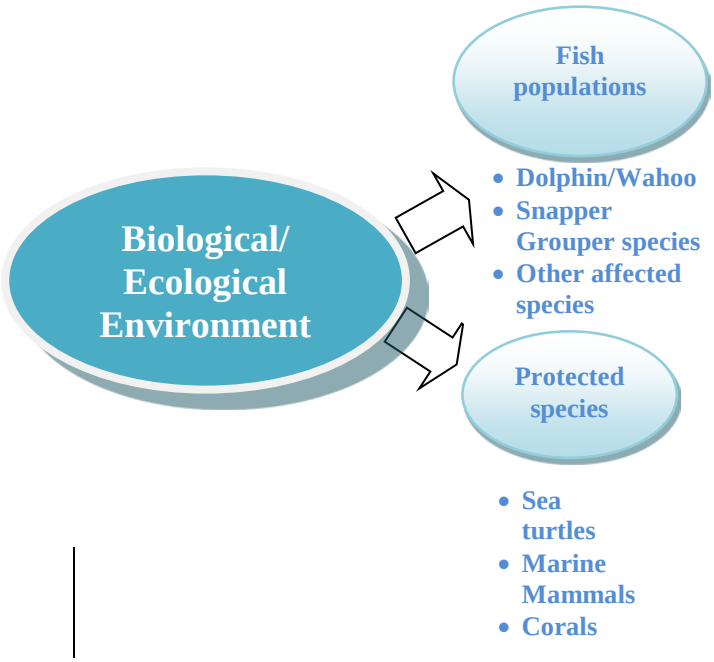

Figure 3-1. Two components of the biological environment described in this document.

3.2.1 Fish Populations

Dolphin and wahoo are highly migratory pelagic species occurring in tropical and subtropical waters worldwide. In the western Atlantic, dolphin and wahoo are distributed from Nova Scotia to Brazil, including Bermuda and the greater Caribbean region, and the Gulf of Mexico. They are found near the surface around natural and artificial floating objects, including *Sargassum* (in the Atlantic).

Dolphin eat a wide variety of species, including small pelagic fish, juvenile tuna, billfish, jacks, and pompano, and pelagic larvae of nearshore, bottom-living species. They also eat invertebrates such as cephalopods, mysids, and jellyfish. Large tuna, rough-toothed dolphin, marlin, sailfish, swordfish, and sharks feed on dolphin, particularly juveniles. Wahoo mainly feed on squid and fish, including frigate mackerel, butterfish, porcupine fish, and round herring. They generally compete with tuna for the same kind of food, but can feed on larger prey. A number of predators such as sharks and large tuna that share their habitat feed on young wahoo. Dolphin and Wahoo are likely to be caught when longline fishermen target other species such as billfish and tuna. Additional background information regarding the fish populations for dolphin and wahoo can be found in the Dolphin Wahoo FMP (SAFMC 2003) at: http://www.safmc.net/Library/Dolphin/Wahoo/tabid/410/Default.aspx

The waters off the South Atlantic coast are home to a diverse population of fish. The snapper grouper fishery management unit contains 59 species of fish, many of them neither “snappers” nor “groupers”. These species live in depths from a few feet (typically as juveniles) to hundreds of feet. As far as north/south distribution, the more temperate species tend to live in the upper reaches of the South Atlantic management area (e.g., black sea bass, red porgy) while the tropical variety’s core residence is in the waters off south Florida,

Caribbean Islands, and northern South America (e.g., black grouper, mutton snapper). These are reef-dwelling species that live amongst each other. These species rely on the reef environment for protection and food. There are several reef tracts that follow the southeastern coast. The fact that these fish populations congregate dictates the nature of the fishery (multi-species) and further forms the type of management regulations proposed in this document. Additional background information regarding the snapper grouper fish populations can be found in the Snapper Grouper FMP (SAFMC 1983) at: http://www.safmc.net/resource-library/snapper-grouper

Dolphin Life History
An Overview

- Worldwide distribution; In the western Atlantic ocean, from Nova Scotia to Brazil (including Bermuda, The Bahamas, the Gulf of Mexico, and the Caribbean)
- Oceanic, adults in open water and juveniles with floating seagrass and marine debris
- Highly migratory
- Protracted multiple spawning behavior throughout the year, varying with region. Off North Carolina, peak spawning is during April through July
- Maximum age is 4 years (mean <2 years)

3.2.2 Dolphin, *Coryphaena hippurus*

In the western Atlantic ocean, dolphin are most common from North Carolina, throughout the Gulf of Mexico and Caribbean, to the northeast coast of Brazil (Oxenford 1999). Dolphin are highly migratory and pelagic with adults found in open water, and juveniles with floating seagrass and marine debris and occasionally found in estuaries and harbors (Palko et al. 1982; Johnson 1978).

In a study by Schwenke and Buckel (2008) off North Carolina, dolphin ranged from 3.5 in (89 mm) fork length (FL) to 57 in (1451 mm) FL. Mean dolphin weight ranged from 14.2 lbs (6.44 kg) for males to 7.6 lbs (3.44 kg) for females. Estimated average growth rate was 0.15 in (3.78 mm)/day during the first six months, and maximum reported age was 3 years. Size at 50% maturity was slightly smaller for female dolphin (18.1 in FL; 460 mm), when compared with males (18.7 in FL; 475 mm); and peak spawning occurred from April through July off North Carolina (Schwenke and Buckel 2008). Prager (2000) estimated natural mortality for dolphin to be between 0.68 and 0.80.

For a more comprehensive record of the literature on the biology and ecology of dolphin, see **Section 3.0** in the Dolphin Wahoo FMP (SAFMC 2003) found at: http://www.safmc.net/Library/Dolphin/Wahoo/tabid/410/Default.aspx

3.2.3 Wahoo, *Acanthocybium solanderi*

In the western Atlantic, the highly migratory, pelagic wahoo are found from New York through Columbia including Bermuda, The Bahamas, the Gulf of Mexico, and the Caribbean (Theisen et al. 2008; Garber et al. 2005; Collette 2002). Wahoo typically occur far offshore, inhabit waters around pinnacles, reef edges, and walls, and may be attracted to oceanic frontal zones and temperature discontinuities (Garber et al. 2005).

Wahoo Life History
An Overview

- Worldwide distribution; In the western Atlantic wahoo are found from New York through Columbia (including Bermuda, The Bahamas, the Gulf of Mexico, and the Caribbean)
- Oceanic
- Highly migratory
- The spawning season extends from June through August, with peak spawning in June and July
- Maximum age is 9.3 years (mean 1.8 years)

In studies off Florida and the northern Bahamas, McBride et al. (2008) reported rapid growth to a large size, with sizes ranging from 24.7 in (628 mm) FL to 77 in (1956 mm) FL. Males were smaller than females, with the largest male at 72.3 lbs (32.8 kg) and the largest female was 101.4 lbs (46.0 kg). Maximum age was 9.3 years. Maki Jenkins and McBride (2009) reported size and age at 50% maturity for female wahoo at 36.4 in (925 mm) FL and 0.64 years, respectively, with peak spawning in the summer.

For a more comprehensive record of the literature on the biology and ecology of wahoo, see **Section 3.0** in the Dolphin Wahoo FMP (SAFMC 2003) found at: http://www.safmc.net/Library/Dolphin/Wahoo/tabid/410/Default.aspx

3.2.4 Snapper Grouper Species

Snapper grouper species that may be affected by the proposed action include 59 species in the Snapper Grouper FMU. The life history, biological characteristics, and stock status of each species may be found in their respective Southeast Data, Assessment, and Review (SEDAR) reports listed on the SEDAR web site http://www.sefsc.noaa.gov/sedar/. Yellowtail snapper was assessed by the state of Florida in 2012 (O'Hop et al. 2012).

3.2.5 Stock Status of Dolphin and Wahoo

The Report to Congress on the Status of U.S. Stocks indicates dolphin is not overfished, and is not undergoing overfishing (http://www.nmfs.noaa.gov/sfa/statusoffisheries/SOSmain.htm). The overfished/overfishing status of wahoo is unknown, but all indications are that it is a healthy stock. Prager (2000) conducted an exploratory assessment of dolphin, but the results were not conclusive. A Southeast Data, Assessment, and Review (SEDAR) stock assessment for dolphin and wahoo is expected within the next 5 years. The SEDAR process, initiated in 2002, is a cooperative Fishery Management Council process intended to improve the quality, timeliness, and reliability of fishery stock assessments in the South Atlantic, Gulf of Mexico, and U.S. Caribbean. SEDAR is managed by the Caribbean, Gulf of Mexico, and South Atlantic Fishery Management Councils in

coordination with NMFS and the Atlantic and Gulf States Marine Fisheries Commissions. Oxenford and Hunte (1986) suggested that there were at least two separate unit stocks of dolphin in the northeast and southeast Caribbean Sea. Oxenford (1999) suggested that it was very likely that additional stocks of dolphin existed in the Gulf of Mexico and central/western Caribbean. Theisen et al. (2008) indicated that a worldwide stock for wahoo consisted of a single globally distributed population. However, Zischke et al. (2012) concluded that despite genetic homogeneity in wahoo, multiple discrete phenotypic stocks existed in the Pacific and eastern Indian oceans.

Life-history characteristics of dolphin and wahoo such as rapid growth rates, early maturity, batch spawning over an extended season, a short life span, and a varied diet could help sustain fishing pressures on these species (Schwenke and Buckel 2008; McBride et al. 2008; Prager 2000; and Oxenford 1999). Dolphin and wahoo are listed as species of "least concern" under the International Union for Conservation of Nature Red List, i.e., species that have a low risk of extinction. See **Section 1.5** for a history of recent management of dolphin and wahoo.

3.2.6 Stock Status of Snapper Grouper Species

Stock assessments are not available for all 59 species within the Snapper Grouper FMU. Available stock assessments for snapper grouper species may be found in their respective SEDAR reports listed on the SEDAR web site http://www.sefsc.noaa.gov/sedar/.

3.2.7 Protected Species

There are 40 listed species protected by federal law that may occur in the exclusive economic zone (EEZ) of the South Atlantic Region and are under the purview of NMFS. Thirty-one of these species are marine mammals protected under the Marine Mammal Protection Act (MMPA). Six of these marine mammal species (sperm, sei, fin, blue, humpback, and North Atlantic right whales) are also listed as endangered under the Endangered Species Act (ESA). In addition to those six marine mammals, five species of sea turtles (green, hawksbill, Kemp's ridley, leatherback, and loggerhead); the smalltooth sawfish; five distinct population segments (DPSs) of Atlantic sturgeon; and two *Acropora* coral species (elkhorn [*Acropora palmata*] and staghorn [*A. cervicornis*]) are also protected under the ESA. Portions of designated critical habitat for North Atlantic right whales and *Acropora* corals occur within the South Atlantic Council's jurisdiction. Additionally, NMFS has proposed rules to uplist *Acropora* Corals, list 6 additional species of corals, and designate critical habitat for loggerhead sea turtles. The potential impacts from the continued authorization of the Atlantic dolphin wahoo fishery and the South Atlantic Snapper Grouper Fishery on ESA-listed species have been considered in previous ESA Section 7 consultations or subsequent memoranda. Those consultations indicate that of the species listed above, sea turtles and smalltooth sawfish are the most likely to interact with these fisheries and are therefore discussed further below.

Turtles

Green, hawksbill, Kemp's ridley, leatherback, and loggerhead sea turtles are all highly migratory and travel widely throughout the South Atlantic. The following sections are a brief overview of the general life history characteristics of the sea turtles found in the South Atlantic region. Several volumes exist that cover the biology and ecology of these species more thoroughly (i.e., Lutz and Musick (eds.) 1997, Lutz et al. (eds.) 2002).

Green sea turtle hatchlings are thought to occupy pelagic areas of the open ocean and are often associated with *Sargassum* rafts (Carr

1987, Walker 1994). Pelagic stage green sea turtles are thought to be carnivorous. Stomach samples of these animals found ctenophores and pelagic snails (Frick 1976, Hughes 1974). At approximately 20 to 25 cm carapace length, juveniles migrate from pelagic habitats to benthic foraging areas (Bjorndal 1997). As juveniles move into benthic foraging areas a diet shift towards herbivory occurs. They consume primarily seagrasses and algae, but are also know to consume jellyfish, salps, and sponges (Bjorndal 1980, 1997; Paredes 1969; Mortimer 1981, 1982). The diving abilities of all sea turtles species vary by their life stages. The maximum diving range of green sea turtles is estimated at 110 m (360 ft) (Frick 1976), but they are most frequently making dives of less than 20 m (65 ft.) (Walker 1994). The time of these dives also varies by life stage. The maximum dive length is estimated at 66 minutes with most dives lasting from 9 to 23 minutes (Walker 1994).

The **hawksbill's** pelagic stage lasts from the time they leave the nesting beach as hatchlings until they are approximately 22-25 cm in straight carapace length (Meylan 1988, Meylan and Donnelly 1999). The pelagic stage is followed by residency in developmental habitats (foraging areas where juveniles reside and grow) in coastal waters. Little is known about the diet of pelagic stage hawksbills. Adult foraging typically occurs over coral reefs, although other hard-bottom communities and mangrove-fringed areas are occupied occasionally. Hawksbills show fidelity to their foraging areas over several years (van Dam and Diéz 1998). The hawksbill's diet is highly specialized and consists primarily of sponges (Meylan 1988). Gravid females have been noted ingesting coralline substrate (Meylan 1984) and calcareous algae (Anderes Alvarez and Uchida 1994), which are believed to be possible sources of calcium to aid in eggshell production. The maximum diving depths of these animals are not known, but the maximum length of dives is estimated at 73.5 minutes. More routinely, dives last about 56 minutes (Hughes 1974).

Kemp's ridley hatchlings are also pelagic during the early stages of life and feed in surface waters (Carr 1987, Ogren 1989). Once the juveniles reach approximately 20 cm carapace length they move to relatively shallow (less than 50m) benthic foraging habitat over unconsolidated substrates (Márquez-M. 1994). They have also been observed transiting long distances between foraging habitats (Ogren 1989). Kemp's ridleys feeding in these nearshore areas primarily prey on crabs, though they are also known to ingest mollusks, fish, marine vegetation, and shrimp (Shaver 1991). The fish and shrimp Kemp's ridleys ingest are not thought to be a primary prey item but instead may be scavenged opportunistically from bycatch discards or from discarded bait (Shaver 1991). Given their predilection for shallower water, Kemp's ridleys most routinely make dives of 50 m or less (Soma 1985, Byles 1988). Their maximum diving range is unknown. Depending on the life stage a Kemp's ridleys may be able to stay submerged anywhere from 167 minutes to 300 minutes, though dives of 12.7 minutes to 16.7 minutes are much more common (Soma 1985, Mendonca and Pritchard 1986, Byles 1988). Kemp's ridleys may also spend as much as 96% of their time underwater (Soma 1985, Byles 1988).

Leatherbacks are the most pelagic of all ESA-listed sea turtles and spend most of their time in the open ocean. Although they will enter coastal waters and are seen over the continental shelf on a seasonal basis to feed in areas where jellyfish are concentrated. Leatherbacks feed primarily on cnidarians (medusae, siphonophores) and tunicates. Unlike other sea turtles, leatherbacks' diets do not shift during their life cycles. Because leatherbacks' ability to capture and eat jellyfish is not constrained by size or age, they continue to feed on these species regardless of life stage (Bjorndal 1997).

Leatherbacks are the deepest diving of all sea turtles. It is estimated that these species can dive in excess of 1000 m (Eckert et al. 1989) but more frequently dive to depths of 50 m to 84 m (Eckert et al. 1986). Dive times range from a maximum of 37 minutes to more routines dives of 4 to 14.5 minutes (Standora et al. 1984, Eckert et al. 1986, Eckert et al. 1989, Keinath and Musick 1993). Leatherbacks may spend 74% to 91% of their time submerged (Standora et al. 1984).

Loggerhead hatchlings forage in the open ocean and are often associated with *Sargassum* rafts (Hughes 1974, Carr 1987, Walker 1994, Bolten and Balazs 1995). The pelagic stage of these sea turtles are known to eat a wide range of things including salps, jellyfish, amphipods, crabs, syngnathid fish, squid, and pelagic snails (Brongersma 1972). Stranding records indicate that when pelagic immature loggerheads reach 40-60 cm straight-line carapace length they begin to live in coastal inshore and nearshore waters of the continental shelf throughout the U.S. Atlantic (Witzell 2002). Here they forage over hard- and soft-bottom habitats (Carr 1986). Benthic foraging loggerheads eat a variety of invertebrates with crabs and mollusks being an important prey source (Burke et al. 1993). Estimates of the maximum diving depths of loggerheads range from 211 m to 233 m (692-764ft.) (Thayer et al. 1984, Limpus and Nichols 1988). The lengths of loggerhead dives are frequently between 17 and 30 minutes (Thayer et al. 1984, Limpus and Nichols 1988, Limpus and Nichols 1994, Lanyan et al. 1989) and they may spend anywhere from 80 to 94% of their time submerged (Limpus and Nichols 1994, Lanyan et al. 1989).

Fish

Historically the **smalltooth sawfish** in the U.S. ranged from New York to the Mexico border. Their current range is poorly understood but believed to have contracted from these historical areas. In the South Atlantic region, they are most commonly found in Florida, primarily off the Florida Keys (Simpfendorfer and Wiley 2004). Only two smalltooth sawfish have been recorded north of Florida since 1963 [the first was captured off North Carolina in 1963 and the other off Georgia in 2002 (National Smalltooth Sawfish Database, Florida Museum of Natural History)]. Historical accounts and recent encounter data suggest that immature individuals are most common in shallow coastal waters less than 25 meters (Bigelow and Schroeder 1953, Adams and Wilson 1995), while mature animals occur in waters in excess of 100 meters (Simpfendorfer pers. comm. 2006). Smalltooth sawfish feed primarily on fish. Mullet, jacks, and ladyfish are believed to be their primary food resources (Simpfendorfer 2001). Smalltooth sawfish also prey on crustaceans (mostly shrimp and crabs) by disturbing bottom sediment with their saw (Norman and Fraser 1938, Bigelow and Schroeder 1953).

3.3 Human Environment

3.3.1 Economic Environment

The U.S. vessels most likely to recreationally harvest snapper, grouper, dolphin, and wahoo in Bahamian waters are expected to be the vessels that also participate in the dolphin wahoo, snapper grouper, and coastal migratory pelagic fisheries in the south Atlantic region of the U.S.

The following amendments are referenced to provide economic environment information regarding the U.S. snapper grouper fishery. These amendments include Amendment 13C (SAFMC 2006), Amendment 15A (SAFMC 2008a), Amendment 15B (SAFMC 2008b), Amendment 16 (SAFMC 2009c), Amendment 27 (SAFMC 2014a), Regulatory Amendment 9 (SAFMC 2011b), and Comprehensive ACL Amendment for the South Atlantic Region (SAFMC 2011a) and are incorporated herein by reference.

A description of the dolphin wahoo fishery is contained in SAFMC (2011a) and is incorporated herein by reference.

Regulations allowing fillets from The Bahamas in the U.S. EEZ would apply to any vessel regardless of its involvement in U.S. federally permitted fisheries. Those included in the economic description of the fishery are those persons and vessels who are in the U.S. EEZ with dolphin, wahoo, or snapper grouper species lawfully harvested in The Bahamas.

According to the Internet website of the Bahamian Ministry of Tourism, in 2012, 148,578 individuals arrived in Bahamian ports by sea, but not on a cruise ship (http://www.tourismtoday.com/home/statistics/visitor-arrivals/foreign-air-sea/). Potentially, each of these persons could be affected by these actions. However, accurate data do not exist that characterize or enumerate the numbers of vessels or trips that harvest fish in The Bahamas and then transit through the U.S. EEZ. The best approximation of participation in the fishery would be those vessels that are currently or have historically participated in U.S. managed federal fisheries.

