

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



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Definitions, Abbreviations, and Acronyms Used in the Document

| ABC | acceptable biological catch | FMU | fishery management unit |
|-------------------------|---|---|--|
| ACL | annual catch limits | Μ | natural mortality rate |
| AM | accountability measures | MARMAP | Marine Resources Monitoring Assessment and Prediction Program |
| ACT | annual catch target | MFMT | maximum fishing mortality threshold |
| В | a measure of stock biomass in either weight or other appropriate unit | ММРА | Marine Mammal Protection Act |
| B _{MSY} | the stock biomass expected to exist under equilibrium conditions when fishing at F_{MSY} | MRFSS | Marine Recreational Fisheries Statistics Survey |
| P | the stock biomass expected to exist under equilibrium conditions when fishing at F_{OY} | MRIP | Marine Recreational Information Program |
| B _{OY} | | MSFCMA | Magnuson-Stevens Fishery Conservation and Management Act |
| B _{CURR} | the current stock biomass | MSST | minimum stock size threshold |
| CPUE | catch per unit effort | MSY | maximum sustainable yield |
| DEIS | draft environmental impact statement | nvironmental impact statement NEPA National Environmental Policy | |
| EA | environmental assessment | NMFS National Marine Fisheries Service | |
| EEZ | exclusive economic zone | NOAA | National Oceanic and Atmospheric Administration |
| EFH | essential fish habitat | OFL | overfishing limit |
| F | a measure of the instantaneous rate of fishing mortality | OFL o | optimum yield |
| F _{30%SPR} | fishing mortality that will produce a | PSE | proportional standard error |
| 50 /051 K | static SPR = 30% | RIR | regulatory impact review |
| F _{CURR} | the current instantaneous rate of fishing mortality | SAFMC | South Atlantic Fishery Management Council |
| F _{MSY} | the rate of fishing mortality expected to | SEDAR | Southeast Data, Assessment, and Review |
| I MSY | achieve MSY under equilibrium conditions and a corresponding | SEFSC | Southeast Fisheries Science Center |
| | biomass of B _{MSY} | SERO | Southeast Regional Office |
| F _{OY} | the rate of fishing mortality expected to achieve OY under equilibrium conditions and a corresponding biomass of B _{OY} | SIA | social impact assessment |
| | | SPR | spawning potential ratio |
| FEIS FMP | final environmental impact statement fishery management plan | SSC | Scientific and Statistical Committee |

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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)

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Dolphin Wahoo Amendment 7 Snapper Grouper Amendment 33

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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 back 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 and update regulations allowing recreational fishermen to bring back snapper grouper fillets United States through the Atlantic 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

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

<u>Pros</u>

- 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.
- Skin-on provision would help with species identification.

<u>Cons</u>

- 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.

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.

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., fishermen would be allowed a total of 18 dolphin or wahoo per vessel. 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

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.

Biological Effects

The management measure proposed in Dolphin Wahoo Amendment 7 would allow legally harvested dolphin and wahoo from The Bahamas to be filleted and transported on vessels through the Atlantic EEZ to the U.S. Vessels with dolphin and wahoo fillets would not be allowed to stop and fish in the U.S. EEZ, therefore, no biological impact on species included in the Dolphin Wahoo FMP would be expected.

Economic Effects

Allowing dolphin and wahoo to be brought into the Atlantic EEZ from The Bahamas is not expected to have significant economic effects for the U.S. Atlantic dolphin wahoo fishery. Fishermen carrying dolphin and wahoo fillets from The Bahamas could not fish for any South Atlantic Council managed species in the Atlantic EEZ; however, negative economic effects would be expected to be minimal.

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 Dolphin Wahoo Amendment 7 would make regulations regarding transport of dolphin and wahoo fillets from The Bahamas to the U.S. consistent with existing regulations for snapper grouper species. This would help reduce confusion among fishermen. However, NMFS Office of Law Enforcement has expressed concern over enforcing the bag limits in the U.S. EEZ, as well as Lacey Act <u>as it applies to vessels claiming to be returning from The Bahamas.</u>

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**).

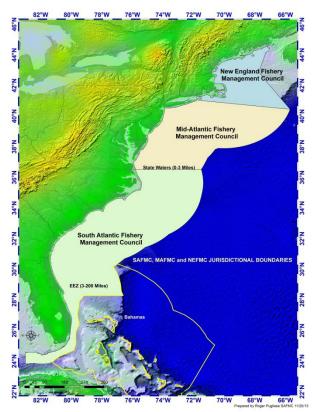


Figure 1-1. The EEZ of The Bahamas and jurisdictional boundaries of the Dolphin and Wahoo Fishery Management Plan for the Atlantic as managed by the South Atlantic Fishery Management Council.

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 back 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 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/LEGISL ATION/SUBORDINATE/1986/1986-0010/FisheriesResourcesJurisdictionandConserv ationRegulations_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. <u>Inward Declaration and Application for</u> <u>Cruising Permit</u> (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 licence 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 elevant 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.

<u>Note:</u> 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/go v/

1.7 What are the regulations in Florida?

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.a sp?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.a

sp?Chapter=68B-57

For snapper grouper species, see: <u>https://www.flrules.org/gateway/ChapterHome.a</u> <u>sp?Chapter=68B-14</u>

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 South Atlantic Regions. 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 December31 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 Point 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 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.

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. 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.

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 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 on the entire fillet.

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

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

The IPT recommends adding the following actions:

New Action: Number of snapper grouper fillets lawfully harvested in The Bahamas that may be brought into the U.S. EEZ.

Alternative 1 (No Action): 60 lbs, or 20 fish of snapper grouper species lawfully harvested in The Bahamas may be brought into the U.S. EEZ. Alternative 2: Two fillets of snapper grouper species, regardless of the size of the fillet will count as 1 fish towards the possession limit. Up to 40 fillets of snapper grouper species lawfully harvested in The Bahamas may be brought into the U.S. EEZ.

New Action: Packaging requirements for fillets lawfully harvested in The Bahamas into the U.S. EEZ.

Alternative 1 (No Action): <u>Snapper grouper</u> <u>species</u>. Fillets lawfully harvested in The Bahamas are limited to 60 lbs. of fillets or 20 fish with no specific packaging requirements. <u>Dolphin Wahoo</u>. Fillets of dolphin and wahoo lawfully harvested in The Bahamas are not currently allowed into the U.S. EEZ. Alternative 2: Fillets of species lawfully harvested in The Bahamas and allowed in the U.S. EEZ must:

Sub-alternative 2a: be landed fresh (not frozen).

Sub-alternative 2b: be individually wrapped (1 fillet per package). Sub-alternative 2c: be wrapped with no more than 2 fillets per package (1 fish per package).

Chapter 3 Affected Environment

Amendment 7 to the Fishery Management Plan (FMP) 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 Region (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 21 to the Snapper Grouper FMP (under development) 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/ecosystemmanagement/fishery-ecosystem-plan-1.Dolphin and wahoo are highly 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 Bight, 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 statedesignated 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 nonfishing 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

Dolphin Wahoo Amendment 7 Snapper Grouper Amendment 33 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).

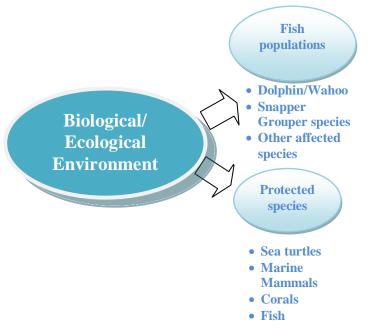


Figure 3-1. Two components of the biological environment described in this document.

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).

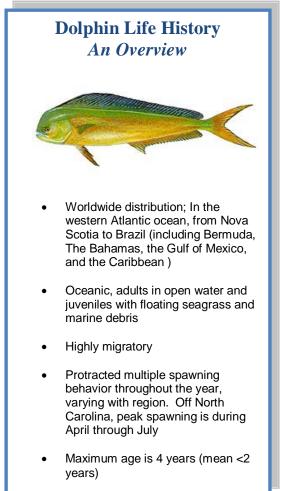
Dolphin eat a wide variety of species, including small pelagic fish, juvenile tuna, billfish, jacks, and pompano, and pelagic larvae of nearshore, bottom-living species. They also eat invertebrates such as cephalopods, mysids, and jellyfish. Large tuna, rough-toothed dolphin, marlin, sailfish, swordfish, 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/t abid/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,