Only foreign vessels that fish recreationally in The Bahamas are allowed to obtain Bahamian fishing permits. Selling fish lawfully caught in The Bahamas in the U.S. would be a violation of the Lacey Act (6 CFR § 3372). Nonetheless, vessels permitted to fish commercially in the U.S. EEZ for dolphin, wahoo, or snapper grouper species could fish recreationally in The Bahamas.

3.3.1.1 Snapper Grouper Fishery

3.3.1.1.1 Commercial Sector

On average, there were 14,788 commercial fishing trips made by an average of 928 vessels where at least one pound of a snapper grouper species was landed. Average annual landings of snapper grouper were 7,239,350 lbs ww, with an average nominal annual value of $18,026,966. On, April 28, 2014, there were 571 valid or renewable South Atlantic Snapper Grouper Unlimited Permits, and 113 225-lb Limited permits.

3.3.1.1.2 Recreational Sector

Average landings of snapper grouper species from the South Atlantic region from 2008 through 2012 were 8,113,668 lbs ww per year by the private/rental sector of the recreational fishery with the majority of the fish being harvested off the east coast of Florida. The average number of trips taken by private/rental vessels landing snapper grouper species from 2008 through 2012 were 1,935,729 trips per year. An average of 628,815 trips by private/rental vessels from 2008 through 2012 that specifically targeted snapper grouper species in the South Atlantic. The number of permitted private/rental vessels that participated in the snapper grouper fishery in the South Atlantic is unknown.

Average landings of snapper grouper species by the for-hire sector (both charter and headboats combined) for 2008-2012 was 3,281,092 lbs ww on an average of 115,481 trips. There were 1,430 valid snapper grouper for-hire permits As of April 28, 2014.

The estimated mean value of access per marine recreational fishing trip in the South Atlantic is $109.31 [in 2000$] (Haab *et al.* 2001). Although this estimate is not specific to snapper grouper fishing trips, it may shed light on the magnitude of an angler‘s willingness to pay for this type of recreational experience.

The estimated willingness to pay for an incremental increase in catch and keep rates per trip for snapper grouper speciesis $3.01 (in 2000 dollars) (Haab *et al.* 2001). Whitehead and Haab (2001) estimated the marginal willingness to pay to avoid a one fish red snapper bag limit

decrease to be $1.06 to $2.20 (in 2000 dollars) . Finally, Haab *et al.* (2001) provided a compensating variation (the amount of money a person would have to receive to be no worse off after a reduction of the bag limit) estimate of $2.49 (in 2000 dollars) per fish when calculated across all private boat anglers that targeted snapper grouper snapper grouper species in the South Atlantic.

The NMFS Southeast Fisheries Science Center (NMFS 2009) developed estimates of consumer surplus per angler trip based on various studies and data in the last ten years. The values/ranges of consumer surplus estimates are (in 2009 dollars) $112 to $128 for red snapper, $123 to $128 for grouper, $11 for other snappers, and $80 for snapper grouper.

3.3.1.2 Dolphin Wahoo Fishery

3.3.1.2.1 Commercial Sector

On average there were 2,271 commercial fishing trips were at least one pound of dolphin was landed. Average annual landings of dolphin were 158,974 lbs ww, with an average nominal annual value of $335,243.

On average there were 406 commercial fishing trips were at least one pound of wahoo was landed. Average annual landings of wahoo were 24,383 lbs ww, with an average nominal annual value of $72,203.

As of April 28, 2014, there were a total of 1,929 valid South Atlantic Dolphin Wahoo commercial permits.

3.3.1.2.2 Recreational Sector

Average landings of dolphin from the South Atlantic region from 2008 through 2012 averaged 4,518,455 lbs ww per year by the private/rental sector of the recreational fishery with the majority of the fish being harvested off the east coast of Florida. The average number of trips taken by private/rental vessels landing dolphin from 2008 through 2012 averaged 263,733 trips per year. There was an average of 708,015 trips by private/rental vessels from 2007 through 2011 that specifically targeted dolphin.

Average landings of wahoo from the South Atlantic region from 2008 through 2012 averaged 79,987 lbs ww per year by the private/rental sector of the recreational fishery with the majority of the fish being harvested off the east coast of Florida. The average number of trips taken by private/rental vessels landing wahoo from 2008 through 2012 averaged 18,265 trips per year. There was an average of 117,143 trips by private vessels from 2007 through 2011 that specifically targeted wahoo.

The actual number of permitted private vessels that participated in the dolphin wahoo fishery in the South Atlantic is unknown.

Average landings of dolphin and wahoo by the for-hire sector (both charter and headboats combined) for 2008-2012 was 2,582,842 lbs ww on an average of 32,854 trips. There were 1,047 active dolphin for-hire permits in 2012.

Using the NMFS Southeast Fisheries Science Center (NMFS 2009) estimates of consumer surplus per angler trip based on various studies and data in the last ten years, the range of consumer surplus estimates for dolphin (in 2009 dollars) is $40 to $412 (Haab, *et al*. 2009). Comparable estimates for wahoo are not available.

3.3.2 Social Environment

Social Importance of Fishing

Socio-cultural values are qualitative in nature making it difficult to measure social valuation of marine resources and fishing activity. The following description includes multiple approaches to examining fishing importance. These spatial approaches focus on

the community level (based on the address of dealers or permit holders) and identify importance by "community", defined according to geo-political boundaries (cities). A single county may thus have several communities identified as reliant on fishing and the boundaries of these communities are not discrete in terms of residence, vessel homeport, and dealer address. For example, a fisherman may reside in one community, homeport his vessel in another, and land his catch in yet another.

One approach to identify communities with the greatest engagement utilizes measures called the regional quotient (rq) to identify commercial reliance. The rq is a way to measure the relative importance of a given species across all communities in the region and represents the proportional distribution of commercial landings of a particular species. This proportional measure does not provide the number of pounds or the value of the catch, data which might be confidential at the community level for many places. The rq is calculated by dividing the total pounds (or value) of a species landed in a given community, by the total pounds (or value) for that species for all communities in the region.

Another approach analyzes relevant fishing permits at the state and community level to examine the areas where actions which may impact permit holders and their crew might be experienced. Communities above the mean are presented because the number of communities with permits is so numerous.

These measures are an attempt to quantify the importance of the components of the included fisheries to communities around the Atlantic coast and suggest where impacts from management actions are more likely to be experienced. The descriptions of the dolphin wahoo fishery and snapper grouper fishery that follow include these quantitative measures in addition to qualitative information about the communities.

Dolphin Wahoo Fishery

A description of the social environment of the dolphin wahoo fishery is contained in Dolphin Wahoo Amendment 5 (SAFMC 2013) and is incorporated herein by reference where appropriate. The South Atlantic, Mid-Atlantic, and New England regions are included in the description of the social environment. The referenced description focuses on available geographic and demographic data to identify communities with strong relationships with dolphin or wahoo fishing (i.e., significant landings and revenue), and positive or negative impacts from regulatory change are expected to occur in places with greater landings of wahoo or dolphin.

The descriptions of South Atlantic communities in Amendment 5 (SAFMC 2013) include information about the top communities based upon regional quotients of commercial landings and value for dolphin and wahoo. These top communities are referred to in this document as "dolphin communities" and "wahoo communities" because these are the areas that would be most likely to experience the effects of proposed actions that could change the dolphin or wahoo fisheries and impact the participants and associated businesses and communities within the region. Additionally, the descriptions in Amendment 5 (SAFMC 2013) for all Atlantic regions also include reliance and engagement indices to identify other areas in which dolphin and wahoo fishing is important, and provide information of how a community overall is involved with commercial and recreational fishing and could experience effects from regulatory actions for any species (see Amendment 5 for more details about the reliance and engagement indices). The identified communities in this section are referenced in the social effects analyses in Section 4 in order to provide information on how the alternatives could affect specific areas.

Overall, the dolphin and wahoo fisheries are primarily recreational, and effort and landings predominantly occur in south Florida and the Florida Keys.

Commercial Dolphin and Wahoo Communities in the South Atlantic
Using the regional quotient to identify dolphin communities, Wadmalaw Island, South Carolina and Palm Beach Gardens, Florida make up about 1/3 of the total commercial dolphin landings and value. Most commercial dolphin communities are in Florida and include Mayport, St. Augustine, Cocoa, and Margate in addition to a few communities in the Florida Keys (Key West, Key Largo, Marathon, and Islamorada). North Carolina communities with higher regional quotients include Wanchese, Wrightsville Beach, Hatteras, and Beaufort. In addition to Wadmalaw Island, the community of McClellanville, South Carolina also has a high regional quotient for dolphin. No Georgia communities are identified as dolphin communities.

Communities with high regional quotients for wahoo are similar to those for dolphin. Wadmalaw Island, South Carolina and Palm Beach Gardens, Florida make up the highest levels of commercial dolphin landings and value. Wahoo communities in Florida include Key West, Margate, St. Augustine, Ft. Lauderdale, Miami, Jupiter, New Smyrna Beach, and Hialeah. North Carolina communities with higher regional quotients include Wanchese, Wrightsville Beach, and Morehead City. In addition to Wadmalaw Island, the community of Yonges Island, South Carolina also has a high regional quotient for wahoo. No areas in Georgia are identified as wahoo communities.

Reliance on and Engagement with Commercial and Recreational Fishing in the South Atlantic
Reliance and engagement indices are used in Amendment 5 (SAFMC 2013) to identify several communities in the South Atlantic that are substantially engaged in commercial and recreational fishing. The communities of Islamorada, Key West, and Marathon, Florida; and Atlantic Beach, Beaufort, and Wanchese, North Carolina are both engaged and reliant on commercial fishing. The communities of Islamorada, Key West, Marathon, Florida, and St. Augustine, Florida; Atlantic Beach, Morehead City, Nags Head and Wanchese, North Carolina. Wrightsville Beach, North Carolina and Murrell's Inlet, South Carolina are above the threshold for recreational engagement and reliance. These communities would most likely have local economies with some dependence upon recreational fishing and its supporting businesses.

In terms of overall fishing dependence, the communities of Islamorada, Key West, and Marathon, Florida and Atlantic Beach, and Wanchese, North Carolina are engaged and reliant for both commercial and recreational fishing. These communities would have an especially strong dependence upon fishing throughout their overall economy with substantial support infrastructure.

<u>Mid-Atlantic and New England Regions</u>
The South Atlantic Council manages dolphin and wahoo through the Mid-Atlantic and New England regions. Overall, landings of these species in the Mid-Atlantic and New England regions are very low compared to landings in the South Atlantic, and management actions by the South Atlantic Council likely have minimal impacts on Mid-Atlantic and New England communities. More detailed information about these communities and how they were identified is described in Amendment 5 (SAFMC 2013).

Commercial Dolphin and Wahoo Communities in the Mid-Atlantic and New England Regions
Using the regional quotient to identify dolphin communities, New Bedford, Massachusetts is the leading port in terms of dolphin landings with Ocean City, Maryland a distant second. Several other communities follow with near

comparable amounts of dolphin landed but far less than the leading community. Wahoo landings for 2011were far less than dolphin with only three communities reporting landings: New Bedford, Massachusetts; Hatteras, North Carolina; and Cape May, New Jersey.

Reliance on and Engagement with Commercial and Recreational Fishing in the Mid-Atlantic and New England Regions

Ocean City, Maryland; Belmar, Barnegat Light, Cape May, and Point Pleasant, New Jersey; Montauk, New York; Virginia Beach, and Watchapreague, Virginia; Boston, and New Bedford, Massachusetts; and Point Lookout, New York are all over either the engaged or reliant threshold for commercial fishing or both. In terms of recreational fishing engagement and reliance for Northeast communities with dolphin and wahoo landings, almost every community is over the threshold for either engagement or reliance for recreational fishing.

Snapper Grouper Fishery

The snapper grouper fishery is considered to be of substantial social and cultural importance in the South Atlantic region. The description of the snapper grouper fishery focuses on available geographic and demographic data to identify communities with strong relationships with snapper grouper harvest (i.e., significant landings and revenue), and positive or negative impacts from regulatory change are expected to occur in places with greater landings of snapper grouper species.

The descriptions of South Atlantic communities below include information about the top communities based upon regional quotients of commercial landings and value for all federally managed snapper grouper species. These top communities are referred to in this document as "snapper grouper communities" because these are the areas that would be most likely to experience the effects of proposed actions that could change the snapper grouper fishery and impact the participants and associated businesses and communities within the region. Additionally, the descriptions also include reliance and engagement indices to identify other areas in which snapper grouper species are important, and provide information of how a community overall is involved with commercial and recreational fishing and could experience effects from regulatory actions for any species. The identified communities in this section are referenced in the social effects analyses in Section 4 in order to provide information on how the alternatives could affect specific areas.

Commercial Snapper Grouper Communities in the South Atlantic

Using the regional quotient to identify snapper grouper communities, Figure 3.3.2.1 shows important snapper grouper communities in the South Atlantic. The regional quotients consider combined snapper grouper landings and no communities make up a particularly significant proportion of commercial landings and value. Important North Carolina communities include Winnabow, Wanchese, Morehead City, Beaufort, Sneads Ferry, Shallotte, Wilmington, and Hampstead. The South Carolina communities of Murrells Inlet, Little River, Wadmalaw Island, and McClellanville have significant commercial pounds and value of snapper grouper species. In Florida, identified snapper grouper communities include Key West, Miami, Mayport, Marathon, Cocoa, Port Orange, Key Largo, Hialeah, Fort Lauderdale, St Augustine, Fort Pierce, Palm Beach Gardens, and Islamorada. No Georgia communities are identified in the analysis of regional quotients, but areas such as Savannah and Townsend have vessels that may depend on snapper grouper species.

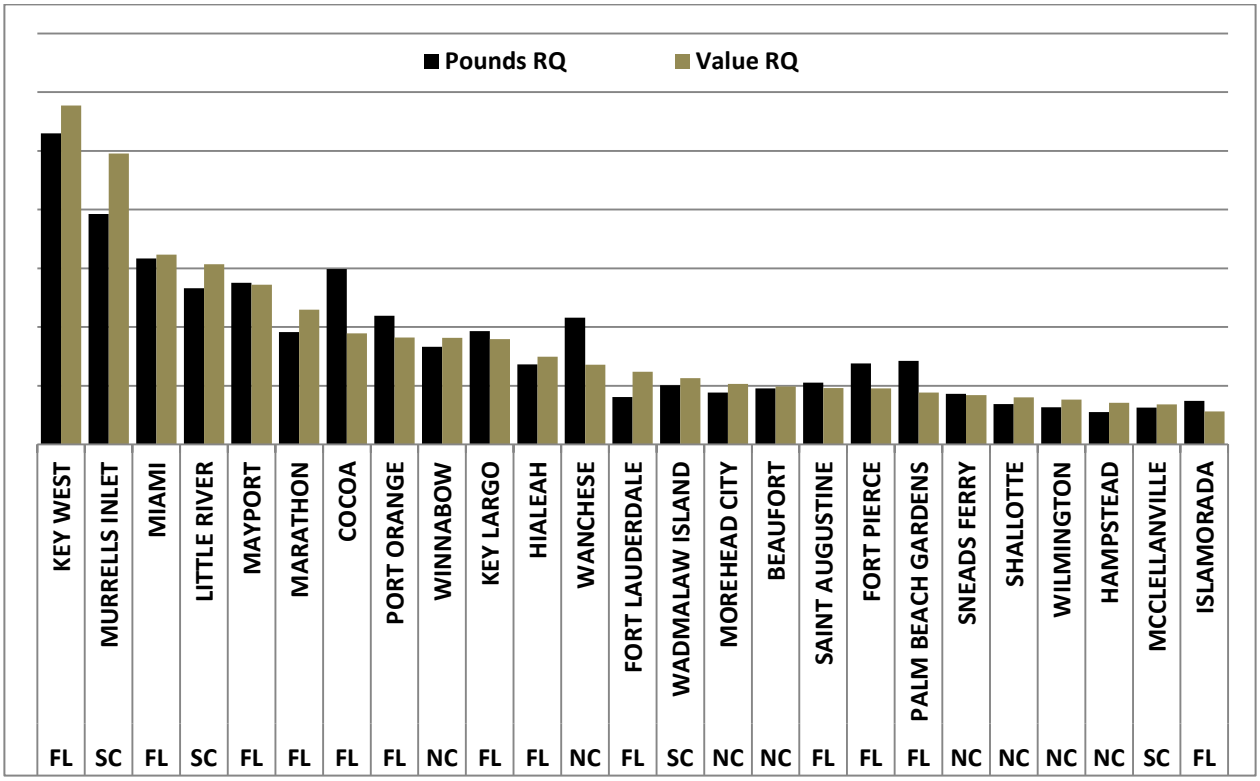

Figure 3.3.2.1. South Atlantic Fishing Communities Ranked by Total 2011 Snapper Grouper Landings RQ. Source: SERO 2014

Reliance on and Engagement with Recreational Snapper Grouper Fishing in South Florida
The reliance and engagement indices that were used in above sections to describe communities tied to recreational fishing of dolphin wahoo are also used in this section to describe snapper grouper recreational communities. Detailed information on the engagement and reliance indices and how they were developed is available in Dolphin Wahoo Amendment 5 (SAFMC 2013). **Figure 3.3.2.2** shows the top communities with substantial reliance on and engagement with recreational snapper grouper fishing in South Florida, since these are most likely the communities that could be affected by the actions proposed in this amendment. These communities would most likely have local economies with some dependence upon recreational fishing and its supporting businesses.

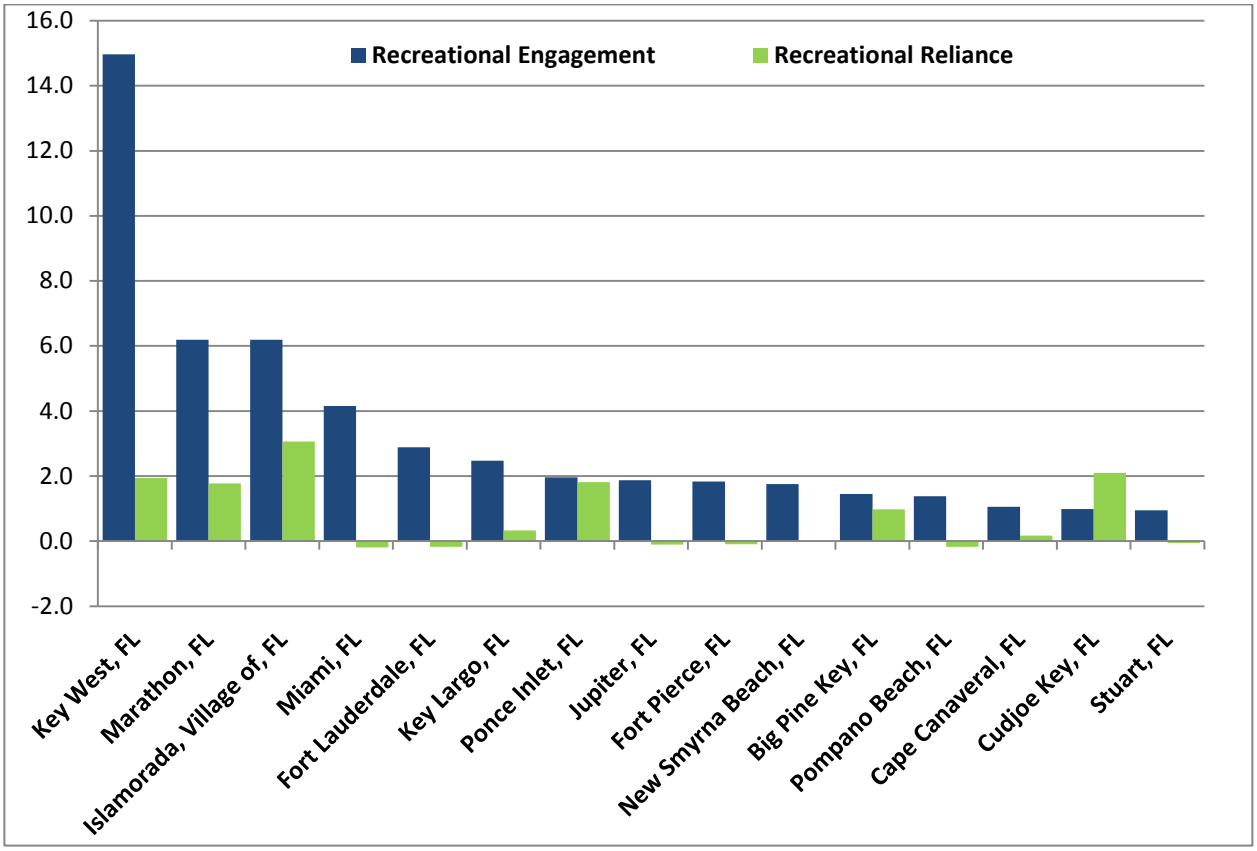

Figure 3.3.2.2. The top South Florida communities for engagement with and reliance on recreational snapper grouper fishing. Source: SERO 2014.

3.3.3 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. The main focus of Executive Order 12898 is to consider "the disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States and its territories…" This executive order is generally referred to as environmental justice (EJ).

Commercial fishermen, recreational fishermen, and coastal communities could be impacted by the proposed actions in the South Atlantic. However, information on the race and income status for these individuals is not available. Because the proposed action could be expected to impact fishermen and community members in numerous communities in the South Atlantic, census data have been assessed to examine whether any coastal counties have poverty or minority rates that exceed thresholds for raising EJ concerns.

The threshold for comparison used was 1.2 times the state average for the proportion of minorities and population living in poverty (EPA 1999). If the value for the county was greater than or equal to 1.2 times this average,

then the county was considered an area of potential EJ concern. Census data for the year 2010 were used. Estimates of the state minority and poverty rates, associated thresholds, and county rates are provided in **Table 3.3.3.1** note that only counties that exceed the minority threshold and/or the poverty threshold are included in the table**.**

Table 3.3.3.1. Environmental Justice thresholds (2010 U.S. Census data) for counties in the South Atlantic region. Only coastal counties (east coast for Florida) with minority and/or poverty rates that exceed the state threshold are listed.

State	County	Minority Rate	Minority Threshold*	Poverty Rate	Poverty Threshold*
Florida		**47.4**	**56.88**	**13.18**	**15.81**
	Broward	52.0	-4.6	11.7	4.11
	Miami-Dade	81.9	-34.5	16.9	-1.09
	Orange County	50.3	-2.9	12.7	3.11
	Osceola	54.1	-6.7	13.3	2.51
Georgia		**50.0**	**60.0**	**15.0**	**18.0**
	Liberty	53.2	-3.2	17.5	0.5
South Carolina		**41.9**	**50.28**	**15.82**	**18.98**
	Colleton	44.4	-2.5	21.4	-2.42
	Georgetown	37.6	4.3	19.3	-0.32
	Hampton	59.0	-17.1	20.2	-1.22
	Jasper	61.8	-19.9	9.9	-0.92
North Carolina		**39.1**	**46.92**	**15.07**	**18.08**
	Bertie	64.6	-25.50	22.5	-4.42
	Chowan	39.2	-0.1	18.6	-0.52
	Gates	38.8	0.3	18.3	-0.22
	Hertford	65.3	-26.2	23.5	-5.42
	Hyde	44.5	-5.4	16.2	1.88
	Martin	48.4	-9.3	23.9	-5.82
	Pasquotank	43.4	-4.3	16.3	1.78
	Perquimans	27.7	11.4	18.6	-0.52
	Tyrrell	43.3	-4.2	19.9	-1.82
	Washington	54.7	-15.6	25.8	-7.72

*The county minority and poverty thresholds are calculated by comparing the county minority rate and poverty estimate to 1.2 times the state minority and poverty rates. A negative value for a county indicates that the threshold has been exceeded.

While some counties 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, significant EJ issues are not expected to arise as a result of this proposed amendment. It is anticipated that the impacts from the proposed regulations may impact minorities or the poor, but not through discriminatory application of these regulations.

The actions in this amendment are expected to benefit recreational fishermen who harvest dolphin, wahoo and snapper grouper species in The Bahamas. Minimal or no negative impacts are expected for other recreational fishermen,

commercial fishermen, and coastal communities. Any negative impacts are not expected to disproportionately affect minorities or the poor.

Finally, the general participatory process used in the development of fishery management measures (e.g., scoping meetings, public hearings, and open South Atlantic Council meetings) is expected to provide sufficient opportunity for meaningful involvement by potentially affected individuals to participate in the development process of this amendment and have their concerns factored into the decision process. Public input from individuals who participate in the fishery has been considered and incorporated into management decisions throughout development of the amendment.

3.4 Administrative Environment

3.4.1 The Fishery Management Process and Applicable Laws

3.4.1.1 Federal Fishery Management

Federal fishery management is conducted under the authority of the Magnuson-Stevens Act (16 U.S.C. 1801 et seq.), originally enacted in 1976 as the Fishery Conservation and Management Act. The Magnuson-Stevens Act claims sovereign rights and exclusive fishery management authority over most fishery resources within the EEZ, an area extending 200 nm from the seaward boundary of each of the coastal states, and authority over U.S. anadromous species and continental shelf resources that occur beyond the U.S. EEZ.

Responsibility for federal fishery management decision-making is divided between the U.S. Secretary of Commerce (Secretary) and eight regional fishery management councils that represent the expertise and interests of constituent states. Regional councils are responsible for preparing, monitoring, and revising management plans for fisheries needing management within their jurisdiction. The Secretary is responsible for collecting and providing the data necessary for the councils to prepare fishery management plans and for promulgating regulations to implement proposed plans and amendments after ensuring that management measures are consistent with the Magnuson-Stevens Act and with other applicable laws. In most cases, the Secretary has delegated this authority to NMFS.

The South Atlantic Council, in cooperation with the Mid-Atlantic Fishery Management Council and the New England Fishery Management Council, is responsible for conservation and management of dolphin and wahoo in federal waters off the Atlantic states. These waters extend from 3 to 200 mi offshore from the seaward boundary of Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, and east Florida to Key West. The South Atlantic Council has thirteen voting members: one from NMFS; one each from the state fishery agencies of North Carolina, South Carolina, Georgia, and Florida; and eight public members appointed by the Secretary. On the South Atlantic Council, there are two public members from each of the four South Atlantic States. Non-voting members include representatives of the U.S. Fish and Wildlife Service, U.S. Coast Guard, State Department, and Atlantic States Marine Fisheries Commission (ASMFC). The South Atlantic Council has adopted procedures whereby the non-voting members serving on the South Atlantic Council Committees have full voting rights at the Committee level but not at the full South Atlantic Council level. South Atlantic Council members serve three-year terms and are recommended by state governors and appointed by the Secretary from lists of nominees submitted by state governors. Appointed members may serve a maximum of three consecutive terms.

Public interests also are involved in the fishery management process through participation on Advisory Panels and through council meetings, which, with few exceptions for discussing personnel matters and litigation, are open to the public. The South Atlantic Council uses its Scientific and Statistical Committee (SSC) to review the data and science being used in assessments and fishery management plans/amendments. In addition, the regulatory process is in accordance with the Administrative Procedure Act, in the form of "notice and comment" rulemaking.

3.4.1.2 State Fishery Management

The state governments of Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia North Carolina, South Carolina, Georgia, and Florida have the authority to manage fisheries that occur in waters extending three nautical miles from their respective shorelines. The Department of Marine Fisheries is responsible for marine fisheries in Maine's state waters. In New Hampshire, marine fisheries are managed by the Marine Fisheries Division of the New Hampshire Fish and Game Department. Massachusetts's marine fisheries are managed by the Division of Marine Fisheries of the Massachusetts Department of Fish and Game. Rhode Island's marine fisheries are managed by the Division of Fish and Wildlife of Rhode Island's Department of Environmental Management. Connecticut manages its marine fisheries through the Department of Energy and Environmental Protection. New York's marine fisheries are managed by the Division of Fish, Wildlife and Marine Resources of the Department of Environmental Conservation. New Jersey manages its marine fisheries through the Division of Fish and Wildlife of the Department of Environmental Protection. Pennsylvania manages its fisheries through the Pennsylvania Fish and Boat Commission. Marine fisheries in Delaware are managed by the Fisheries Section of the Division of Fish and Wildlife. Maryland's Department of Natural Resources manages its marine fisheries. Marine fisheries in Virginia are managed by the Virginia Marine Resources Commission. North Carolina's marine fisheries are managed by the Marine Fisheries Division of the North Carolina Department of Environment and Natural Resources. The Marine Resources Division of the South Carolina Department of Natural Resources regulates South Carolina's marine fisheries. Georgia's marine fisheries are managed by the Coastal Resources Division of the Department of Natural Resources. The Marine Fisheries Division of the Florida Fish and Wildlife Conservation Commission is responsible for managing Florida's marine fisheries. Each state fishery management agency has a designated seat on the South Atlantic Council. The purpose of state representation at the South Atlantic Council level is to ensure state participation in federal fishery management decision-making and to promote the development of compatible regulations in state and federal waters.

The Atlantic States are also involved through the ASMFC in management of marine fisheries. This commission was created to coordinate state regulations and develop management plans for interstate fisheries. It has significant authority, through the Atlantic Striped Bass Conservation Act and the Atlantic Coastal Fisheries Cooperative Management Act, to compel adoption of consistent state regulations to conserve coastal species. The ASFMC is also represented at the South Atlantic Council level, but does not have voting authority at the South Atlantic Council level.

NMFS' State-Federal Fisheries Division is responsible for building cooperative partnerships to strengthen marine fisheries management and conservation at the state, inter-regional, and national levels. This division implements and oversees the distribution of grants for two national (Inter-jurisdictional Fisheries Act and Anadromous Fish

Conservation Act) and two regional (Atlantic Coastal Fisheries Cooperative Management Act and Atlantic Striped Bass Conservation Act) programs. Additionally, it works with the ASMFC to develop and implement cooperative State-Federal fisheries regulations.

3.4.1.3 Management of Fisheries in The Bahamas

Fisheries Resources (Jurisdiction and Conservation) Regulations in The Bahamas are covered under Chapter 244-Section 48 of the Subsidiary Legislation of The Bahamas. The Bahamas allow for a total of 18 fish in any aggregation of king mackerel, tunas, dolphin, or wahoo. Filleting of dolphin and wahoo is not prohibited under Bahamian law. There are no size limits for dolphin or wahoo in The Bahamas. Foreign (e.g., U.S. vessels) are required to have a cruising and fishing permit onboard, otherwise the vessel has a possession limit of six fish. Snapper grouper species are covered under the same section of Bahamian regulations, and fall under "other demersal fishery resources". Sport fishers are allowed no more than 60 pounds or 20 fish per vessel. Filleting of snapper grouper species is not prohibited under Bahamian law. There are no size limits for snapper grouper species in The Bahamas. For more information, see: http://laws.bahamas.gov.bs/cms/images/LEGISLATION/SUBORDINATE/1986/1986-0010/FisheriesResourcesJurisdictionandConservationRegulations_1.pdf

3.4.1.4 Enforcement

Both the National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries (NMFS) Office for Law Enforcement (NOAA/OLE) and the United States Coast Guard (USCG) have the authority and the responsibility to enforce South Atlantic Council regulations. NOAA/OLE agents, who specialize in living marine resource violations, provide fisheries expertise and investigative support for the overall fisheries mission. The USCG is a multi-mission agency, which provides at sea patrol services for the fisheries mission.

Neither NOAA/OLE nor the USCG can provide a continuous law enforcement presence in all areas due to the limited resources of NOAA/OLE and the priority tasking of the USCG. To supplement at sea and dockside inspections of fishing vessels, NOAA entered into Cooperative Enforcement Agreements with all but one of the states in the Southeast Region (North Carolina), which granted authority to state officers to enforce the laws for which NOAA/OLE has jurisdiction. In recent years, the level of involvement by the states has increased through Joint Enforcement Agreements, whereby states conduct patrols that focus on federal priorities and, in some circumstances, prosecute resultant violators through the state when a state violation has occurred.

The NOAA Office of General Counsel Penalty Policy and Penalty Schedules can be found at www.gc.noaa.gov/enforce-office3.html.

NOAA/OLE had recommended against the current provision of allowing fillets of snapper grouper species during the development of Amendment 8 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region (SAFMC 1997), since it is difficult to enforce. USCG requires all species of fish brought into the U.S. EEZ from The Bahamas to be whole. The state of Florida only has a "gentleman's agreement" that currently allows fillets of snapper grouper species harvested in The Bahamas, to be landed in Florida.

NOAA/OLE recommended against fillets of any species, and has specific concerns with the actions in this amendment:

- No NOAA/OLE agreement exists with The Bahamas.
- Species identification at sea is difficult, especially if the fish are frozen in a block of ice.
- NOAA/OLE does not have certified scales onboard their vessels to weigh the fish.
- It is easy to conceal fillets on a vessel.
- It is expensive to send fish out for DNA analysis (to determine if fillets belong to a prohibited species, or a species taken out of season).
- Difficult to prove fish were caught in Bahamian waters and not in the U.S. EEZ.

NOAA/OLE had recommended removing the current exemption of head and fins intact for snapper-grouper species during the discussion of this amendment.

Chapter 4. Environmental Consequences

4.1 Action 1: Exempt dolphin and wahoo harvested lawfully in The Bahamas from regulations that require them to be landed with head and fins intact in the U.S. EEZ.

4.1.1 Biological Effects

The biological effects of the proposed management measure to allow dolphin and wahoo fillets lawfully harvested in Bahamian waters to be exempt from the requirement that they be maintained with head and fins intact in the South Atlantic EEZ cannot be quantified. Dolphin and wahoo subject to proposed measure must be lawfully harvested in Bahamian waters according to Bahamian regulations. Currently, fishermen can harvest a bag limit of up to 18 fish in any aggregation of king mackerel, tuna, dolphin, or wahoo per vessel as long as they possess the necessary permits issued by the government of The Bahamas. The management measure proposed in Dolphin Wahoo Amendment 7 and Snapper Grouper Amendment 33 would allow lawfully harvested dolphin and wahoo from The Bahamas to be filleted and transported on vessels through the U.S. EEZ. Vessels with dolphin and wahoo fillets would not be allowed to stop and fish in the U.S. EEZ, therefore, no direct biological impact on the species included in the Dolphin Wahoo FMP would be expected.

***Alternatives*[1]**

*(preferred alternatives in **bold**)*

1. No Action. Dolphin and wahoo in or from the Atlantic EEZ must be maintained with head and fins intact. Such fish may be eviscerated, gilled, and scaled, but must otherwise be maintained in a whole condition.

2. Allow dolphin and wahoo brought into the U.S. EEZ from The Bahamas as fillets. The vessel must have stamped and dated passports to prove that the vessel passengers were in The Bahamas, as well as valid current Bahamian cruising and fishing permits onboard the vessel. The vessel must be in continuous transit in the U.S. EEZ. Two fillets of dolphin or wahoo, regardless of the size of the fillet will count as 1 fish towards the possession limit.

[1]See Chapter 2 for a more detailed description of the alternatives.

However, dolphin and wahoo move throughout Bahamian waters and the U.S. EEZ. As a result, indirect negative biological impacts on dolphin and wahoo in U.S. waters could result from this action if **Alternative 2** results in an increase in recreational fishing effort for these species in Bahamian waters. However, it is not possible to quantify the possible biological effects of **Alternative 2** because no data are collected on these species in The Bahamas. Recreational effort in Bahamian waters is unknown since landings of dolphin and wahoo are not monitored in The Bahamas. Additionally, landings data for dolphin and wahoo from Bahamian waters are not available in the fisheries database of the United Nations' Food and Agricultural Organization. National data for The Bahamas (http://www.tourismtoday.com/home/statistics/visitor-arrivals/foreign-air-sea/) are available for 2013 and 2012 that indicate the number of individuals who arrived in The Bahamas by boat, but not on a cruise ship. Prior to 2012, data were not separated by cruise ship/non-cruise ship arrivals. In 2013 and 2012, 160,812 and 148,578 passengers, respectively, arrived to The Bahamas by boat.

The Report to Congress on the Status of U.S. Stocks lists dolphin is not overfished, and is not undergoing overfishing (http://www.nmfs.noaa.gov/sfa/fisheries_eco/status_of_fisheries/). The overfished/overfishing status of wahoo is unknown, but all indications are that it is a healthy stock. Prager (2000) conducted an exploratory assessment of dolphin, but the results were not conclusive. A Southeast Data, Assessment, and Review (SEDAR) stock assessment for dolphin and wahoo is expected within the next 5 years. Life-history characteristics of dolphin and wahoo such as rapid growth rates, early maturity, batch spawning over an extended season, short life span, and varied diet help sustain fishing pressures on these species (Schwenke and Buckel 2008; McBride et al. 2008; Prager 2000; and Oxenford 1999). Furthermore, dolphin and wahoo are listed as species of "least concern" under the International Union for Conservation of Nature Red List, i.e., species that have a low risk of extinction. Schwenke and Buckel (2008) reported that increased harvest of dolphin off North Carolina in the 1980s and 1990s did not influence life history parameters for the species, and the authors concluded that due to fast growth rates and small size-at-maturity, dolphin are capable of withstanding high rates of fishing mortality.

If **Alternative 2** results in a large increase in landings of dolphin and wahoo from The Bahamas, the negative biological effects on the stocks in U.S. and Bahamian waters would be expected to be more substantial than if there were only a minimal change in landings. However, due to the life history characteristics of dolphin and wahoo, even large increases in landings could be sustainable and might not negatively impact the stock. Furthermore, sales of filleted dolphin, wahoo, and snapper grouper species harvested recreationally in the Bahamas and landed in the U.S. are prohibited and actions proposed in this amendment would not change this prohibition. Thus, there would not be an incentive for U.S. commercial fishermen to harvest dolphin and wahoo from Bahamian waters.

There is likely to be no additional effects, positive or negative, to protected species from either of the alternatives. **Alternatives 1 (No Action)** and **2** would perpetuate the existing level of risk for interactions between Endangered Species Act (ESA)-listed species and the fisheries. Previous ESA consultations have assessed the impacts of potential interactions and determined the dolphin wahoo and the snapper grouper fisheries were not likely to adversely affect marine mammals, Atlantic sturgeon, or *Acropora* species, and were not likely to jeopardize the continued existence or recovery of sea turtles or smalltooth sawfish.

4.1.2 Economic Effects

The current prohibition on bringing dolphin and wahoo fillets lawfully harvested in The Bahamas into the U.S., which would continue under **Alternative 1 (No Action)**, has several economic effects. Some fishermen have been confused about which species are exempt from the fillet prohibition. Because snapper and grouper species can be filleted and brought from The Bahamas into the U.S. EEZ, fishermen have received violations for mistakenly filleting and transporting dolphin and wahoo. This leads to seizures, fines, other costs associated with the legal process.

Not allowing dolphin and wahoo to be brought back as fillets could impact whether or not fishermen will make trips. Many fishermen make trips to The Bahamas in order to keep the fish they catch to eat them later. Many dolphin and wahoo are too large to be stored whole and placed in a cooler. Some fishermen may be less likely to plan a trip to The Bahamas if they think they are not likely to be able to bring back

fish they feel is safe enough to eat as a result of proper refrigeration. Fillets are generally easier to store and refrigerate than are fish with head and fins intact.

Because allowing dolphin and wahoo to be brought into the Atlantic EEZ from The Bahamas would not be expected to adversely affect U.S. stocks, or associated harvest and economic benefits, **Alternative 2** would not be expected to have any adverse economic effects on the U.S. Atlantic dolphin wahoo fishery. It is not known whether allowing dolphin and wahoo fillets into the Atlantic EEZ would have an adverse impact on the number of fishing trips in the EEZ, although the expectation is that these trips, and associated economic benefits, would be unaffected. Instead, an increase in the number of trips to The Bahamas to fish for dolphin and wahoo may occur. This would result in an increase the consumer surplus to recreational anglers and net operating revenue to for-hire vessels.