Chapter 3. Affected Environment

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/snappergrouper



3.2.2 Dolphin, Coryphaena hippurus

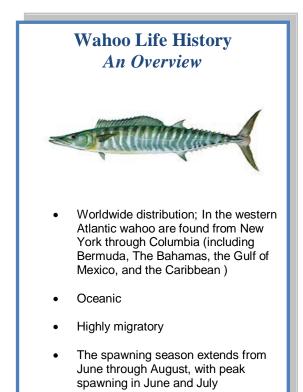
In the western Atlantic ocean, dolphin are most common from North Carolina, throughout the Gulf of Mexico and Caribbean, to the northeast coast of Brazil (Oxenford 1999). Dolphin are highly migratory and pelagic with adults found in open water, and juveniles with floating seagrass and marine debris and 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: <u>http://www.safmc.net/Library/Dolphin/Wahoo/t</u> <u>abid/410/Default.aspx</u>

3.2.3 Wahoo, Acanthocybium solanderi

Dolphin Wahoo Amendment 7 Snapper Grouper Amendment 33 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).



• 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: <u>http://www.safmc.net/Library/Dolphin/Wahoo/t</u> abid/410/Default.aspx

3.2.4Snapper 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 <u>http://www.sefsc.noaa.gov/sedar/</u>. Yellowtail snapper was assessed by the state of Florida in 2012 (FWRI 2012).

3.2.6 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

Dolphin Wahoo Amendment 7 Snapper Grouper Amendment 33 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.

3.2.7 Stock Status of Snapper Grouper Species

Stock assessments are not available for all 59 species within the Snapper Grouper FMU. Available stock status of snapper grouper species may be found in their respective SEDAR reports listed on the SEDAR web site <u>http://www.sefsc.noaa.gov/sedar/</u>. Yellowtail snapper was assessed by the state of Florida in 2012 (FWRI 2012).

3.2.8Protected SpeciesTo be updated

There are 31 different species of marine mammals that may occur in the exclusive economic zone (EEZ of the South Atlantic region. All 31 species are protected under the Marine Mammal Protection Act (MMPA) and six are also listed as endangered under the Endangered Species Act (ESA (i.e., sperm, sei, fin, blue, humpback, and North Atlantic right whales). Other species protected under the ESA occurring in the South Atlantic include five species of sea turtle (green, hawksbill, Kemp's ridley, leatherback, and loggerhead); the smalltooth sawfish; four distinct population segments of Atlantic sturgeon; and two Acropora coral species (elkhorn [Acropora palmata] and staghorn [A. cervicornis]). Designated critical habitat for the Acropora corals and North Atlantic right whales also occurs within the South Atlantic region. However, only sea turtles are likely to interact with the hook-and line dolphin and wahoo fishery. Sea turtles are discussed in detail in Section 3.2.5.1 of Dolphin Wahoo Amendment 5 (SAFMC 2013).

3.3 Human Environment

3.3.1 Economic Environment

U.S. vessels most likely to participate in Bahamian snapper grouper, dolphin and wahoo fisheries could also participate in the dolphin wahoo, snapper grouper, and coastal migratory pelagic fisheries in the south Atlantic region of the U.S.

Additional information on the dolphin wahoo fishery contained in previous or concurrent amendments is incorporated herein by reference [see Comprehensive ACL Amendment for the South Atlantic Region (SAFMC 2011a)].

Additional information on the recreational sector of the snapper grouper fishery is contained in previous or concurrent amendments and is incorporated herein by reference [see Snapper Grouper Fishery Amendment 13C (SAFMC 2006), Amendment 15A (SAFMC 2008a), Amendment 15B (SAFMC 2008b), Amendment 16 (SAFMC 2009a), Amendment 17A (SAFMC 2010a), Amendment 17B (SAFMC 2010b), Regulatory Amendment 9 (SAFMC 2011a), Regulatory Amendment 11 (SAFMC 2011a), Regulatory Amendment 11 (SAFMC 2011b), Comprehensive ACL Amendment for the South Atlantic Region (SAFMC 2011c), and Amendment 24 (SAFMC 2011d)].

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 affected by 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.

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.

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/v isitor-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.

3.3.1.1 Snapper Grouper Fishery

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

3.3.1.1.1 Commercial Sector

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

The major source of data summarized in this description is the Federal Logbook System (FLS), supplemented by average prices calculated from the Accumulated Landings System (ALS) and price indices taken from the Bureau of Labor Statistics. Revenue values presented are nominal. All values presented are for fish caught within the areas managed by SAFMC fishery management plans for the species and represent average values from the 2008 through 2012 calendar years.

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. In 2012, there were a total of 637 South Atlantic Snapper Grouper Permits, of which 528 were unlimited and 109 were 225-lb Limited permits.

3.3.1.1.2 Recreational Sector

The following statistics are from Snapper Grouper Amendment 27 (SAFMC 2014) and the Comprehensive ACL Amendment (2011c). They are general representations of participation in the snapper grouper fishery.

Average landings of snapper grouper species from the South Atlantic region from 2008 through 2012 averaged 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 vessels landing snapper grouper species from 2008 through 2012 averaged 1,935,729 trips per year. There was an average of 628,815 trips by private vessels from 2008 through 2012 that specifically targeted snapper grouper species in the South Atlantic. The actual number of permitted private 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 1,049 active snapper grouper for-hire permits in 2012.

Estimates of the economic value of a day of saltwater recreational fishing in the South Atlantic indicate that the mean value of access per marine recreational fishing trip is \$109.31 for the South Atlantic (Haab *et al.* 2001). While 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.

Willingness to pay for an incremental increase in catch and keep rates per trip was also estimated to be \$3.01 for bottom fish snapper grouper species by 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. 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 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. These estimates were culled from various studies – such as Haab *et al.* (2009), and Dumas *et al.* (2009). 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

The following amendments are referenced to provide economic environment information regarding the U.S. dolphin wahoo recreational fishery sector. These documents include the Fishery Management Plan for the Dolphin and Wahoo Fishery of the Atlantic (SAFMC 2003), Amendment 5 (SAFMC under review) and Comprehensive Annual Catch Limit (ACL) Amendment for the South Atlantic Region (SAFMC 2011c) and are incorporated herein by reference.

3.3.1.2.1 Commercial Sector

Additional information on the commercial dolphin wahoo fishery is contained in previous amendments [Fishery Management Plan for the Dolphin and Wahoo Fishery of the Atlantic (SAFMC 2003), and Comprehensive Annual Catch Limit (ACL) Amendment for the South Atlantic Region (SAFMC 2011a)] and are incorporated herein by reference. Presented below is selected information on the commercial sector of the dolphin wahoo fishery.

The major source of data summarized in this description is the Federal Logbook System (FLS), supplemented by average prices calculated from the Accumulated Landings System (ALS) and price indices taken from the Bureau of Labor Statistics and the SEFSC ACL database. Nominal values are reported in the dollar value of the individual year without adjustment for inflation. Landings are expressed in whole weight to match with the method for collecting ex-vessel price information for dolphin and wahoo.

The data reported in this section and its subsections do not represent the entire range of landings from the entire management area because not all fishermen who land dolphin and wahoo are required to have a federal permit (e.g. some landings from other states, landings from state waters). The dolphin wahoo fishery encompassed by this amendment includes the entire US Atlantic coast; however, logbooks are required only for federally permitted fishermen in the four South Atlantic states.

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.

In 2012, there were a total of 1,697 South Atlantic Dolphin Wahoo commercial permits.

3.3.1.2.2 Recreational Sector

The following statistics are from Dolphin Wahoo Amendment 5 (SAFMC under review) and the Comprehensive ACL Amendment (2011c). They are general representations of participation in the dolphin wahoo fishery.

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 vessels landing dolphin from 2008 through 2012 averaged 263,733 trips per year. There was an average of 708,015 trips by private 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 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 2011 were 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.

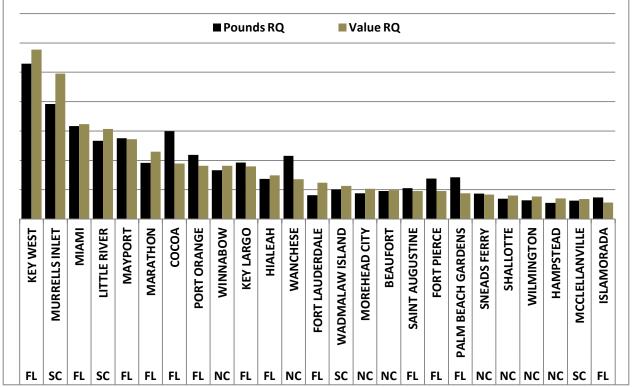


Figure 3.3.2.1. South Atlantic Fishing Communities Ranked by Total 2011 Snapper Grouper Landings RQ. Source: SERO 2014

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.