Allowing recreational fishermen to bring into the U.S. EEZ dolphin and wahoo fillets from fish caught in The Bahamas could potentially have a small effect on the number of fish that might otherwise be purchased by these fishermen in the U.S. However, the estimated impact of lost sales due to Bahamian dolphin and wahoo brought into the U.S. is expected to be minimal.

4.1.3 Social Effects

Overall, the effects of allowing dolphin and wahoo fillets to be brought into the U.S. EEZ from The Bahamas **(Alternative 2)** on the fishing fleets, and associated businesses and communities, would be expected to be minimal compared to **Alternative 1 (No Action)**. The benefits to recreational fishermen by allowing fillets to be brought into the U.S. EEZ from The Bahamas (**Alternative 2**) could contribute to improved quality and quantity of dolphin and wahoo caught on these trips, because whole fish would not have to be stored with head and fins intact. **Alternative 2** would be expected to be beneficial to Atlantic recreational fishermen harvesting dolphin and wahoo in The Bahamas, particularly for fishermen coming in and out of south Florida and the Florida Keys. It is not expected that removal of the requirement for fish to be intact would result in negative impacts on fishermen or communities in Florida or across the Atlantic coast. Additionally, allowing fillets to be brought into the Atlantic EEZ (**Alternative 2**) would make the Dolphin Wahoo FMP consistent with the regulations for snapper grouper species that allows fillets from legally harvest fish in The Bahamas to be brought into the U.S. EEZ.

Section 4.1.2 notes that **Alternative 2** could have some effect on the for-hire sector by increasing consumer surplus, which could affect profits of for-hire operations if the price for for-hire trips decrease. For potential clients on charter or headboat trips, getting a trip at a lower price would likely be beneficial. However, for the for-hire business owners, crew, and for businesses and communities associated with the for-hire sector, these changes could have some negative effects if trips and profits are reduced.

4.1.4 Administrative Effects

National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries (NMFS) Office for Law Enforcement (NOAA/OLE), in conjunction with state enforcement agencies inspects some vessels returning from The Bahamas for violations citations as appropriate. However, there is no NOAA/OLE agreement with The Bahamas; species identification at sea is difficult, especially if the fish are frozen in a block of ice; NOAA/OLE does not have certified scales onboard their vessels to weigh the fish and weighing fish is problematic; it is easy to conceal fillets on a vessel; it is expensive to send fish out for DNA analysis to identify fillets to species; and it is difficult to prove if fish were caught in Bahamian waters or in the U.S. EEZ (in order to enforce provisions of the Lacey Act). Therefore,

NOAA/OLE recommended against allowing fillets of any species to be brought into the U.S. EEZ from The Bahamas. Due to the geographic proximity of Florida to The Bahamas, it is likely that most vessels interested in harvesting dolphin or wahoo in The Bahamas and returning with fillets originate in Florida. Furthermore, the state of Florida requires dolphin, wahoo, and snapper grouper species are required to be landed whole. Additional administrative effects would result from regulations being updated and enforced by the state of Florida and the U.S. Coast Guard (USCG). Other administrative burdens that could result from the management measures in this action would take the form of development and dissemination of outreach and education materials for fishery participants and all law enforcement agencies.

The management measure in **Alternative 2** of this action would exempt dolphin and wahoo from regulations to maintain head and fins intact, if they were lawfully harvested in The Bahamas and transported to the U.S., thus making regulations consistent with current regulations for snapper grouper species and help reduce confusion among fishermen. In order to gain consistency in regulations, NOAA/OLE recommended removing the current exemption of head and fins intact for snapper grouper species during the discussion of this amendment, and recommended the South Atlantic Council not go forward with exempting dolphin and wahoo from maintaining head and tail intact.

4.2 **Action 2**: Exempt dolphin and wahoo harvested lawfully from The Bahamas from the bag and possession limits in the U.S. EEZ.

4.2.1 Biological Effects

***Alternatives*[1]**
*(preferred alternatives in **bold**)*

1. No Action. The bag limit for the possession of dolphin and wahoo lawfully harvested from The Bahamas, is 10 dolphin (60 dolphin per boat)/2 wahoo per person per day, in the U.S. EEZ.
2. Exempt dolphin lawfully harvested in The Bahamas from regulations for bag limits in the U.S. EEZ.
3. Exempt wahoo lawfully harvested in The Bahamas from regulations for bag limits in the U.S. EEZ.

[1]See Chapter 2 for a more detailed description of the alternatives.

The current bag limit for the possession of dolphin and wahoo lawfully harvested from The Bahamas, is 10 dolphin (60 dolphin per boat)/2 wahoo per person per day, in the U.S. EEZ (**Alternative 1, No Action**). Current Bahamian regulations state that: "any migratory fishery resource (such as kingfish, dolphin, tuna, or wahoo) that is caught shall not in total exceed 18 fish aboard the vessel at any time." **Alternative 2** would exempt dolphin from U.S. bag limits for dolphin, and allow them to retain Bahamian bag limits for dolphin. However, if fishermen currently abide by Bahamian regulations, there is no difference between **Alternative 1 (No Action)** and **Alternative 2.** Thus, the biological effects for dolphin under **Alternative 2** would be expected to be neutral.

Alternative 3 could result in negative biological effects for wahoo, since the number of wahoo allowed to be lawfully harvested would be increased from 2 per person per day to a maximum of 18 wahoo per vessel, assuming no king mackerel, tuna, or dolphin were retained. The biological effects of **Alternative 3** would depend on how many people are on board the vessel, and which species they choose to lawfully harvest in The Bahamas and transport them into the U.S. EEZ. As explained in **Section 4.1.1**, recreational landings of dolphin and wahoo are not recorded in Bahamian waters and data are not available to quantify direct or indirect biological effects of their harvest.

The proposed alternatives would not increase fishing or change fishing methods for species targeted within the dolphin and wahoo fishery and the snapper grouper fishery. Therefore, no adverse effects to the protected species most likely to interact with these fisheries (e.g., sea turtles and smalltooth sawfish) are likely to result under this Action.

4.2.2 Economic Effects

Regardless of where fish are harvested, current regulations require that the fish meet the U.S. bag and possession limits (**Alternative 1, No Action**). U.S. EEZ possession limits for dolphin of 10 fish per person with a maximum of 60 fish per vessel per day is currently higher than what is allowed in The Bahamas (a maximum of 18 fish as part of a multispecies bag limit). The only scenario where the Bahamian possession limit would be higher than the limit in the EEZ is if only one person is on board the vessel and the trip is limited to one day of fishing. As a result, **Alternative 2** would not be expected to have any positive or negative economic effects compared to **Alternative 1 (No Action)** because allowing fishermen to keep the Bahamian bag limit of dolphin would not affect the amount of dolphin retained.

This is not the case for wahoo. For wahoo the U.S. EEZ possession limit is two wahoo per person per day, whereas in The Bahamas, wahoo is again part of the 18-fish multispecies bag limit. If vessels entering the U.S. EEZ from The Bahamas were required to abide by the U.S. EEZ possession limits, then they would not be able to possess as many wahoo in the U.S. EEZ as they would be allowed to possess in Bahamian waters. Because there are expected to be times when fishermen go to The Bahamas specifically to fish for wahoo, fewer trips may occur if fishermen are not allowed to bring back a Bahamian bag limit into the U.S. EEZ. Therefore, compared to **Alternative 1 (No Action)**, **Alternative 3** would be expected to result in an increase in direct economic benefits associated with increased wahoo harvest and increased number of trips. It is noted that this conclusion is based on the assumption that any increase in trips and, specifically, wahoo harvest will not have an adverse effect on the wahoo stock. If adverse stock effects occur, any short-term increase in economic benefits may be offset, and exceeded, by the economic losses associated with a declining stock.

4.2.3 Social Effects

Overall, the social effects of allowing recreational vessels to be exempt from possession limits for dolphin and wahoo caught in The Bahamas **(Alternatives 2** and **3)**, would be expected to be minimal compared to **Alternative 1 (No Action)**. The bag limit for The Bahamas would constrain the number of fish brought into the U.S. EEZ from The Bahamas, which would be expected to not have negative effects on other resource users. The benefits to recreational fishermen to possess wahoo at the bag limit for The Bahamas (**Alternative 3**) would be expected to be beneficial to South Atlantic recreational fishermen harvesting in The Bahamas, particularly for fishermen coming in and out of south Florida and the Florida Keys.

Any negative social effects would be associated with potential negative biological effects on the stocks for exceeding the bag limit. Under **Alternative 2** this would be expected to occur because of the constraints of regulations in The Bahamas for dolphin. Under **Alternative 3**, however, the potential increased number of wahoo could contribute to future negative effects on the wahoo stock.

4.2.4 Administrative Effects

This action would add to the administrative burden of law enforcement agencies. NMFS OLE has expressed concern over enforcing bag limits of snapper grouper species in the U.S. EEZ, as well as the Lacey Act as it applies to vessels returning from The Bahamas. Because fish fillets are difficult to identify to species, NOAA/OLE has difficulty enforcing species-specific regulations when encountering filleted fish. Exempting wahoo (**Alternative 3**) lawfully harvested from Bahamian waters from bag and possession limits in the U.S. EEZ may increase the number of fillets of wahoo (depending on how many people are in the vessel and which species they harvest). Thus, **Alternative 3** could have negative direct and indirect administrative effects when compared with **Alternative 1** (**No Action**). If fishermen abide by Bahamian regulations, there is no difference between **Alternative 1 (No Action)** and **Alternative 2**.

4.3 **Action 3**: Require fillets of dolphin, wahoo, and snapper grouper species brought into the U.S. EEZ from The Bahamas to have the skin intact.

4.3.1 Biological Effects

The alternatives of **Action 3** are designed to assist law enforcement in species identification. Fish with intact skin are easier to identify to species, especially if they are filleted. Snapper grouper species are subject to different regulations in the U.S. EEZ and The Bahamas including species prohibitions and seasonal closures. For example, snapper grouper species such as Nassau grouper, speckled hind, and warsaw grouper are prohibited from harvest and retention in the U.S. EEZ, but are allowed to be harvested and retained in Bahamian waters. Dolphin and wahoo currently have different bag limit requirements in the U.S. EEZ and the Bahamas, with the bag limit requirements being more restrictive for dolphin in The Bahamas. Regulations requiring the skin to be left on the entire fillet under **Preferred Alternatives 2** and **3** could help law enforcement in species identification and enforcing regulations. **Preferred Alternatives 2** and **3** are not expected to have biological effects that are different from **Alternative 1 (No Action)**.

Alternatives[1]

*(preferred alternatives in **bold**)*

1. No Action. Snapper grouper fillets possessed in the U.S. EEZ from The Bahamas are currently not required to have skin intact.
2. **Snapper grouper fillets brought into the U.S. EEZ from The Bahamas must have the skin intact on the entire fillet.**
3. **Dolphin and wahoo fillets brought into the U.S. EEZ from The Bahamas must have the skin intact on the entire fillet.**

[1]See Chapter 2 for a more detailed description of the alternatives.

Preferred Alternatives 2 and **3** would not increase fishing or change fishing methods for species targeted within the dolphin and wahoo fishery and the snapper grouper fishery. Therefore, no adverse effects to the protected species most likely to interact with these fisheries (e.g., sea turtles and smalltooth sawfish) are likely to result under this Action.

4.3.2 Economic Effects

The alternatives of **Action 3** are designed to assist law enforcement in species identification. Current regulations (**Alternative 1 – No Action)** make it difficult for law enforcement to identify correctly snapper grouper species. **Alternative 2** would help make it easier to identify snapper grouper species. Additionally, if dolphin and wahoo fillets lawfully harvested from The Bahamas are allowed in the U.S. EEZ, **Amendment 3** would aid in species identification. Having skin on fillets in the U.S. EEZ will help law enforcement in making valid cases regarding possession requirements. Not having skin on the fillets could result in inadequate protection for U.S. managed stocks, which in turn could affect abundance of these species. Negative economic effects could result from inadequate protection. Nonetheless, it must be noted that species identification for some snapper grouper species may be inadequate or not possible without scales. This action only requires skin, not scales on the fillets.

4.3.3 Social Effects

Alternative 1 (No Action) is not expected to change the snapper grouper and dolphin wahoo fisheries or the coastal communities associated with these fisheries. However, under **Alternative 1 (No Action)**, fishery officers could continue to struggle with the identification of species based on the appearance of fillets. It is difficult to identify the take of illegal species from Bahamian waters due the inability to identify a filleted species. For example, it would likely be difficult for law enforcement officers to determine if a grouper fillet is a Nassau grouper or a black grouper, as harvest of Nassau grouper is prohibited in the U.S. EEZ but allowed in the EEZ of The Bahamas. If misidentification of fillets result in incorrect information and data about a stock in the snapper grouper fishery, there could be long-term negative effects on future fishing opportunities if there are any resulting negative biological effects on a snapper grouper stock or stocks.

Preferred Alternative 2 and **3** would not directly affect any U.S. coastal communities in terms of local businesses or social institutions. Requiring the skin to be intact on snapper grouper species **(Preferred Alternative 2)** and dolphin and wahoo **(Preferred Alternative 3)** is expected to enhance the ability of law enforcement officers to identify fillets to species and enforce regulations**,** which would be expected to result in long-term broad social benefits.

4.3.4 Administrative Effects

The administrative effects of **Preferred Alternatives 2** and **3** would be expected to be positive compared with **Alternative 1 (No Action)**. Regulations requiring the skin to be left on the entire fillet under **Preferred Alternatives 2** and **3** could help law enforcement identify species and enforce regulations. Other administrative burdens that could result from the management measure in this action would take the form of development and dissemination of outreach and education materials for fishery participants and all law enforcement agencies.

4.4 **Action 4**: In addition to possessing valid Bahamian cruising and fishing permits, require stamped and dated passports to prove that vessel passengers were in The Bahamas if the vessel is in possession of snapper grouper fillets in the U.S. EEZ.

4.4.1 Biological Effects

This action is purely administrative and biological effects are expected to be negligible among the proposed alternatives. Current Bahamian regulations already require passports to be stamped at the port of entry into The Bahamas, within 24 hours after arrival into Bahamian waters. The date is included in the stamp. No passengers or crew are allowed to disembark until the process is completed**.** See **Section 1.6** and http://www.bahamas.gov.bs/wps/portal/public/gov/ for more details. Fillets of snapper grouper species lawfully harvested in The Bahamas have been authorized to be brought into the U.S. EEZ since 1998, with the implementation of Amendment 8 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region (Amendment 8).

Alternatives[1]
*(preferred alternatives in **bold**)*

1. No Action. Vessels bringing snapper grouper fillets into the U.S. EEZ from The Bahamas are required to have valid current Bahamian cruising and fishing permits onboard the vessel.

2. Vessels bringing snapper grouper fillets into the U.S. EEZ from The Bahamas are required to have stamped and dated passports to prove that the vessel passengers were in The Bahamas, as well as valid current Bahamian cruising and fishing permits onboard the vessel.

[1]See Chapter 2 for a more detailed description of the alternatives.

The proposed **Alternatives** would not increase fishing or change fishing methods for species targeted within the snapper grouper fishery. Therefore, no adverse effects to the protected species most likely to interact with these fisheries (e.g., sea turtles and smalltooth sawfish) are likely to result under this Action.

4.4.2 Economic Effects

Having a valid passport is required for entry into The Bahamas. Passports are dated and stamped as part of the immigration process. **Action 1, Alternative 2**, if selected as the preferred alternative, would require stamped and dated passports indicating the passengers had just been in The Bahamas in addition to valid Bahamian cruising and fishing permits. **Action 4, Alternative 2** would require passengers aboard vessels returning from The Bahamas also to have stamped and dated passports indicating the passengers had just been in The Bahamas.

Bahamian cruising and fishing permits are time limited and not valid for just a single trip. Requiring passengers to have stamped passports aboard vessels returning from The Bahamas with snapper grouper fillets onboard could help prevent vessels that had not been fishing in The Bahamas on the current, but have Bahamian cruising or fishing permits onboard from illegally filleting fish from U.S. waters. Requiring stamped and dated passports would provide parity with **Action 1** could prevent fish caught in U.S. EEZ from being misattributed to The Bahamas. Depending on the frequency of such activity, U.S.

managed stocks could be adversely affected, which in turn could have a potential negative economic effect for U.S. fishermen.

Requiring stamped and dated passports for all passengers onboard the vessel as required by **Alternative 2** brings parity between U.S. and Bahamian requirements and poses no additional economic effect compared to **Alternative 1 (No Action)** for those legally participating in the Bahamian snapper grouper fishery. However, **Alternative 2** could prevent adverse impacts to U.S. managed snapper grouper stocks by closing a potential loophole for illegal fishing or filleting of fish caught in the U.S. EEZ as is currently allowed under **Alternative 1 (No Action)**.

4.4.3 Social Effects

Alternative 1 (No Action) and **Alternative 2** would not be expected to result in postitive or negative social effects on coastal communities or fishermen. Because the requirements under **Alternative 2** are already in place under Bahamian law, it is assumed that all passengers aboard U.S. vessels would have stamped passport documentation when harvesting snapper grouper in the EEZ of The Bahamas under both **Alternatives 1** and **2.**

4.4.4 Administrative Effects

No new and additional administrative effects are expected from the proposed alternatives under this action. Current regulations under Amendment 8 (SAFMC 1997) and Bahamian requirements to lawfully harvest snapper grouper species in Bahamian waters already encompass these requirements.

Chapter 5. Council's Choice for the Preferred Alternative

Chapter 6. Cumulative Effects

6.1 Biological

1. Identify the significant cumulative effects issues associated with the proposed action and define the assessment goals.

The Council on Environmental Quality (CEQ) cumulative effects guidance states that this step is done through three activities. The three activities and the location in the document are as follows:

I. The direct and indirect effects of the proposed actions **(Chapter 4)**;
II. Which resources, ecosystems, and human communities are affected **(Chapter 3)**; and
III. Which effects are important from a cumulative effects perspective **(information revealed in this Cumulative Effects Analysis (CEA))**

2. Establish the geographic scope of the analysis.

The South Atlantic Fishery Management Council (South Atlantic Council), in cooperation with the Mid-Atlantic Fishery Management Council and the New England Fishery Management Council, is responsible for conservation and management of dolphin and wahoo in federal waters off the Atlantic states. The immediate impact area for dolphin and wahoo is the federal 200-mile limit of the Atlantic off the coasts of Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, and east Florida to Key West. For snapper grouper species, the immediate impact area is the federal 200-mile limit of the Atlantic off the coasts of North Carolina, South Carolina, Georgia, and east Florida to Key West. In light of the available information, the extent of the boundaries would depend upon the degree of fish immigration/emigration and larval transport, whichever has the greatest geographical range. The ranges of affected species are described in **Section 3.2.1**. **Section 3.1.1** describes the essential fish habitat designation and requirements for dolphin, wahoo, and snapper grouper species; additional details are included in **Appendix J**. The most measurable and substantial effects would be limited to the Atlantic region.

3. Establish the timeframe for the analysis.

Establishing a timeframe for the CEA is important when the past, present, and reasonably foreseeable future actions are discussed. It would be advantageous to go back to a time when there was a natural, or some modified (but ecologically sustainable) condition. Dolphin, wahoo, and snapper grouper species are harvested by recreational fishers in The Bahamas, and recreational landings data for these species are not available for The Bahamas. See Chapters 3 and 4 for more details on the affected environment and environmental consequences, respectively.

4. Identify the other actions affecting the resources, ecosystems, and human communities of concern (the cumulative effects to the human communities are discussed in Section 4).

Listed are other past, present, and reasonably foreseeable actions occurring in the South Atlantic region. These actions, when added to the proposed management measures, may result in cumulative effects on the biophysical environment.

I. Fishery-related actions affecting dolphin, wahoo, and snapper grouper species.

A. Past

The reader is referred to **Section 1.8** and **Appendix D** (History of Management**)** of this document for past regulatory activity for dolphin,wahoo, and snapper grouper species. These include bag and size limits, commercial quotas, and gear prohibitions and limitations.

The Comprehensive Annual Catch Limit (ACL) Amendment and its integrated Final Environmental Impact Statement (FEIS) (SAFMC 2011a) fulfilled the 2011 mandate of the Magnuson-Stevens Fishery Conservation and Management Act to establish ACLs and accountability measures (AMs) for species managed by the South Atlantic Council that are not undergoing overfishing. The amendment addressed dolphin and wahoo, a number of species in the snapper grouper fishery management unit, as well as golden crab and *Sargassum*. The Comprehensive ACL Amendment (SAFMC 2011a) established the acceptable biological catch (ABC) control rule, ABC, ACL, optimal yield (OY), and AMs in the dolphin and wahoo fishery for both the commercial and recreational sectors. The amendment also set an annual catch target (ACT) for the recreational sector for dolphin and wahoo. The Comprehensive ACL Amendment was implemented on April 16, 2012.

B. Present

The South Atlantic Council has recently completed and is developing amendments for snapper grouper, coastal migratory pelagic species, and corals/live-hard bottom. See the South Atlantic Council's Web site at http://www.safmc.net for further information on South Atlantic Council managed species.

The South Atlantic Headboat Reporting Amendment was implemented on January 27, 2014, and requires that all federally-permitted headboats on the South Atlantic report their landings information electronically, and on a weekly basis in order to improve the timeliness and accuracy of harvest data.

C. Reasonably Foreseeable Future

Dolphin Wahoo Amendment 5, if implemented through rulemaking, would revise the ABC estimates, ACLs, and recreational ACTs for dolphin and wahoo as per the new Marine Recreational Information Program. Additionally, Dolphin Wahoo Amendment 5 would revise the AMs and update the framework procedure for dolphin and wahoo.

The Joint Generic Dealer Reporting Amendment was approved by the Secretary of Commerce (Secretary) and will require that all dealers report landings information electronically on a weekly basis to improve the timeliness and accuracy of landings data. This amendment will apply to fishery management plans (FMP) for dolphin wahoo, snapper grouper, and coastal migratory pelagics. The final rule published on April 9, 2014, and regulations will be effective on August 7, 2014.
The Joint Commercial Logbook Reporting Amendment would require electronic reporting of landings information by federally-permitted commercial vessels, which would increase the timeliness and accuracy of landings data.

The Joint Charter Boat Reporting Amendment would require charter vessels to regularly report their landings information electronically. Including charter boats in the recreational harvest reporting system would further improve the agency's ability to monitor recreational catch rates in-season.

Dolphin Wahoo Amendment 7 and Snapper Grouper Amendment 33 would consider allowing dolphin and wahoo fillets from the Bahamas to be brought into the United States through the Atlantic exclusive economic zone (EEZ); exempt dolphin and wahoo from the bag and possession limit in the U.S. EEZ; and require fillets of dolphin, wahoo, and snapper grouper species to have the skin intact.

II. Non-Council and other non-fishery related actions, including natural events affecting the species in this amendment.

A. Past
B. Present
C. Reasonably foreseeable future

In terms of natural disturbances, it is difficult to determine the effect of non-Council and non-fishery related actions on stocks of dolphin wahoo species. Annual variability in natural conditions such as water temperature, currents, food availability, predator abundance, etc. can affect the abundance of young fish that survive the egg and larval stages each year to become juveniles (i.e., recruitment). This natural variability in year class strength is difficult to predict as it is a function of many interactive and synergistic factors that cannot all be measured (Rothschild 1986). Furthermore, natural factors such as storms, red tide, cold water upwelling, etc. can affect the survival of juvenile and adult fishes; however, it is very difficult to quantify the magnitude of mortality these factors may have on a stock. Alteration of preferred habitats for dolphin, wahoo, and snapper grouper species could affect survival of fish at any stage in their life cycles. However, estimates of the abundance of fish, which utilize any number of preferred habitats, as well as determining the impact habitat alteration may have on dolphin, wahoo, and snapper grouper species, is problematic and limited, especially, since data are not available from The Bahamas. Dolphin and wahoo are highly migratory pelagic species occurring in tropical and subtropical waters worldwide. Other natural events such as spawning seasons and aggregations of fish in spawning condition can make some snapper grouper species such as Nassau grouper especially vulnerable to targeted fishing pressure.

The Report to Congress on the Status of U.S. Stocks indicates dolphin is not overfished, and is not undergoing overfishing (http://www.nmfs.noaa.gov/sfa/fisheries_eco/status_of_fisheries/). The overfished/overfishing status of wahoo is unknown, but all indications are that it is a healthy stock. A Southeast Data, Assessment, and Review (SEDAR) stock assessment for dolphin and wahoo is scheduled within the next 5 years. Life-history characteristics of dolphin and wahoo such as rapid growth rates, early maturity, batch spawning over an extended season, a short life span, and a varied diet could help sustain fishing pressures on these species (Schwenke and Buckel 2008; McBride et al. 2008; Prager 2000; and Oxenford 1999). Dolphin and wahoo are listed as species of "least concern" under the International Union for Conservation of Nature Red List, i.e. species that have a low risk of extinction. See **Section 3.2** and the references cited therein for more information.

How global climate changes will affect the dolphin wahoo, and snapper grouper fisheries is unclear. Climate change can impact marine ecosystems through ocean warming by increased thermal stratification, reduced upwelling, sea level rise, increases in wave height and frequency, loss of sea ice, and increased risk of diseases in marine biota. Decreases in surface ocean pH due to absorption of anthropogenic CO_2 emissions may impact a wide range of organisms and ecosystems, particularly organism that absorb calcium from surface waters, such as corals and crustaceans (IPCC 2007, and references therein).

The BP/Deepwater Horizon oil spill event, which occurred in the Gulf of Mexico on April 20, 2010, did not impact fisheries operating in the Atlantic. Oil from the spill site has not been detected in the Atlantic region, and did not likely to pose a threat to the species addressed in this amendment.

5. Characterize the resources, ecosystems, and human communities identified in scoping in terms of their response to change and capacity to withstand stress.

In terms of the biophysical environment, the resources/ecosystems identified in earlier steps of the CEA are the fish populations directly or indirectly affected by the regulations. This step should identify the trends, existing conditions, and the ability to withstand stresses of the environmental components.

The species most likely to be impacted by alternatives considered in this amendment are dolphin, wahoo, and snapper grouper species. Trends in the condition of dolphin, wahoo, and snapper grouper species are determined through the SEDAR process. More information on the SEDAR process and specific information on these species are included in **Section 3.2**, and is hereby incorporated by reference.

6. Characterize the stresses affecting these resources, ecosystems, and human communities and their relation to regulatory thresholds.

This step is important in outlining the current and probable stress factors on dolphin, wahoo, and snapper grouper species identified in the previous steps. The goal is to determine whether these species are approaching conditions where additional stresses could have an important cumulative

effect beyond any current plan, regulatory, or sustainability threshold (CEQ 1997). Sustainability thresholds can be identified for some resources, which are levels of impact beyond which the resources cannot be sustained in a stable state. Other thresholds are established through numerical standards, qualitative standards, or management goals. The CEA should address whether thresholds could be exceeded because of the contribution of the proposed action to other cumulative activities affecting resources.

Fish populations

This document relates to dolphin, wahoo, and snapper grouper species harvested in Bahamian waters. See **Section 3.2** for more information on fish populations. The overfishing and overfished status of species affected by this amendment can be found in the U.S. Report to Congress on the Status of U.S. Stocks (http://www.nmfs.noaa.gov/sfa/fisheries_eco/status_of_fisheries/).

Climate change

Global climate changes could have significant effects on South Atlantic fisheries. However, the extent of these effects is not known at this time. Possible impacts include temperature changes in coastal and marine ecosystems that can influence organism metabolism and alter ecological processes such as productivity and species interactions; changes in precipitation patterns and a rise in sea level which could change the water balance of coastal ecosystems; altering patterns of wind and water circulation in the ocean environment; and influencing the productivity of critical coastal ecosystems such as wetlands, estuaries, and coral reefs (IPCC 2007; Kennedy et al. 2002).

It is unclear how climate change would affect dolphin, wahoo, and snapper grouper species in the Atlantic. Climate change can affect factors such as migration, range, larval and juvenile survival, prey availability, and susceptibility to predators. In addition, the distribution of native and exotic species may change with increased water temperature, as may the prevalence of disease in keystone animals such as corals and the occurrence and intensity of toxic algae blooms. Climate change may significantly impact dolphin, wahoo, and snapper grouper species in the future, but the level of impacts cannot be quantified at this time, nor is the time frame known in which these impacts will occur.

7. Define a baseline condition for the resources, ecosystems, and human communities.

The purpose of defining a baseline condition for the resource and ecosystems in the area of the proposed action is to establish a point of reference for evaluating the extent and significance of expected cumulative effects. Oxenford and Hunte (1986) suggested that there were at least two separate unit stocks of dolphin in the northeast and southeast Caribbean Sea. Oxenford (1999) suggested that it was very likely that additional stocks of dolphin existed in the Gulf of Mexico and central/western Caribbean. Prager (2000) conducted an exploratory assessment of dolphin, but the results were not conclusive. Theisen et al. (2008) indicated that a worldwide stock for wahoo consisted of a single globally distributed population. However, Zischke et al. (2012) concluded that despite genetic homogeneity in wahoo, multiple discrete phenotypic stocks

existed in the Pacific and eastern Indian oceans. The Report to Congress on the Status of U.S. Stocks indicates dolphin is not overfished, and is not undergoing overfishing (http://www.nmfs.noaa.gov/sfa/fisheries_eco/status_of_fisheries/). The overfished/overfishing status of wahoo is unknown, but all indications are that it is a healthy stock. A SEDAR stock assessment for dolphin and wahoo is scheduled within the next 5 years. Status determination criteria for dolphin and wahoo are outlined in the Dolphin Wahoo Fishery Management Plan (2003) and the Comprehensive ACL Amendment (2011a).

The SEDAR assessments for snapper grouper species (http://www.sefsc.noaa.gov/sedar/) show trends in biomass, fishing mortality, fish weight, and fish length going back to the earliest periods of data collection. For more details on the baseline conditions of dolphin, wahoo, and snapper grouper species, the reader is referred to additional sources referenced in **Section 3** of the document.

8. Identify the important cause-and-effect relationships between human activities and resources, ecosystems, and human communities.

The dolphin wahoo fishery is not as highly regulated as the snapper grouper fishery. Regulations that have affected the dolphin wahoo resource, ecosystem, and human communities are shown in **Table 6-1.**

Table 6-1. The cause and effect relationship of fishing and regulatory actions within the time period of the Cumulative Effects Analysis (CEA).

Time period/dates	Cause	Observed and/or Expected Effects
Effective June 28, 2004	Fishery Management Plan for the Dolphin Wahoo Fishery off the Atlantic states (Dolphin Wahoo FMP).	1) A 20-inch fork length minimum size limit for dolphin off the coasts of Georgia and Florida with no size restrictions elsewhere; (2) prohibition of longline fishing for dolphin and wahoo in areas closed to the use of such gear for highly migratory pelagic species; and (3) allowable gear to be used in the fishery (hook-and-line gear including manual, electric, and hydraulic rods and reels; bandit gear; handlines; longlines; and spearfishing (including powerheads) gear. In addition, other approved portions of the FMP were also effective on this date, including (1) the management unit and designations of stock status

Time period/dates	Cause	Observed and/or Expected Effects
		criteria for the unit; (2) a fishing year of January 1 through December 31; (3) a 1.5 million pound (or 13% of the total harvest) cap on commercial landings; (4) establishment of a framework procedure by which the SAFMC may modify its management measures; and (5) designations of Essential Fish Habitat (EFH) and EFH-Habitat Areas of Particular Concern (HAPC).
Effective September 24, 2004	Dolphin Wahoo FMP	1) owners of commercial vessels and/or charter vessels/headboats must have vessel permits and, if selected, submit reports; (2) dealers must have permits and, if selected, submit reports; (3) longline vessels must comply with sea turtle protection measures; (4) a recreational bag limit of 10 dolphin and 2 wahoo per person per day, with a limit of 60 dolphin per boat per day (headboats are excluded from the boat limit); (5) prohibition on recreational sale of dolphin and wahoo caught under a bag limit unless the seller holds the necessary commercial permits; and (6) a commercial trip limit of 500 pounds for wahoo.
Effective November 23, 2004	Dolphin Wahoo FMP	Operators of commercial vessels, charter vessels and headboats that are required to have a federal vessel permit for dolphin and wahoo must display operator permits.
Effective Date July 22, 2010	Amendment 1 to the Dolphin Wahoo FMP (Comprehensive Ecosystem	Updated spatial information of Council-designated EFH and EFH-HAPCS.

Time period/dates	Cause	Observed and/or Expected Effects
	Based Amendment (CE-BA) 1)	
Effective Date April 16, 2012	Amendment 2 to the Dolphin Wahoo FMP (Comprehensive ACL Amendment SAFMC 2011a)	Set ABC, ACL, ACT and AMs
Target 2014	Amendment 5 to the Dolphin Wahoo FMP	Revisions to ABCs, ACLs, recreational ACTs, and AMs implemented through the Comprehensive ACL Amendment; and revisions to the framework procedure in the Dolphin Wahoo FMP.
Target 2014	Generic For-Hire Reporting Amendment	Require all federally-permitted headboats in the South Atlantic to report landings information electronically and on a weekly basis.
Target 2014	Generic Dealer Reporting Amendment	Require that all dealers report landings information electronically on a weekly basis to improve the timeliness and accuracy of landings data
Target 2017	Joint Commercial Logbook Reporting Amendment	Require all federally-permitted commercial fin fish fishermen in the southeast to report electronically.
Target 2014/2015	Joint Charterboat Reporting Amendment	Require all federally-permitted charterboats to report landings information electronically.
Target 2014	Dolphin Wahoo Amendment 7	Allow dolphin and wahoo fillets from the Bahamas to be brought into the United States through the Atlantic EEZ.
Target 2015	Generic AM and dolphin sector allocations (under development).	The Council is considering alternatives to modify existing commercial and recreational sector allocations for dolphin.

The snapper grouper fishery is highly regulated in the South Atlantic Region. Regulations that have affected the snapper grouper resource, ecosystem, and human communities are shown in **Table 6-2.**

Table 6.2. The cause and effect relationship of fishing and regulatory actions within the time period of the Cumulative Effects Analysis (CEA).

Time period/dates	Cause	Observed and/or Expected Effects
Pre-January 12, 1989	Habitat destruction, growth overfishing of vermilion snapper.	Damage to snapper grouper habitat, decreased yield per recruit of vermilion snapper.
January 1989	Trawl prohibition to harvest fish (Snapper Grouper Amendment 1; SAFMC 1988).	Increase yield per recruit of vermilion snapper; eliminate trawl damage to live bottom habitat.
Pre-January 1, 1992	Overfishing of many snapper grouper species.	Spawning stock ratio of these species is estimated to be less than 30% indicating that they are overfished.
January 1992	Prohibited gear: fish traps south of Cape Canaveral, FL; entanglement nets; longline gear inside of 50 fathoms; powerheads and bangsticks in designated SMZs off SC. Size/Bag limits: 10" TL vermilion snapper (recreational only); 12" TL vermilion snapper (commercial only); 10 vermilion snapper/person/day; aggregate grouper bag limit of 5/person/day; and 20" TL gag, red, black, scamp, yellowfin, and yellowmouth grouper size limit (Snapper Grouper Amendment 4; SAFMC 1991).	Reduce mortality of snapper grouper species.
Pre-June 27, 1994	Damage to *Oculina* habitat.	Noticeable decrease in numbers and species diversity in areas of *Oculina* off FL
July 1994	Prohibition of fishing for and retention of snapper grouper species (HAPC renamed Oculina Experimental Closed Area (OECA). Snapper Grouper Amendment 6; SAFMC 1993.	Initiated the recovery of snapper grouper species in OECA.
1992-1999	Declining trends in biomass and	Spawning potential ratio for

Time period/dates	Cause	Observed and/or Expected Effects
	overfishing continue for a number of snapper grouper species including golden tilefish.	golden tilefish is less than 30% indicating that they are overfished.
July 1994	Snapper Grouper Amendment 6; SAFMC 1993.	Commercial quota for golden tilefish; commercial trip limits for golden tilefish; include golden tilefish in grouper recreational aggregate bag limits.
February 24, 1999	Snapper Grouper Amendment 6; SAFMC 1993.	All S-G without a bag limit: aggregate recreational bag limit 20 fish/person/day, excluding tomtate and blue runners. Vessels with longline gear aboard may only possess snowy, warsaw, yellowedge, and misty grouper, and golden, blueline and sand tilefish.
Effective October 23, 2006	Stock assessments indicate black sea bass vermilion snapper, red porgy, and snowy grouper are undergoing overfishing. Snapper grouper FMP Amendment 13C (SAFMC 2006)	Management measures implemented to end overfishing of these species.
Effective February 12, 2009	Recognized need to provide additional protection to deepwater snapper grouper species, and to protect spawning locations. Snapper grouper FMP Amendment 14 (SAFMC 2007).	Use marine protected areas (MPAs) as a management tool to promote the optimum size, age, and genetic structure of slow growing, long-lived deepwater snapper grouper species (e.g., speckled hind, snowy grouper, warsaw grouper, yellowedge grouper, misty grouper, golden tilefish, blueline tilefish, and sand tilefish). Gag and vermilion snapper occur in some of these areas.
Effective March 20, 2008	Stock assessments indicate snowy grouper, black sea bass, and red porgy are overfished. Snapper grouper FMP Amendment 15A (SAFMC 2008a).	Establish rebuilding plans and SFA parameters for snowy grouper, black sea bass, and red porgy.

Time period/dates	Cause	Observed and/or Expected Effects
Effective Dates Dec 16, 2009, to Feb 16, 2010.	Concern that bag limit sales of snapper grouper species obfuscates accurate reporting of landings data. Snapper grouper FMP Amendment 15B (SAFMC 2008b).	End double counting in the commercial and recreational reporting systems by prohibiting the sale of bag-limit caught snapper grouper, and minimize impacts on sea turtles and smalltooth sawfish.
Effective Date July 29, 2009	Stock assessment indicates gag is experiencing overfishing and is approaching an overfished condition. Snapper grouper FMP Amendment 16 (SAFMC 2009a).	Protect spawning aggregations and snapper grouper in spawning condition by increasing the length of the spawning season closure, decrease discard mortality by requiring the use of dehooking tools, reduce overall harvest of gag and vermilion snapper to end overfishing.
Effective Date January 4, 2010	Stock assessment indicated red snapper is overfished and undergoing overfishing. Red Snapper Interim Rule.	Prohibit commercial and recreational harvest of red snapper from January 4, 2010, to June 2, 2010 with a possible 186-day extension. Reduce overfishing of red snapper while long-term measures to end overfishing are addressed in Amendment 17A.
Effective Dates June 3, 2010, to Dec 5, 2010	Stock assessment indicated red snapper is overfished and undergoing overfishing. Extension of Red Snapper Interim Rule	Extended the prohibition of red snapper to reduce overfishing of red snapper while long-term measures to end overfishing are addressed in Amendment 17A.
Effective Date December 4, 2010	Stock assessment indicated red snapper is overfished and undergoing overfishing. Snapper Grouper FMP Amendment 17A (SAFMC 2010a).	Specified SFA parameters for red snapper; ACLs and ACTs; management measures to limit recreational and commercial sectors to their ACTs; accountability measures. Establish rebuilding plan for red snapper. Large snapper grouper area closure inn EEZ of NE Florida. Emergency rule delayed the effective date of the snapper grouper closure.