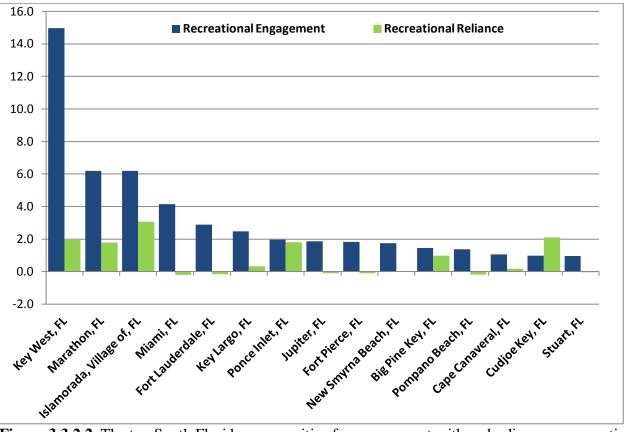


Figure 3.3.2.2. The top South Florida communities for engagement with and reliance on recreational snapper grouper fishing. Source: SERO 2014.

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 lowincome 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 | Minority | Poverty | Poverty |
|----------------|---------------|----------|------------|---------|------------|
| | v | Rate | Threshold* | Rate | 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, interregional, 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/LEGIS LATION/SUBORDINATE/1986/1986-0010/FisheriesResourcesJurisdictionandConserv ationRegulations 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 <u>www.gc.noaa.gov/enforce-office3.html</u>.

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 are unknown. Dolphin and wahoo subject to proposed measure would 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 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) would allow lawfully harvested dolphin and wahoo from The Bahamas to be filleted and transported on vessels through the South Atlantic EEZ to the U.S. Vessels with dolphin and wahoo fillets would not be allowed to stop and fish in

Alternatives¹

(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.

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

the U.S. EEZ, therefore, no direct biological impact on the species included in the Dolphin Wahoo FMP would be expected. Dolphin and wahoo do migrate between Bahamian waters and the U.S. EEZ and indirect biological impacts may result from this action if additional recreational fishers target these species in Bahamian waters. However, the current 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 indicates dolphin is not overfished, and is not undergoing overfishing (<u>http://www.nmfs.noaa.gov/sfa/statusoffisheries/SOSmain.htm</u>). The

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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 currently 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. Therefore, while it seems logical to assume that exempting dolphin and wahoo from the maintaining head and fins intact under Alternative 2 could have lower biological benefits compared to Alternative 1 (No Action), there is no data available to support negative (or positive) biological effects, be they direct or indirect. Furthermore, sales of filleted dolphin, wahoo, and snapper grouper species harvested recreationally in the Bahamas and landed in the U.S. will be prohibited, thereby reducing the incentive to over-harvest the species.

4.1.2 Economic Effects

The current prohibition on bringing dolphin and wahoo fillets has several economic effects. Some fishermen have been confused about what is and is not allowed. While snapper and grouper species can be filleted and brought from The Bahamas into the U.S. EEZ, fishermen have received violations for mistakenly filleting dolphin and wahoo as they can with snapper grouper species. This leads to legal costs and additional economic losses due to missed work to appear in court.

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 become 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 through proper refrigeration. Fillets are generally, easier to store and refrigerate than are fish with head and fins intact.

Allowing dolphin and wahoo to be brought into the Atlantic EEZ from The Bahamas is not expected to have significant economic effects in regards to the U.S. Atlantic dolphin wahoo fishery. However, it is not known whether allowing dolphin and wahoo fillets into the Atlantic EEZ would have an impact on the number of trips made to The Bahamas to fish for dolphin and wahoo. Vessels carrying dolphin or wahoo fillets could not stop or fish in the Atlantic EEZ; however, any negative economic effects would be expected to be minimal.

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 once back 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 back 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, since whole fish would not have to be stored with head and fins intact. Alternative 2 would be expected to be beneficial to South 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 legally harvest in The Bahamas to be brought into the U.S. EEZ from The Bahamas.

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 for violations and issues citations as applicable. 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; 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 dolphin and wahoo); and it is difficult to prove whether 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. 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. However, 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. USCG currently requires all species of fish brought into the U.S. EEZ from The Bahamas to be whole. Additional administrative effects would result from regulations being updated and enforced by the state of Florida and USCG. 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.

The management measure in **Alternative 2** of this action would make regulations regarding transport of dolphin and wahoo fillets from The Bahamas to the U.S. consistent with existing 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 preferred to 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

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). Alternatives 2 and 3 would allow a total of 18 dolphin and wahoo, respectively, to be possessed by a vessel traveling from The Bahamas through the U.S. EEZ. Alternative 2 could result in positive biological effects for dolphin, since the total number of dolphin allowed per vessel would be reduced from 60 to 18. 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 18 wahoo per vessel. However, the above simplistic rationale would hold true depending 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

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

- 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.

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

and wahoo are not recorded in Bahamian waters and data are not available to quantify direct or indirect biological effects of their harvest.

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 at 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 of where the Bahamian possession limit would be higher is if only one person was to come back from The Bahamas from a one day fishing trip. Then the U.S. EEZ possession limit would be 10 dolphin. Alternative 2 is not expected to have either positive or negative economic effects compared to Alternative 1 (No Action) because allowing fishermen to keep a Bahamian bag limit of dolphin is no different than what is currently permitted. Any vessel that has been fishing in The Bahamas is not allowed to fish once it reaches the U.S. EEZ.

Wahoo present a different situation than dolphin in terms of possession limits. In the U.S. EEZ possession is limited to two wahoo per person per day. Again, wahoo is 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 may not be able to bring as many wahoo back into U.S. EEZ as they would be allowed to possess in The Bahamas. As there are times when fishermen go to The Bahamas specifically to fish for wahoo, some trips might be cancelled if they were not allowed to bring back a Bahamian bag

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limit into the U.S. EEZ. Compared to Alternative 1 (No Action), Alternative 3 could have increased indirect positive economic effects based on the value of goods and services vessels would need prior to leaving their U.S. port such as fuel. Estimating the value of potentially cancelled trips is not possible without knowing how many trips would be cancelled if wahoo were not exempted from the bag limits for the U.S. EEZ. Canceled trips due to the status quo (Alternative 1 - No Action) would potentially have a greater economic effect for the Bahamian economy than for the U.S. economy due to losses from tourist based industries such as hotel and restaurant revenues.

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 (**Alternative 2**), would be expected to be minimal compared to **Alternative 1** (**No Action**). The bag limit for The Bahamas will 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 by to possess dolphin and wahoo at the bag limit for The Bahamas (**Alternative 2**) would be expected to be beneficial to South Atlantic recreational fishermen harvesting dolphin and wahoo in The Bahamas, particularly for fishermen coming in and out of south Florida and the Florida Keys. Additionally, exempting dolphin and wahoo brought into the U.S. EEZ from The Bahamas from the U.S. bag limit (**Alternative 2**) would make the Dolphin Wahoo FMP consistent with the regulations for snapper grouper species.

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 in the U.S. EEZ, as well as the Lacey Act as it applies to vessels returning from The Bahamas. NOAA/OLE has already testified to the fact that fillets of any species are difficult to identify to species and enforce. USCG requires all fish to be whole, and the state of Florida only has a "gentleman's agreement" allowing fillets of snapper and grouper lawfully harvested from The Bahamas into state waters. Exempting dolphin (Alternative 2) and 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 dolphin and wahoo (depending on how many people are in the vessel and which species they harvest), and could have negative direct and indirect administrative effects when compared with Alternative 1 (No Action).

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

Positive direct and indirect biological effects could be expected from requiring fillets of dolphin, wahoo, and snapper grouper species brought into the U.S. EEZ from The Bahamas. Fish with intact skin is easier to identify to species, especially if they are filleted. 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. Additionally, fillets of such species could result in negative biological effects for that species. Regulations requiring the skin to be left on the entire fillet under Preferred Alternatives 2 and 3could help law enforcement identify such species and result in positive biological effects when compared with Alternative 1 (No Action). Furthermore, the South Atlantic Council's intention is to prohibit fillets of all species of fish harvested in The Bahamas to be brought into the U.S. EEZ, if those species are prohibited to harvest, as well as under a seasonal closure in the U.S. EEZ.

*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.

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

4.3.2 Economic Effects

The alternatives of Action 3 are designed to assist law enforcement in species identification. Alternatives 2 and 3 are not expected to have economic effects that are different from the status quo, Alternative 1 (No Action).

4.3.3 Social Effects

Alternative One: No Action.

This would change little that is currently occurring in the fishery and the coastal communities associated with these fisheries. The one group it could potentially affect are the fishery officers who may continue to struggle with the identification of species based on the appearance of fillets. It will be difficult to identify the take of illegal species from Bahamian waters due the difficulty in identifying the catch of filleted species. For example, how could one know if a grouper fillet came from a Nassau grouper as opposed to a Black grouper?