Time period/dates	Cause	Observed and/or Expected Effects
Effective Date January 31, 2011	Reauthorized Magnuson-Stevens Act requires ACLs for all species undergoing overfishing. Snapper Grouper Amendment 17B (SAFMC 2010b).	Specified ACLs and ACTs; management measures to limit recreational and commercial sectors to their ACTs; AMs, for species undergoing overfishing. Established a harvest prohibition of six snapper grouper species in depths greater than 240 feet.
Effective Date June 1, 2011	New red snapper assessment indicates stock is undergoing overfishing and is overfished but area closures approved in Amendment 17B are not needed. Regulatory Amendment 10 (SAFMC 2010c).	Removed of snapper grouper area closure approved in Amendment 17A.
Effective Date July 15, 2011	Additional management measures are considered to help ensure overfishing of black sea bass, vermilion snapper, and gag does not occur. Desired to have management measures slow the rate of capture to prevent derby fisheries. Regulatory Amendment 9 (SAFMC 2011a)	Harvest management measures for black sea bass; commercial trip limits for gag, vermilion snapper, and greater amberjack
Effective Date May 10, 2012	New analysis demonstrates prohibition to harvest of 6 deepwater species in Amendment 17B is not an effective measure to reduce bycatch of speckled hind and warsaw grouper. Regulatory Amendment 11 (SAFMC 2011b)	Removed the harvest prohibition of six deepwater snapper grouper species implemented in Amendment 17B.
Effective Date April 16, 2012	Reauthorized Magnuson-Stevens Act requires ACLs for species not undergoing overfishing. Comprehensive ACL Amendment (SAFMC 2011c).	ACLs ACTs, and AMs for species not experiencing overfishing; accountability measures; an action to remove species from the fishery management unit as appropriate; and management measures to limit recreational and commercial sectors to their ACTs.

Time period/dates	Cause	Observed and/or Expected Effects
July 11, 2012	Stock assessment indicates red grouper is overfished and undergoing overfishing. Amendment 24 (Red Grouper) (SAFMC 2011d).	Established a rebuilding plan for red grouper, specified ABC, and established ACL, ACT and revised AMs for the commercial and recreational sectors.
Effective Date July 1, 2012	Need to slow rate of harvest in black sea bass pot sector to ease derby conditions. Amendment 18A (SAFMC 2012a).	Established an endorsement program for black sea bass commercial fishery; established a trip limit; specified requirements for deployment and retrieval of pots; made improvements to data reporting for commercial and for-hire sectors
Effective Dates: September 17, 2012 (commercial); September 14, 2012 (recreational)	As red snapper stock rebuilds some limited harvest of red snapper can occur, as long as rebuilding is not compromised. Temporary Rule through Emergency Action (Red snapper).	Established limited red snapper fishing seasons (commercial and recreational) in 2012.
Effective Date January 7, 2013	Clarification of action in Amendment 18A for black sea bass pot endorsement transferability was needed. Amendment 18A Transferability Amendment.	Reconsidered action to allow for transfer of black sea bass pot endorsements that was disapproved in Amendment 18A.
Effective Date October 26, 2012	Some wreckfish catch shares have become available over time. Amendment 20A (Wreckfish) (SAFMC 2012b).	Redistributed inactive wreckfish shares.
Effective Date October 9, 2012	Stock assessment indicates golden tilefish overfishing has been ended and catch levels can be increased. Regulatory Amendment 12 (SAFMC 2012c).	Adjusted the golden tilefish ACL based on the results of a new stock assessment and modified the recreational golden tilefish AM.
Effective Date May 23, 2013	There is a need to reduce effort in the commercial longline sector that targets golden tilefish to ease derby conditions. Snapper Grouper Amendment 18B (SAFMC 2013a)	Establish a commercial longline endorsement program for golden tilefish; establish an appeals process; allocate the commercial ACL by gear; establish trip limit for the hook-and-line sector.

Time period/dates	Cause	Observed and/or Expected Effects
July 17, 2013	The recreational data collection system has changed from MRFSS to MRIP. ACLs and allocations in place utilize MRFSS data. Regulatory Amendment 13. (SAFMC 2013b).	Adjust ACLs and allocations for unassessed snapper grouper species with MRIP recreational estimates
August 23, 2013	As the red snapper stock rebuilds, some allowable harvest could occur if rebuilding is not affected. Snapper Grouper Amendment 28 (SAFMC 2013d).	Modify red snapper management measures including the establishment of a process to determine future annual catch limits and fishing seasons.
September 12, 2013	New stock assessments completed for vermilion snapper and red porgy. Regulatory Amendment 18 (SAFMC 2013e).	Adjust ACLs and management measure for vermilion snapper and red porgy based on results from new update assessment.
September 23, 2013	New stock assessment for black sea bass indicates the stock is rebuilt and catch levels can be increased. Regulatory Amendment 19 (SAFMC 2013f).	Increase recreational and commercial ACLs for black sea bass. Black sea bass pots prohibited from November 1 through April 30 (effective October 23, 2013).
September 5, 2013	New stock assessment indicates catch levels of yellowtail snapper can be increased. Accountability measures for gag can be adjusted because effective means are in place to ensure overfishing does not occur. Regulatory Amendment 15 (SAFMC 2013c).	Increase yellowtail snapper ACL, remove accountability measure for gag that closes commercial harvest for all shallow water grouper species when the gag ACL is met. Reduce gag ACL to account for dead discards when fishermen target co-occurring shallow water grouper species.
January 27, 2014	Blue runner are caught primarily in state waters of FL, and it is not clear if federal management is needed. Nassau grouper is no longer managed by Gulf Council. South Atlantic Council would like to be able to make adjustment to ACLs more quickly after a stock assessment has been completed. Snapper	Establish the South Atlantic Council as the managing entity for yellowtail and mutton snappers and Nassau grouper in the Southeast U.S., modify the SG framework; modify placement of blue runner in an FMU or modify management measures for blue runner

Time period/dates	Cause	Observed and/or Expected Effects
	Grouper Amendment 27	
January 27, 2014	Southeast Fisheries Science Center has established a program that allows headboats to report landings through electronic means. Generic For-Hire Reporting Amendment.	Require all federally-permitted headboats in the South Atlantic to report landings information electronically and on a weekly basis.
August 7, 2014	There is no dealer permit for the Coastal Migratory Pelagics fishery. Multiple dealer permits is burdensome. Quota monitoring of dealer reported landings needs to be more timely to ensure ACLs are not exceeded.	A single dealer permit is required for multiple fisheries in the Gulf of Mexico and South Atlantic. Dealers must report electronically once a week.
Target 2014	There is a need to control recreational harvest of snapper grouper species with very small ACLs. Snapper Grouper Amendment 22 (under development).	Develop a recreational tag program for snapper grouper species in the South Atlantic.
Target 2014	South Atlantic Council's SSC has identified new methods to estimate ABC for data poor species. Snapper Grouper Amendment 29 (under development).	Update ABCs, ACLs, and ACTs for snapper grouper species based on recommendations from SSC.
Target 2014	Joint Commercial Logbook Reporting Amendment	Require all federally-permitted commercial fin fish fishermen in the southeast to report electronically.
Target 2014/2015	Joint Charterboat Reporting Amendment	Require all federally-permitted charterboats to report landings information electronically.
Target 2015	Regulatory Amdendment 16 (under development).	Remove and/or modify seasonal closure for black sea bass pots.
Target 2015	Regulatory Amdendment 17 (under development).	Modifications to existing MPAs and/or addition of new MPAs.

Time period/dates	Cause	Observed and/or Expected Effects
Target 2015	Generic AM and dolphin sector allocations (under development).	Adjusting the accountability measure criteria in this amendment will help to bring consistency across species managed by the Council.
Target 2015	Regulatory Amendment 20 (under development).	Rebuilding strategy, revision of ABC, ACL, commercial trip limits, and bag limits for snowy grouper.

9. Determine the magnitude and significance of cumulative effects.

Dolphin was assessed by Prager (2000), and SEDAR stock assessments for dolphin and wahoo are scheduled within the next 5 years. SEDAR stock assessments for snapper grouper species are ongoing. When the SEDAR stock assessments are completed, changes to regulations may be required. In addition, changes in management regulations, fishing techniques, social/economic structure, etc. can result in shifts in the percentage of harvest between user groups over time. As such, the South Atlantic Council has determined that certain aspects of the current management system would need to be restructured. **Chapters 2** and **4** of this document describe in detail the magnitude and significance of effects of the alternatives considered which would exempt dolphin and wahoo lawfully harvested in The Bahamas, from regulations that require head and tail intact, bag and possession limits in the U.S. EEZ, and require that all fillets of fish being brought into the U.S. EEZ from The Bahamas have the skin intact. None of the impacts have been determined to be significant.

The cumulative effects of the actions proposed in Dolphin Wahoo Amendment 7 and Snapper Grouper Amendment 33 are not expected to affect the magnitude of bycatch, diversity, and ecosystem structure of fish communities, or safety at sea of fishermen targeting dolphin, wahoo. and snapper grouper species managed by the South Atlantic Council, especially since the fish would not be harvested in the U.S. EEZ.

This action is not likely to result in direct, indirect, or cumulative effects to unique areas, such as significant scientific cultural or historical resources, park land, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas as the proposed action is not expected to substantially increase fishing effort or the spatial and/or temporal distribution of current fishing effort within the South Atlantic region. The Stellwagen Bank off the Northeastern U.S.; USS Monitor, Gray's Reef, and Florida Keys National Marine Sanctuaries are within the boundaries of the Atlantic EEZ. The proposed actions are not likely to cause loss or destruction of these national marine sanctuaries.

10. Modify or add alternatives to avoid, minimize, or mitigate significant cumulative effects.

The cumulative effects on the biophysical environment are unknown, but could be expected to be negligible, since the harvest of fish species would occur in Bahamian waters. Avoidance, minimization, and mitigation are not applicable.

11. Monitor the cumulative effects of the selected alternative and adapt management.

The effects of the proposed actions are, and will continue to be, monitored through collection of data by NMFS, states, stock assessments and stock assessment updates, life history studies, and other scientific observations.

6.2 Socioeconomic

A description of the human environment, including a description of the snapper grouper fishery and the dolphin wahoo fishery as well as associated key fishing communities is contained in **Section 3.3.2** and a description of the history of management of snapper grouper and dolphin wahoo are contained in **Appendix D**. A detailed description of the expected social and economic impacts of the action in this document is contained in **Section 4**.

Participation in and the economic performance of the dolphin wahoo and snapper grouper fisheries has been affected by a combination of regulatory, biological, social, and external economic factors. Commercial fishermen, for-hire vessel owners and crew, and private recreational anglers commonly participate in multiple fisheries throughout the year. Even within the snapper grouper fishery, effort can shift from one species to another due to environmental, economic, or regulatory changes. Overall, changes in management of one species can impact effort and harvest of another species (in the snapper grouper fishery, dolphin wahoo fishery, or in another fishery) because of multi-fishery participation that is characteristic in the South Atlantic region.

The cumulative social and economic effects of past, present, and future amendments may be described as limiting fishing opportunities in the short-term, with some exceptions of actions that alleviate some negative social and economic impacts, such as the proposed actions in this amendment. The intent of these amendments is to improve prospects for sustained participation in the respective fisheries over time and the proposed actions in this amendment are expected to result in some important long-term benefits to the commercial and for-hire fishing fleets, fishing communities and associated businesses, and private recreational anglers. The proposed changes in this amendment are expected to provide benefits to recreational fishermen who harvest snapper, grouper, dolphin and wahoo in The Bahamas and improve consistency of regulations, while having no expected negative effects on other resource users.

Chapter 7. List of Preparers

Table 7-1. List of preparers of the document.

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NMFS = National Marine Fisheries Service, SAFMC = South Atlantic Fishery Management Council, SF = Sustainable Fisheries Division, PR = Protected Resources Division, SERO = Southeast Regional Office, HC = Habitat Conservation Division, GC = General Counsel, Eco=Economics

Table 7-2. List of interdisciplinary plan team members for the document.

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NMFS = National Marine Fisheries Service, SAFMC = South Atlantic Fishery Management Council, SF = Sustainable Fisheries Division, PR = Protected Resources Division, SERO = Southeast Regional Office, HC = Habitat Conservation Division, GC = General Counsel, Eco=Economics

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List of Agencies, Organizations, and Persons Consulted
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Bahamas Agricultural and Industrial Corporation
SAFMC Law Enforcement Advisory Panel
SAFMC Dolphin Wahoo Advisory Panel
SAFMC Scientific and Statistical Committee
SAFMC Information and Education Advisory Panel
Florida Fish and Wildlife Conservation Commission
Georgia Department of Natural Resources
South Carolina Department of Natural Resources
North Carolina Division of Marine Fisheries
Atlantic States Marine Fisheries Commission
Gulf of Mexico Fishery Management Council
Mid Atlantic Fishery Management Council
New England Fishery Management Council
National Marine Fisheries Service
- Washington Office
- Office of Ecology and Conservation
- Southeast Regional Office
- Southeast Fisheries Science Center

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Appendix A. Alternatives Considered, but Eliminated from Detailed Analysis

This section describes actions and alternatives that the South Atlantic Fishery Management Council (South Atlantic Council) considered in developing Amendment 7 to the Fishery Management Plan for the Dolphin and Wahoo Fishery of Atlantic (Amendment 7) and Amendment 33 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region (Amendment 33), but decided not to pursue. The description of each alternative is followed by a summary statement of why it was eliminated from Amendment 7 and Amendment 33.

Allow dolphin and wahoo fillets from The Bahamas Action

Action 1

Alternative 2

***Subalternative 2b**: Regardless of the number of dolphin/wahoo fillets, 10 lbs of fillets will be counted as one fish.*

***Subalternative 2c**: Regardless of the number of dolphin/wahoo fillets, 20 lbs of fillets will be counted as one fish.*

***Subalternative 2d**: Regardless of the number of dolphin/wahoo fillets, 30 lbs of fillets will be counted as one fish.*

***Subalternative 2e**: Regardless of the number of dolphin/wahoo fillets, 40 lbs of fillets will be counted as one fish.*

Bahamian regulations state limits in terms up numbers of fish, unlike the Bahamian regulations for snapper grouper species which states limits in terms of numbers of fish or in pounds. There currently are no empirical estimates of the average weight of fillets from either dolphin or wahoo.

Reporting Requirements Action

***Action 3**: Establish reporting requirements for vessels bringing fillets of dolphin, wahoo, and snapper grouper species into the U.S. EEZ from The Bahamas.*

***Alternative 1 (No Action)**: There are no reporting requirements.*

***Alternative 2**: Vessels lawfully bringing fillets of dolphin, wahoo, and snapper grouper species into the U.S. EEZ from The Bahamas must call law enforcement identifying themselves as having fish harvested in The Bahamas onboard.*

***Alternative 3**: Vessels lawfully bringing fillets of dolphin, wahoo, and snapper grouper species into the U.S. EEZ from The Bahamas must have an operating, NMFS-approved VMS unit onboard.*

No law enforcement organization, Federal or State of Florida, has the ability to monitor these types of reporting system for such a large number of participants.

Remove Exemption for Snapper Grouper Fillets Action

***Action 5**: Remove the exemption that allows fillets of snapper grouper species harvested lawfully in The Bahamas to be landed in the U.S. EEZ.*

***Alternative 1 (No Action)**: In the South Atlantic EEZ, snapper grouper lawfully harvested in Bahamian waters are exempt from the requirement that they be maintained with head and fins intact,*

provided valid Bahamian fishing and cruising permits are on board the vessel and the vessel is in transit through the South Atlantic EEZ.

***Alternative 2**: Require snapper grouper lawfully harvested in Bahamian waters to be maintained with head and fins intact.*

The South Atlantic Council did not want to create or reinstitute a problem that existed prior to the current regulation. It was decided that considering this action would alienate the public. Landing snapper grouper fillets from The Bahamas has not been a source of significant problems since this regulation was in effect.

Exempt Snapper Grouper from Bag and Possession Limits Action

***Action 6**. Exempt snapper grouper species harvested lawfully from The Bahamas from the bag and possession limits in the U.S. EEZ.*

***Alternative 1 (No Action)**: Snapper grouper species lawfully harvested from The Bahamas are subject to the bag and possession limits in the U.S. EEZ.*

***Alternative 2**: Exempt snapper grouper lawfully harvested in The Bahamas from regulations for bag limits in the U.S. EEZ.*

The South Atlantic Council decided that there are not any significant issues with requiring fishermen bringing snapper grouper fillets from The Bahamas in terms of bag and possession limits. It was also decided that fillets brought from The Bahamas into the U.S. EEZ must not be from species prohibited from possession in the U.S. EEZ.

Appendix C. Other Applicable Law

1.1 Administrative Procedure Act (APA)

All federal rulemaking is governed under the provisions of the APA (5 U.S.C. Subchapter II), which establishes a "notice and comment" procedure to enable public participation in the rulemaking process. Under the APA, the National Marine Fisheries Service (NMFS) is required to publish notification of proposed rules in the *Federal Register* and to solicit, consider, and respond to public comment on those rules before they are finalized. The APA also establishes a 30-day wait period from the time a final rule is published until it takes effect, with some exceptions. Amendment 7 to the Fishery Management Plan for the Dolphin Wahoo Fishery of the Atlantic (Dolphin Wahoo Amendment 7) and Amendment 33 to the FMP for the Snapper Grouper Fishery of the South Atlantic (Snapper Grouper Amendment 33) complies with the provisions of the APA through the South Atlantic Fishery Management Council's (South Atlantic Council) extensive use of public meetings, requests for comments, and consideration of comments, including those conducted by the Mid-Atlantic and New England Fishery Management Councils. The proposed rule associated with this amendment will have a request for public comments which complies with the APA, and upon publication of the final rule, there will be a 30-day wait period before the regulations are effective.

1.2 Information Quality Act (IQA)

The IQA (Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Public Law 106-443)) which took effect October 1, 2002, directed the Office of Management and Budget (OMB) to issue government-wide guidelines that "provide policy and procedural guidelines to federal agencies for ensuring and maximizing the quality, objectivity, utility, and integrity of information disseminated by federal agencies." OMB directed each federal agency to issue its own guidelines, establish administrative mechanisms allowing affected persons to seek and obtain correction of information that does not comply with OMB guidelines, and report periodically to OMB on the number and nature of complaints. The NOAA Section 515 Information Quality Guidelines require a series of actions for each new information product subject to the IQA. Dolphin Wahoo Amendment 7 and Snapper Grouper Amendment 33 has used the best available information and made a broad presentation thereof. The information contained in this document was developed using best available scientific information. Therefore, this document is in compliance with the IQA.

1.3 Coastal Zone Management Act (CZMA)

Section 307(c)(1) of the federal CZMA of 1972 requires that all federal activities that directly affect the coastal zone be consistent with approved state coastal zone management programs to the maximum extent practicable. The South Atlantic Council, in cooperation with the Mid-Atlantic Fishery Management Council and the New England Fishery Management Council, is responsible for conservation and management of dolphin and wahoo in federal waters off the Atlantic states. While it is the goal of the South Atlantic Council to have management measures that complement those of the states, federal and state administrative procedures vary and regulatory changes are unlikely to be fully instituted at the same time. Based on the analysis of the environmental consequences of the proposed actions in **Section 4**, the South Atlantic Council believes this document is consistent to the maximum extent practicable with the Coastal Zone Management Plans of Maine, New Hampshire, Massachusetts, Rhode Island,

Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, and east Florida to Key West. This determination will be submitted to the responsible state agencies under Section 307 of the CZMA administering approved Coastal Zone Management Programs in the states mentioned above.

1.4 Endangered Species Act (ESA)

The ESA of 1973 (16 U.S.C. Section 1531 et seq.) requires that federal agencies must ensure actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of threatened or endangered species or the habitat designated as critical to their survival and recovery. The ESA requires NMFS to consult with the appropriate administrative agency (itself for most marine species, and the U.S. Fish and Wildlife Service for all remaining species) when proposing an action that may affect threatened or endangered species or adversely modify critical habitat. Consultations are necessary to determine the potential impacts of the proposed action. They conclude informally when proposed actions may affect but are "not likely to adversely affect" threatened or endangered species or designated critical habitat. Formal consultations, resulting in a biological opinion, are required when proposed actions may affect and are "likely to adversely affect" threatened or endangered species or adversely modify designated critical habitat.

NMFS completed a biological opinion (NMFS 2003) on August 27, 2003, evaluating the impacts of the Atlantic dolphin and wahoo fishery on ESA-listed species (see **Section 3.0**). The opinion concluded the fishery would not affect ESA-listed marine mammals or smalltooth sawfish, and is not likely to jeopardize the continued existence of any listed sea turtle species (see NMFS 2003 for discussion on these species). However, the opinion did state that the dolphin wahoo fishery would adversely affect sea turtles. An incidental take statement was issued for green, hawksbill, Kemp's ridley, leatherback, and loggerhead sea turtles. Reasonable and prudent measures to minimize the impact of these incidental takes were specified, along with terms and conditions to implement them.

Subsequent to the 2003 biological opinion, NMFS made several modifications to the list of protected species for which they are responsible. These changes included: (1) the listing of two species of *Acropora* coral, (2) the designation of *Acropora* critical habitat, (3) the determination that the loggerhead sea turtle population consists of nine distinct population segments (DPSs; 76 FR 58868), (4) the listing of five DPSs of Atlantic sturgeon, and (5) the proposed listing of 66 coral species and reclassification of *Acropora* from threatened to endangered (77 FR 73220).

NMFS addressed how these ESA changes could impact the determinations of the 2003 biological opinion in a series of consultation memoranda. In separate memoranda, NMFS concluded the continued authorization of the Atlantic dolphin wahoo fishery, is not likely to adversely affect *Acropora* or *Acropora* critical habitat (May 18, 2010), and Atlantic sturgeon (February 15, 2012). The February 15, 2012, memorandum also stated that because the 2003 biological opinion had evaluated the impacts of the fishery on the loggerhead subpopulations now wholly contained within the Northwest Atlantic DPS, the opinion's conclusion that the fishery is not likely to jeopardize the continued existence of loggerhead sea turtles remains valid. Finally, in a memorandum dated February 13, 2013, NMFS concluded new information provided in the proposed reclassification (uplisting) of *Acropora* did not change the previous effects determination that the fishery was not likely to adversely affect *Acropora*. Therefore, the actions of proposed Dolphin Wahoo Amendment 7 would fall within the level of effort and scope of the action analyzed in the above mentioned opinion and subsequent memoranda.

1.5 Executive Order 12612: Federalism

E.O. 12612 requires agencies to be guided by the fundamental federalism principles when formulating and implementing policies that have federalism implications. The purpose of the Order is to guarantee the division of governmental responsibilities between the federal government and the states, as intended by the framers of the Constitution. No federalism issues have been identified relative to the action proposed in this document and associated regulations. Dolphin, wahoo, and snapper grouper species would be harvested in Bahamian waters and vessels with fillets these fish would not be allowed to stop and fish in the U.S. exclusive economic zone (EEZ). Therefore, preparation of a Federalism assessment under E.O. 13132 is not necessary.

1.6 Executive Order 12866: Regulatory Planning and Review

E.O. 12866, signed in 1993, requires federal agencies to assess the costs and benefits of their proposed regulations, including distributional impacts, and to select alternatives that maximize net benefits to society. To comply with E.O. 12866, NMFS prepares a Regulatory Impact Review (RIR) for all fishery regulatory actions that implement a new fishery management plan (FMP) or that significantly amend an existing plan. RIRs provide a comprehensive analysis of the costs and benefits to society associated with proposed regulatory actions, the problems and policy objectives prompting the regulatory proposals, and the major alternatives that could be used to solve the problems. The reviews also serve as the basis for the agency's determinations as to whether proposed regulations are a "significant regulatory action" under the criteria provided in E.O. 12866 and whether proposed regulations will have a significant economic impact on a substantial number of small entities in compliance with the Regulatory Flexibility Act (RFA). A regulation is significant if it is likely to result in an annual effect on the economy of at least $100,000,000 or if it has other major economic effects.

In accordance with E.O. 12866, the following is set forth by the South Atlantic Council: (1) this rule is not likely to have an annual effect on the economy of more than $100 million or to adversely affect in a material way the economy, a sector of the economy, productivity, jobs, the environment, public health or safety, or state, local, or tribal governments or communities; (2) this rule is not likely to create any serious inconsistencies or otherwise interfere with any action taken or planned by another agency; (3) this rule is not likely to materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights or obligations of recipients thereof; (4) this rule is not likely to raise novel or policy issues arising out of legal mandates, or the principles set forth in the Executive Order; and (5) this rule is not controversial.

This amendment includes the RIR as **Appendix G**.

1.7 Executive Order 12898: Environmental Justice

E.O. 12898 requires that "to the greatest extent practicable and permitted by law…each federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies and activities on minority populations and low-income populations in the United States and its territories and possessions…"

The actions considered in this document are not expected to result in any disproportionate adverse human health or environmental effects to minority populations or low-income populations of Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, and east Florida to Key West. A description of the communities impacted by the actions contained in this document and potential socioeconomic impacts of those actions are contained in **Sections 3.0** and **4.0** of this document.

1.8 Executive Order 12962: Recreational Fisheries

E.O. 12962 requires federal agencies, in cooperation with states and tribes, to improve the quantity, function, sustainable productivity, and distribution of U.S. aquatic resources for increased recreational fishing opportunities through a variety of methods including but not limited to developing joint partnerships; promoting the restoration of recreational fishing areas that are limited by water quality and habitat degradation; fostering sound aquatic conservation and restoration endeavors; and evaluating the effects of federally-funded, permitted, or authorized actions on aquatic systems and recreational fisheries, and documenting those effects. Additionally, the Order establishes a seven-member National Recreational Fisheries Coordination Council responsible for, among other things, ensuring that social and economic values of healthy aquatic systems that support recreational fisheries are considered by federal agencies in the course of their actions, sharing the latest resource information and management technologies, and reducing duplicative and cost-inefficient programs among federal agencies involved in conserving or managing recreational fisheries. The National Recreational Fisheries Coordination Council also is responsible for developing, in cooperation with federal agencies, states and tribes, a Recreational Fishery Resource Conservation Plan - to include a five-year agenda. Finally, the Order requires NMFS and the U.S. Fish and Wildlife Service to develop a joint agency policy for administering the ESA.

The action considered in this amendment is consistent with the directives of E.O. 12962.

1.9 Executive Order 13089: Coral Reef Protection

E.O. 13089, signed by President William Clinton on June 11, 1998, recognizes the ecological, social, and economic values provided by the Nation's coral reefs and ensures that federal agencies are protecting these ecosystems. More specifically, the Order requires federal agencies to identify actions that may harm U.S. coral reef ecosystems, to utilize their program and authorities to protect and enhance the conditions of such ecosystems, and to ensure that their actions do not degrade the condition of the coral reef ecosystem.

The actions considered in this amendment are consistent with the directives of E.O. 13089.

1.10 Executive Order 13158: Marine Protected Areas (MPAs)

E.O. 13158 was signed on May 26, 2000, to strengthen the protection of U.S. ocean and coastal resources through the use of MPAs. The E.O. defined MPAs as "any area of the marine environment that has been reserved by federal, state, territorial, tribal, or local laws or regulations to provide lasting protection for part or all of the natural and cultural resources therein". It directs federal agencies to work closely with state, local, and non-governmental partners to create a comprehensive network of MPAs "representing diverse U.S. marine ecosystems, and the Nation's natural and cultural resources".

The actions considered in this amendment are consistent with the directives of E.O. 13158.

1.11 Marine Mammal Protection Act (MMPA)

The MMPA established a moratorium, with certain exceptions, on the taking of marine mammals in U.S. waters and by U.S. citizens on the high seas. It also prohibits the importing of marine mammals and marine mammal products into the United States. Under the MMPA, the Secretary of Commerce (authority delegated to NMFS) is responsible for the conservation and management of cetaceans and pinnipeds (other than walruses). The Secretary of the Interior is responsible for walruses, sea otters, polar bears, manatees, and dugongs. Part of the responsibility that NMFS has under the MMPA involves monitoring populations of marine mammals to make sure that they stay at optimum levels. If a population falls below its optimum level, it is designated as "depleted". A conservation plan is then developed to guide research and management actions to restore the population to healthy levels.

In 1994, Congress amended the MMPA, to govern the taking of marine mammals incidental to commercial fishing operations. This amendment required the preparation of stock assessments for all marine mammal stocks in waters under U.S. jurisdiction; development and implementation of take-reduction plans for stocks that may be reduced or are being maintained below their optimum sustainable population levels due to interactions with commercial fisheries; and studies of pinniped-fishery interactions. The MMPA requires a commercial fishery to be placed in one of three categories, based on the relative frequency of incidental serious injuries and mortalities of marine mammals. Category I designates fisheries with frequent serious injuries and mortalities incidental to commercial fishing; Category II designates fisheries with occasional serious injuries and mortalities; and Category III designates fisheries with a remote likelihood or no known serious injuries or mortalities.

Under the MMPA, to legally fish in a Category I and/or II fishery, a fisherman must take certain steps. For example, owners of vessels or gear engaging in a Category I or II fishery, are automatically registered for the Marine Mammal Authorization Program and are required by law to carry a current Authorization Certificate on board their vessel or person when participating in the listed fishery. Fishermen are also required to accommodate an observer if requested (50 CFR 229.7(c)) and must comply with any applicable take reduction plans. Furthermore, all fishermen (regardless of fishery category) must report any incidental mortality or injury to a marine mammal during commercial fishing activities within 48 hours of the fishing trip.

The dolphin wahoo fishery of the Atlantic is part of the Southeastern U.S. Atlantic, Gulf of Mexico, and Caribbean pelagic hook-and-line/harpoon fishery and the commercial hook-and-line components of the South Atlantic snapper grouper fishery (i.e., bottom longline, bandit gear, and handline) are both designated as Category III fisheries (79 FR 14418, March 14, 2014) because there have been no known documented interactions between these gear and marine mammals. The black sea bass pot component of the South Atlantic snapper grouper fishery is part of the Atlantic mixed species trap/pot fishery, a Category II fishery (79 FR 14418, March 14, 2014). The Atlantic mixed species trap/pot fishery designation was created in 2003 (68 FR 41725, July 15, 2003), by combining several separately listed trap/pot fisheries into a single group. This group was designated Category II as a precaution because of known interactions between marine mammals and gear similar to those included in this group. Prior to this consolidation, the black sea bass pot fishery in the South Atlantic was a part of the "U.S. Mid-Atlantic and Southeast U.S. Atlantic Black Sea Bass Trap/Pot" fishery (Category III). There has never

been a documented interaction between marine mammals and black sea bass trap/pot gear in the South Atlantic. The actions in this EA are not expected to negatively impact the provisions of the MMPA.

1.12 Migratory Bird Treaty Act (MBTA) and Executive Order 13186

The MBTA implemented several bilateral treaties for bird conservation between the United States and Great Britain, the United States and Mexico, the United States and Japan, and the United States and the former Union of Soviet Socialists Republics. Under the MBTA, it is unlawful to pursue, hunt, take, capture, kill, possess, trade, or transport any migratory bird, or any part, nest, or egg of a migratory bird, included in bilateral treaties, except as permitted by regulations issued by the Department of the Interior (16 U.S.C. 703-712). Violations of the MBTA carry criminal penalties. Any equipment and means of transportation used in activities in violation of the MBTA may be seized by the United States government and, upon conviction, must be forfeited to it.

Executive Order 13186 directs each federal agency taking actions that have, or are likely to have, a measurable negative effect on migratory bird populations to develop and implement a memorandum of understanding (MOU) with the U.S. Fish and Wildlife Service (USFWS) to conserve those bird populations. In the instance of unintentional take of migratory birds, NMFS would develop and use principles, standards, and practices that will lessen the amount of unintentional take in cooperation with the USFWS. Additionally, the MOU would ensure that NEPA analyses evaluate the effects of actions and agency plans on migratory birds, with emphasis on species of concern.

An MOU was signed on August 15, 2012, which addresses the incidental take of migratory birds in commercial fisheries under the jurisdiction of NMFS. NMFS must monitor, report, and take steps to reduce the incidental take of seabirds that occurs in fishing operations. The United States has already developed the U.S. National Plan of Action for Reducing Incidental Catch of Seabirds in Longline Fisheries. Under that plan many potential MOU components are already being implemented.

The action considered in this amendment is consistent with the directives of E.O. 13186.

1.13 National Environmental Policy Act (NEPA)

This document has been written and organized in a manner that meets NEPA requirements, and includes an Environmental Assessment, as described in NOAA Administrative Order (NAO) 216- 6, Section 6.03.a.2.

Proposed Actions

The proposed actions are described in **Chapter 2.**

Affected Environment

The affected environment is described in **Chapter 3**.

Impacts of the Action

The impacts of the actions on the environment are described in **Chapter 4.**

1.14 National Marine Sanctuaries Act (NMSA)

Under the NMSA (also known as Title III of the Marine Protection, Research and Sanctuaries Act of 1972), as amended, the U.S. Secretary of Commerce is authorized to designate National Marine Sanctuaries to protect distinctive natural and cultural resources whose protection and beneficial use requires comprehensive planning and management. The National Marine Sanctuary Program is administered by the Sanctuaries and Reserves Division of NOAA. The NMSA provides authority for comprehensive and coordinated conservation and management of these marine areas. The National Marine Sanctuary Program currently comprises 13 sanctuaries around the country, including sites in American Samoa and Hawaii. These sites include significant coral reef and kelp forest habitats, and breeding and feeding grounds of whales, sea lions, sharks, and sea turtles. The sanctuaries in the Atlantic exclusive economic zone are the Stellwagen Bank, USS Monitor, Gray's Reef, and Florida Keys National Marine Sanctuaries.

The action considered in this amendment is not expected to have any adverse impacts on the resources managed by the National Marine Sanctuaries.

1.15 Paperwork Reduction Act (PRA)

The purpose of the PRA is to minimize the burden on the public. The PRA is intended to ensure that the information collected under the proposed action is needed and is collected in an efficient manner (44 U.S.C. 3501 (1)). The authority to manage information collection and record keeping requirements is vested with the Director of the Office of Management and Budget (OMB). This authority encompasses establishment of guidelines and policies, approval of information collection requests, and reduction of paperwork burdens and duplications. The PRA requires NMFS to obtain approval from the OMB before requesting most types of fishery information from the public.

The actions considered in this amendment are not expected to affect PRA since no data collection program is included.

1.16 Regulatory Flexibility Act (RFA)

The RFA of 1980 (5 U.S.C. 601 et seq.) requires federal agencies to assess the impacts of regulatory actions implemented through notice and comment rulemaking procedures on small businesses, small organizations, and small governmental entities, with the goal of minimizing adverse impacts of burdensome regulations and record-keeping requirements on those entities. Under the RFA, NMFS must determine whether a proposed fishery regulation would have a significant economic impact on a substantial number of small entities. If not, a certification to this effect must be prepared and submitted to the Chief Counsel for Advocacy of the Small Business Administration. Alternatively, if a regulation is determined to significantly impact a substantial number of small entities, the RFA requires the agency to prepare an initial and final Regulatory Flexibility Analysis to accompany the proposed and final rule, respectively. These analyses, which describe the type and number of small businesses affected, the nature and size of the impacts, and alternatives that minimize these impacts while accomplishing stated objectives, must be published in the *Federal Register* in full or in summary for public comment and submitted to the chief counsel for advocacy of the Small Business Administration. Changes to the RFA

in June 1996 enable small entities to seek court review of an agency's compliance with the RFA's provisions.

As NMFS has determined whether a proposed fishery regulation would have a significant economic impact on a substantial number of small entities, a certification to this effect will be prepared and submitted to the Chief Counsel for Advocacy of the Small Business Administration.

This amendment includes the RFA as **Appendix H**.

1.17 Small Business Act (SBA)

Enacted in 1953, the SBA requires that agencies assist and protect small-business interests to the extent possible to preserve free competitive enterprise. The objectives of the SBA are to foster business ownership by individuals who are both socially and economically disadvantaged; and to promote the competitive viability of such firms by providing business development assistance including, but not limited to, management and technical assistance, access to capital and other forms of financial assistance, business training, and counseling, and access to sole source and limited competition federal contract opportunities, to help firms achieve competitive viability. Because most businesses associated with fishing are considered small businesses, NMFS, in implementing regulations, must make an assessment of how those regulations will affect small businesses.

1.18 Public Law 99-659: Vessel Safety

Public Law 99-659 amended the MSFCMA to require that a FMP or FMP amendment must consider, and may provide for, temporary adjustments (after consultation with the U.S. Coast Guard and persons utilizing the fishery) regarding access to a fishery for vessels that would be otherwise prevented from participating in the fishery because of safety concerns related to weather or to other ocean conditions.

No vessel would be forced to participate in Atlantic fisheries under adverse weather or ocean conditions as a result of the imposition of management regulations proposed in this amendment. No concerns have been raised by fishermen or by the U.S. Coast Guard that the proposed management measures directly or indirectly pose a hazard to crew or vessel safety under adverse weather or ocean conditions. In fact, fishermen contend that storing dolphin and wahoo safely with head and fins intact is difficult and impractical due to the size of the fish, and therefore requested that the South Atlantic Council allow the fish to be filleted. Fillets of snapper grouper species lawfully harvested in the Bahamas have been authorized to be brought into the U.S. EEZ since 1998 (SAFMC 1998).

References:

NMFS (National Marine Fisheries Service). 2003. Endangered Species Act – Section 7 Consultation on the Fishery Management Plan for the Dolphin and Wahoo Fishery of the Atlantic Ocean. Biological Opinion, August 27, 2003.

SAFMC (South Atlantic Fishery Management Council). 1998. Amendment 8 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region, Including a Final Supplemental Environmental Impact Statement, Regulatory Impact Review, Initial Flexibility Analysis, &

Social Impact Assessment/Fishery Impact Statement. South Atlantic Fishery Management Council, 1 Southpark Circle, Suite 306, Charleston, South Carolina, 29407-4699. p.126 plus appendices.

Appendix F. Bycatch Practicability Analysis

1. Bycatch Practicability Analysis (BPA)

1.1 Population Effects for the Bycatch Species

Background

Amendment 5 to the Fishery Management Plan (FMP) for Dolphin and Wahoo in the Atlantic (Dolphin Wahoo Amendment 5) includes actions that revise the acceptable biological catch (ABC) estimates, annual catch limits (ACLs), recreational annual catch targets (ACTs) (**Action 1**), and accountability measures (AMs) (**Action 2**). The revisions incorporate updates to the recreational landings data as per the new Marine Recreational Information Program (MRIP), as well as updates to commercial and for-hire landings. Additionally, this amendment would revise the framework procedure for dolphin and wahoo (**Action 3**); and establish commercial trip limits for dolphin (**Action 4**).

Most dolphin and wahoo are taken with hook-and-line gear, with some harvest using pelagic longlines. Landings for dolphin outnumber wahoo for both commercial and recreational sectors (**Table 1**).

Commercial Sector

Currently, discard data are collected using a supplemental form that is sent to a 20% stratified random sample of the active permit holders in dolphin wahoo fishery. However, in the absence of any observer data, there are concerns about the accuracy of logbook data in collecting bycatch information. Biases associated with logbooks primarily result from inaccuracy in reporting of species that are caught in large numbers or are of little economic interest (particularly of bycatch species), and from low compliance rates. The Gulf of Mexico Fishery Management Council (Gulf of Mexico Council) and the South Atlantic Fishery Management Council (South Atlantic Council) are developing an amendment that would consider a requirement for electronic logbooks to improve the accuracy of these data. During 2008-2012, the commercial sector for dolphin landed 835,392 pounds whole weight (lbs ww) and discarded 1,750 lbs ww (**Table 1**). Commercial landings for wahoo were much lower (50,327 lbs ww) with negligible discards (**Table 1**).

Recreational Sector

For the recreational sector, during 2008-2012, estimates of the number of recreational discards were available from Marine Recreational Fisheries Statistical Survey (MRFSS) and the National Marine Fisheries Service (NMFS) headboat survey. The MRFSS system classified recreational catch into three categories:

- Type A - Fishes that were caught, landed whole, and available for identification and enumeration by the interviewers.
- Type B - Fishes that were caught but were either not kept or not available for identification:
    - Type B1 - Fishes that were caught and filleted, released dead, given away, or disposed of in some way other than Types A or B2.