Alternative 2:

There will be no social impacts on coastal communities if this were to occur. It would not directly impact any U.S. coastal communities in terms of local businesses or social institutions.

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Alternative 3:

There will be no social impacts on coastal communities if this were to occur. It would not directly impact any U.S. coastal communities in terms of local businesses or social institutions.

Alternatives 2 and 3 would indirectly impact enforcement as it would allow knowledgeable fishery officers the ability to assess the validity of the catch, in terms of being able to document that fillets were derived from dolphin, wahoo and snapper/grouper species.

The preferred alternatives (2 and 3) assist in the identification and documentation of a fisherman's catch, even after having been filleted. This will require fishery officers to be knowledgeable of or be able to be trained to identify and distinguish between legally harvested/caught snapper/grouper species and other snapper/grouper species, in addition to being able to identify and validate the dolphin and wahoo species as opposed to others that my look similar in a filleted form.

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.

4.3.4 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 that are prohibited for retention in the U.S. EEZ. 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. No passengers or crew are allowed to disembark until the process is completed. The date is included in the stamp. 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). The provisions under Alternative 1 (No Action) and Alternative 2 already fall under the definition of "lawful harvest" of snapper grouper species in Bahamian waters.

Alternatives¹

(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.

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

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. Requiring passengers to have stamped passports aboard vessels returning from The Bahamas with snapper grouper fillets onboard poses no additional economic effect. Since the requirement is already in place in The Bahamas, **Alternative 2** has no economic effects that are different than **Alternative 1** (No Action), which is the status quo.

4.4.3 Social Effects

Alternative 1: No action This would have no social impact on coastal communities or fishermen.

Alternative 2:

This would have no impact on coastal communities. It would however impact fishermen by forcing them to make landing in the Bahamas in order to get this documentation prepared. This could place an economic burden on fishermen by making them pay more in fuel (increased costs) for time spent traveling to landing sites where the documentation can be handled by Bahamian officials. In addition one wonders if the extra travel time could lead to increased risk because of inclement weather.

Dolphin Wahoo Amendment 7 Snapper Grouper Amendment 33 From an administrative standpoint, the burden is placed on Bahamian official to have to deal with all of the fishermen coming through their office to get proper document verification.

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 would be 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 would be the federal 200mile 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.

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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 would be 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 <u>http://www.safmc.net</u> 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 is expected to publish in April 2014, with regulations effective in May 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 (<u>http://www.nmfs.noaa.gov/sfa/statusoffisheries/SOSmain.htm</u>). 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. Definitions of overfishing and overfished for snapper grouper species affected by this amendment can be found in the most recent stock assessment sources, which may be found at <u>http://www.sefsc.noaa.gov/sedar/</u>.

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.

Define a baseline condition for the resources, ecosystems, and human 7. 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/statusoffisheries/SOSmain.htm). 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 Cause period/dates | | Observed and/or Expected Effects |
|------------------------------|--|-------------------------------------|
| Dolphin Wahoo Amendment 7 43 | | Chapter 6. Cumulative Effects |

| Time | Cause | Observed and/or Expected |
|----------------|--------------------------|---------------------------------|
| period/dates | | Effects |
| Effective June | Fishery Management Plan | 1) A 20-inch fork length |
| 28, 2004 | for the Dolphin Wahoo | minimum size limit for |
| | Fishery off the Atlantic | dolphin off the coasts of |
| | states (Dolphin Wahoo | Georgia and Florida with no |
| | FMP). | 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 |
| | | 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 |

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| Time | Cause | Observed and/or Expected |
|------------------------------------|--------------------------|---|
| period/dates | | Effects |
| | | 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) |
| Effective November 23, 2004 | Dolphin Wahoo FMP | 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. |
| | | 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 | Amendment 1 to the | Updated spatial information |
| July 22, 2010 | Dolphin Wahoo FMP | of Council-designated EFH |
| | (Comprehensive Ecosystem | and EFH-HAPCS. |
| | Based Amendment (CE- | |

| Time period/dates | Cause | Observed and/or Expected Effects |
|----------------------------------|--|---|
| | 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. |