- Type B2 - Fishes that were caught and released alive.

Recent improvements have been made to the MRFSS program, and the program is now called MRIP. Beginning in 2013, samples were drawn from a known universe of fishermen rather than randomly dialing coastal households. Other improvements have been and will be made that should result in better estimating recreational catches and the variances around those catch estimates. MRIP methods have been used to recalculate previous MRFSS estimates dating back to 1986.

During 2008-2012, the private recreational landings and discards for dolphin and wahoo were higher than the headboat and charterboat category (**Table 1**). Landings and discards of dolphin and wahoo for the private recreational category were higher than landings from the headboat and charterboat category for those species (**Table 1**).

Commercial landings for dolphin were similar to the recreational sector (private, headboat, and charterboat categories combined), but discards were disproportionately higher in the recreational sector (**Table 1**). For wahoo, while landings were higher in the commercial sector, discards were exponentially high in the recreational sector (**Table 1**). During 2008-2012, charter vessels for the dolphin and wahoo fishery were selected to report by the Southeast Regional Director (SRD) to maintain a fishing record for each trip, or a portion of such trips as specified by the SRD, and on forms provided by the SRD. Harvest and bycatch information was monitored by MRFSS. Since 2000, a 10% sample of charter vessel captains were called weekly to obtain trip level information. In addition, the standard dockside intercept data were collected from charter vessels and charter vessel clients were sampled through the standard random digital dialing of coastal households. Precision of charter vessel effort estimates has improved by more than 50% due to these changes (Van Voorhees *et al.* 2000).

Harvest from headboats was monitored by NMFS at the Southeast Fisheries Science Center's (SEFSC) Beaufort Laboratory. Collection of discard data began in 2004. Daily catch records (trip records) were filled out by the headboat operators, or in some cases by NMFS approved headboat samplers based on personal communication with the captain or crew. Headboat trips were subsampled for data on species lengths and weights. Biological samples (scales, otoliths, spines, reproductive tissues, and stomachs) were obtained as time allowed. Lengths of discarded fish were occasionally obtained but these data were not part of the headboat database.

Table 1. Mean headboat, MRIP charter and private, and commercial estimates of landings and discards in the U.S. Atlantic Ocean (2008-2012). Headboat, MRIP (charter and private) landings are in numbers of fish (N); commercial landings are in pounds whole weight (lbs ww). Discards represent numbers of fish that were caught and released alive.

	HEADBOAT			MRIP CHARTER			MRIP PRIVATE			COMMERCIAL	
Species	Catch (N)	Landings (N)	Discards (N)	Catch (N)	Landings (N)	Discards (N)	Catch (N)	Landings (N)	Discards (N)	Landings (lbs ww)	Discards (N)
Dolphin	3,635	3,269	366	299,392	290,800	8,592	780,125	598,363	181,762	835,392	1,750
Wahoo	122	110	12	12,636	12,545	91	22,058	21,473	586	50,327	6
Total	**3,757**	**3,379**	**378**	**312,028**	**303,345**	**8,683**	**802,183**	**619,836**	**182,347**	**885,719**	**1,756**

Sources: MRIP data from SEFSC Recreational ACL Dataset (May 2013), Headboat data from SEFSC Headboat Logbook CRNF files (expanded; May 2013), Commercial landings data from SEFSC Commercial ACL Dataset (July 10, 2013) with discard estimates from expanded SEFSC Commercial Discard Logbook (Jun 2013).

Note: Dolphin and wahoo landings estimates include all east coast (NY-FL), but discards estimates for headboat and commercial are highly uncertain and only include NC-FL. Estimates of commercial discards are for vertical line gear only.

Finfish Bycatch Mortality

Release mortality rates are unknown for most managed species, including dolphin and wahoo. Hook-and-line gear is the predominant gear used to harvest dolphin and wahoo in the Atlantic (SAFMC 2003). It is likely that most mortality is a function of hooking and handling of the fish when the hook is being removed. However, sustainable seafood guides recommend dolphin harvested by hook-and-line gear in the U.S. as a "best choice" or "good alternative" since this gear has minimal bycatch issues (Blue Ocean 2010; Seafood Watch 2010). A small portion of dolphin is harvested using pelagic longlines, with sea turtles, sharks, and rays commonly caught as bycatch, but, survival rates of hooked sea turtles was over 94% (Whoriskey et al. 2011).

Prager (2000) conducted an assessment of dolphin and indicated the species can withstand a high level of exploitation. Prager (2000) stated the biomass of the U.S. stock of dolphin appeared to be higher than needed to produce the maximum sustainable yield, but the results were not conclusive. The 2012 Report to Congress (NMFS 2012) indicates dolphin are neither overfished nor undergoing overfishing. The overfished/overfishing status of wahoo is unknown; however, like dolphin they are not considered to be vulnerable to overfishing due to life history characteristics including rapid growth rates, early maturity, and batch spawning over an extended season (Oxenford 1999, Prager 2000, McBride et al. 2008, and Schwenke and Buckel 2008). Furthermore, dolphin and wahoo are listed as species of "least concern" under the International Union for Conservation of Nature Red List, i.e. species that have a low risk of extinction (IUCN 2013). A Southeast Data, Assessment, and Review (SEDAR) stock assessment for dolphin and wahoo is scheduled for 2015.

Practicability of Management Measures in Directed Fisheries Relative to their Impact on Bycatch and Bycatch Mortality

Under **Preferred Alternative 2** in **Action 1** of Dolphin Wahoo Amendment 5, the small increases in the revised ABCs and ACLs for dolphin and wahoo are not expected to substantially change fishing practices. Revision of the AMs under **Preferred Alternatives 2c** and **3c** in **Action 2** would further ensure overfishing of dolphin and wahoo does not occur, and promote sustainability of the species. **Action 3**, which would modify the framework procedure, is administrative in nature and **Preferred Alternatives 2** and **3** are not expected to jeopardize the sustainability of dolphin and wahoo. Bycatch information is currently being collected in the dolphin wahoo fishery. Longline gear is more efficient at harvesting large quantities of dolphin than hook-and-line gear, and would be most affected by the trip limit alternatives under **Action 4**. Bycatch of protected species such as sea turtles are documented with longline gear (Whoriskey et al. 2011). Therefore, alternatives that would establish a lower trip limit would be expected to have greater biological benefits to non-target species, including protected species. However, restricting the dolphin trip limit is not expected to have much effect on bycatch of non-target species since 98 percent of the trips harvested 1,000 pounds whole weight (lbs ww) or less of dolphin (see **Section 4.4.1** of the amendment for more details). Furthermore, in September 2013, the South Atlantic Fishery Management Council (South Atlantic Council) selected **Alternative 1 (No Action)** as the preferred alternative for **Action 4**. Therefore, there will be no commercial trip limits for dolphin implemented by this amendment.

Additional information on fishery related actions from the past, present, and future considerations can be found in **Chapter 6** (cumulative effects) of Dolphin Wahoo Amendment 5.

1.2 Ecological Effects Due to Changes in the Bycatch

The ecological effects of bycatch mortality are the same as fishing mortality from directed fishing efforts. If not properly managed and accounted for, either form of mortality could potentially reduce stock biomass to an unsustainable level. The South Atlantic Council, along with the Gulf of Mexico Council and NMFS are in the process of developing actions that would improve bycatch monitoring in all fisheries including the dolphin wahoo fishery (see **Section 1.1** of this BPA). The Joint South Atlantic/Gulf of Mexico Generic Charter/Headboat Amendment, which has been approved by the South Atlantic Council, includes an action that would require weekly electronic reporting of landings and bycatch data for headboats in the South Atlantic. The Gulf of Mexico and South Atlantic Councils are developing an amendment that would require electronic reporting of logbook data, which would include landed and discarded fish. Better bycatch and discard data would improve understanding of the composition and magnitude of catch and bycatch, enhance the quality of data provided for stock assessments, increase the quality of assessment output, provide better estimates of interactions with protected species, and lead to better decisions regarding additional measures to reduce bycatch.

Dolphin and wahoo are pelagic and migratory, interacting with various combinations of species groups at different levels on a seasonal basis. Blue Ocean (2010) reported that the fishing method used to harvest dolphin in the Atlantic does little damage to physical or biogenic habitats, and that the habitat for this species remains robust and viable. Dolphin Wahoo Amendment 5 would not modify the gear types or fishing techniques in the dolphin wahoo fishery. Therefore, ecological effects due to changes in bycatch in this fishery are likely to remain very low if actions in Dolphin Wahoo Amendment 5 are implemented. For more details on ecological effects, see **Chapters 3** and **4** of Dolphin Wahoo Amendment 5.

1.3 Changes in the Bycatch of Other Fish Species and Resulting Population and Ecosystem Effects

As discussed in **Sections 1.1** and **1.2** of this BPA, the actions in Dolphin Wahoo Amendment 5 are not expected to cause changes in the bycatch of other fish species or result in population and ecosystem effects. Furthermore, there is very little bycatch associated with hook-and-line gear (Whoriskey et al. 2011; BlueOcean 2010; Seafood Watch 2010; Chuenpagdee et al. 2003).

1.4 Effects on Marine Mammals and Birds

The actions in Dolphin Wahoo Amendment 5 are not expected to negatively impact marine mammals and birds. Under Section 118 of the Marine Mammal Protection Act (MMPA), NMFS must publish, at least annually, a List of Fisheries (LOF) that places all U.S. commercial fisheries into one of three categories based on the level of incidental serious injury and mortality

of marine mammals that occurs in each fishery. NMFS evaluated the dolphin wahoo fishery of the Atlantic as part of the Southeastern U.S. Atlantic, Gulf of Mexico, and Caribbean pelagic hook-and-line/harpoon fishery and designated it as Category III (78 FR 23008, April 22, 2013). Category III fisheries have a remote likelihood of/no known incidental mortality or serious injury of marine mammals. Further, NMFS completed a biological opinion on August 27, 2003 evaluating the impacts of the Atlantic dolphin wahoo fishery on Endangered Species Act (ESA)-listed species (see **Section 3.0**). The opinion concluded the fishery would not affect ESA-listed marine mammals.

The Bermuda petrel and roseate tern occur within the action area. Bermuda petrels are occasionally seen in the waters of the Gulf Stream off the coasts of North Carolina and South Carolina during the summer. Sightings are considered rare and only occurring in low numbers (Alsop 2001). Roseate terns occur widely along the Atlantic coast during the summer but in the southeast region, they are found mainly off the Florida Keys (unpublished USFWS data). Interaction with fisheries has not been reported as a concern for either of these species.

Fishing effort reductions have the potential to reduce the amount of interactions between the fishery and marine mammals and birds. Although, the Bermuda petrel and roseate tern occur within the action area, these species are not commonly found and neither has been described as associating with vessels or having had interactions with the dolphin wahoo fishery. Thus, it is believed that the dolphin wahoo fishery is not likely to negatively affect the Bermuda petrel and the roseate tern.

1.5 Changes in Fishing, Processing, Disposal, and Marketing Costs

Preferred Alternative 2 in **Action 1** in Dolphin Wahoo Amendment 5 would be beneficial to the species and would likely produce long-term benefits to the fishermen, coastal communities, and fishing businesses by contributing to sustainable harvest of these fish in the present and future. **Actions 2** and **3** are administrative and costs would be related to development and dissemination of outreach and education materials for fishery participants and law enforcement. Establishing a trip limit for dolphin under **Action 4** would affect communities depending on the level of their participation in the dolphin wahoo fishery, benefitting some and non-consequential to others (see **Section 4.4.3** for more details). Higher trip limits would likely favor the use of longlines since this type of gear would be more effective. However, 98 percent of the trips harvested 1,000 lbs ww or less of dolphin, and there is no biological evidence such as localized depletion, overfishing, or overfished status of the species. Enforcement costs could increase under **Action 4** due to the establishment of commercial trip limits, since these would now have to be monitored and enforced. Additionally, legal costs would be incurred from prosecuting any violations that could occur. However, as discussed in **Section 1.1**, the South Atlantic Council chose not to establish commercial trip limits for dolphin at their Council meeting in September 2013.

Economic effects of actions proposed in Dolphin Wahoo Amendment 5 are addressed in **Chapter 4**, as well as **Appendix G** (Regulatory Impact Review) and **Appendix H** (Regulatory Flexibility Act Analysis).

1.6 Changes in Fishing Practices and Behavior of Fishermen

Action 4 in Dolphin Wahoo Amendment 5 could result in a modification of fishing practices by commercial fishermen harvesting dolphin and could have an effect on the magnitude of discards. Higher trip limits would likely be met using longline gear, which is known to have larger amounts of bycatch (Whoriskey et al. 2011, Chuenpagdee et al. 2003). Because a majority trips south of 31° N. Latitude do not exceed 1,000 lbs ww (**Section 4.4.1**), **Option a** under **Alternatives 2-7** would be expected to have minimal effects on the primary dolphin fishing communities in Florida (**Figure 3-2**). Communities in North Carolina and South Carolina could be impacted by establishment of a dolphin trip limit under **Option b** under **Alternatives 2-6** (**Figure 3-2**). Additionally, a dolphin trip limit could restrict fishermen in some New England and Mid-Atlantic communities (**Figure 3-3**). Overall, trip limits for the commercial sector of the dolphin fishery is not expected to have any immediate negative or positive effects on fishermen and associated businesses and communities. Social effects of actions proposed in Dolphin Wahoo Amendment 5 are addressed in **Chapter 4** of this document. In September 2013, the South Atlantic Council chose not to establish commercial trip limits for dolphin. Therefore, no changes in fishing practices and behavior of fishermen are expected from this amendment.

1.7 Changes in Research, Administration, and Enforcement Costs and Management Effectiveness

All the actions in Dolphin Wahoo Amendment 5 would affect some measure of change in research, administration, and enforcement costs and management effectiveness. See **Chapter 4** of the amendment, as well as **Sections 1.1, 1.5,** and **1.6** of this BPA for more details.

Research and monitoring is ongoing to understand the effectiveness of proposed management measure and their effect on bycatch. In 1990, the SEFSC initiated a logbook program for vessels with federal permits in the snapper grouper fishery from the Gulf of Mexico and South Atlantic. In 1999, logbook reporting was initiated for vessels catching king and Spanish mackerel (Gulf of Mexico and South Atlantic Councils). The Dolphin and Wahoo FMP required logbook reporting by fishermen with Commercial Atlantic Dolphin/Wahoo Permits. Approximately 20 percent of commercial fishermen from snapper grouper, dolphin wahoo, and coastal migratory pelagic (CMP) fisheries are asked to fill out discard information in logbooks; however, a greater percentage of fishermen could be selected with emphasis on individuals that dominate landings. Recreational discards are obtained from the MRIP and logbooks from the NMFS headboat program.

The preferred alternative in Charter/Headboat Amendment, which has been approved by the South Atlantic Council, would require electronic reporting for headboats and increase the frequency of reporting to seven days for the snapper grouper, dolphin wahoo, and CMP fisheries in the Atlantic. A similar amendment is being developed by the Gulf Council to require electronic reporting for headboats and increase the frequency of reporting to seven days for the reef and CMP fisheries in the Gulf. Some observer information for the snapper grouper fishery has been provided by the SEFSC, Marine Fisheries Initiative, and Cooperative Research Programs (CRP), but more is desired for the snapper grouper, dolphin wahoo, reef fish, and CMP

fisheries. An observer program is in place for headboats in the southeast for the snapper grouper, reef fish, dolphin wahoo, and CMP fisheries. Observers in the NMFS Headboat survey collect information about numbers and total weight of individual species caught, total number of passengers, total number of anglers, location fished (identified to a 10 mile by 10 mile grid), trip duration (half, ¾, full or multiday trip), species caught, and numbers of released fish with their disposition (dead or alive). The headboat survey does not collect information on encounters with protected species. At the September 2012 South Atlantic Council meeting, the SEFSC indicated that observers are placed on about 2% of the headboat trips out of South Carolina to Florida, and about 9% of the headboat trips out of North Carolina (http://www.safmc.net/LinkClick.aspx?fileticket=XGaVZzxLePY%3d&tabid=745).

Cooperative research projects between science and industry are being used to a limited extent to collect bycatch information on fisheries in the South Atlantic. Research funds for observer programs, as well as gear testing and testing of electronic devices are also available each year in the form of grants from the Marine Fisheries Initiative, Saltonstall-Kennedy program, and the CRP. Efforts are made to emphasize the need for observer and logbook data in requests for proposals issued by granting agencies. A condition of funding for these projects is that data are made available to the Councils and NMFS upon completion of a study.

Stranding networks have been established in the Southeast Region. The NMFS SEFSC is the base for the Southeast United States Marine Mammal Stranding Program (http://sero.nmfs.noaa.gov/pr/strandings.htm). NMFS authorizes organizations and volunteers under the MMPA to respond to marine mammal strandings throughout the United States. These organizations form the stranding network whose participants are trained to respond to, and collect samples from live and dead marine mammals that strand along southeastern United State beaches. The SEFSC is responsible for: coordinating stranding events; monitoring stranding rates; monitoring human caused mortalities; maintaining a stranding database for the southeast region; and conducting investigations to determine the cause of unusual stranding events including mass strandings and mass mortalities (http://www.sefsc.noaa.gov/species/mammals/strandings.htm).

The Southeast Regional Office and the SEFSC participate in a wide range of training and outreach activities to communicate bycatch related issues. The NMFS Southeast Regional Office issues public announcements, Southeast Fishery Bulletins, or News Releases on different topics, including use of turtle exclusion devices, bycatch reduction devices, use of methods and devices to minimize harm to turtles and sawfish, information intended to reduce harm and interactions with marine mammals, and other methods to reduce bycatch for the convenience of constituents in the southern United States. These are mailed out to various organizations, government entities, commercial interests and recreational groups. This information is also included in newsletters and publications that are produced by NMFS and the various regional fishery management councils. Announcements and news releases are also available on the internet and broadcasted over NOAA weather radio.

Additional administrative and enforcement efforts would help to implement and enforce fishery regulations. NMFS established the South East Fishery-Independent Survey in 2010 to strengthen

fishery-independent sampling efforts in southeast U.S. waters, addressing both immediate and long-term fishery-independent data needs, with an overarching goal of improving fishery-independent data utility for stock assessments. Meeting these data needs is critical to improving scientific advice to the management process, ensuring overfishing does not occur, and successfully rebuilding overfished stocks on schedule.

1.8 Changes in the Economic, Social, or Cultural Value of Fishing Activities and Non-Consumptive Uses of Fishery Resources

Proposed management measures, and any changes in economic, social, or cultural values are discussed in **Chapter 4** of Dolphin Wahoo Amendment 5. Further analysis can be found in **Appendix G** (Regulatory Impact Review) and **Appendix H** (Regulatory Flexibility Act Analysis) of Dolphin Wahoo Amendment 5.

1.9 Changes in the Distribution of Benefits and Costs

The distribution of benefits and costs expected from actions in Dolphin Wahoo Amendment 5 are discussed in **Chapter 4, Appendices G** and **H** of the amendment, and summarized in **Section 1.5** of this BPA.

1.10 Social Effects

The social effects of all the measures are described in detail in **Chapter 4** of Dolphin Wahoo Amendment 5, and the relevant action is highlighted in **Section 1.6** of this BPA.

1.11 Conclusion

This section evaluates the practicability of taking additional action to minimize bycatch and bycatch mortality using the ten factors provided at 50 CFR 600.350(d)(3)(i). In summary, measures proposed in Dolphin Wahoo Amendment 5 would revise the ABCs, ACLs, recreational ACTs, and sector AMs for dolphin and wahoo; modify the framework procedure; and establish commercial trip limits for dolphin. None of the actions in this amendment are expected to significantly increase or decrease the magnitude of bycatch or bycatch mortality in the dolphin wahoo fishery. Levels of bycatch in both sectors for dolphin and wahoo are not expected to change as a result of the implementation of this amendment. No additional action is needed to further minimize bycatch in the dolphin wahoo fishery.

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