| Time period/dates | Cause | Observed and/or Expected Effects |
|----------------------|--|--|
| 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 | Cause | Observed and/or Expected |
|-----------------|------------------------------|---------------------------------|
| period/dates | | Effects |
| Pre-January 12, | Habitat destruction, growth | Damage to snapper grouper |
| 1989 | overfishing of vermilion | habitat, decreased yield per |
| | snapper. | recruit of vermilion snapper. |
| January 1989 | Trawl prohibition to harvest | Increase yield per recruit of |
| | fish (Snapper Grouper | vermilion snapper; |
| | Amendment 1; SAFMC | eliminate trawl damage to |
| | 1988). | live bottom habitat. |
| Pre-January 1, | Overfishing of many | Spawning stock ratio of |
| 1992 | snapper grouper species. | these species is estimated to |
| | | be less than 30% indicating |
| | | that they are overfished. |
| January 1992 | Prohibited gear: fish traps | Reduce mortality of snapper |
| | south of Cape Canaveral, | grouper species. |
| | FL; entanglement nets; | |
| | longline gear inside of 50 | |
| | fathoms; powerheads and | |
| | bangsticks in designated | |
| | SMZs off SC. | |

| Time pariod/datas | Cause | Observed and/or Expected |
|----------------------|--|---|
| period/dates | Size/Bag limits: 10" TL vermilion snapper (recreational only); 12" TL vermilion snapper | Effects |
| | grouper size limit (Snapper Grouper Amendment 4; SAFMC 1991). | |
| Pre-June 27, 1994 | Damage to <i>Oculina</i> habitat. | Noticeable decrease in numbers and species diversity in areas of <i>Oculina</i> 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 overfishing continue for a number of snapper grouper species including golden tilefish. | Spawning potential ratio for 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. |

| Time period/dates | Cause | Observed and/or Expected Effects |
|-----------------------------------|---|---|
| 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 | Establish rebuilding plans and SFA parameters for snowy grouper, black sea |

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| Time period/dates | Cause | Observed and/or Expected Effects |
|--|--|---|
| | overfished. Snapper grouper FMP Amendment 15A (SAFMC 2008a). | bass, and red porgy. |
| 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 |

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| Time period/dates | Cause | Observed and/or Expected Effects |
|---------------------------------------|---|---|
| | | 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. |
| 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. |

| Time period/dates | Cause | Observed and/or Expected Effects |
|----------------------------------|--|--|
| 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. |
| 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. |

| | Observed and/or Expected Effects |
|---|--|
| Need to slow rate of harvest | Established an endorsement |
| in black sea bass pot sector | program for black sea bass |
| to ease derby conditions. | commercial fishery; |
| Amendment 18A (SAFMC | established a trip limit; |
| 2012a). | specified requirements for |
| | deployment and retrieval of |
| | pots; made improvements to |
| | data reporting for |
| | commercial and for-hire |
| | sectors |
| As red snapper stock | Established limited red |
| | snapper fishing seasons |
| | (commercial and |
| • • | recreational) in 2012. |
| _ | |
| | |
| | |
| | |
| | Reconsidered action to |
| | allow for transfer of black |
| - | sea bass pot endorsements |
| • | that was disapproved in |
| | Amendment 18A. |
| The second | De distribute d'in estime |
| | Redistributed inactive |
| | wreckfish shares. |
| | |
| | |
| | |
| / | Adjusted the golden tilefish |
| | ACL based on the results of |
| | a new stock assessment and |
| | modified the recreational |
| | golden tilefish AM. |
| | |
| | n black sea bass pot sector o ease derby conditions. Amendment 18A (SAFMC 2012a). |

| Time period/dates | Cause | Observed and/or Expected Effects |
|----------------------|-------------------------------|--|
| Effective Date | There is a need to reduce | Establish a commercial |
| May 23, 2013 | effort in the commercial | longline endorsement |
| | longline sector that targets | program for golden tilefish; |
| | golden tilefish to ease derby | establish an appeals |
| | conditions. Snapper | process; allocate the |
| | Grouper Amendment 18B | commercial ACL by gear; |
| | (SAFMC 2013a) | establish trip limit for the |
| | | hook-and-line sector. |
| July 17, 2013 | The recreational data | Adjust ACLs and |
| | collection system has | allocations for unassessed |
| | changed from MRFSS to | snapper grouper species |
| | MRIP. ACLs and | with MRIP recreational |
| | allocations in place utilize | estimates |
| | MRFSS data. Regulatory | |
| | Amendment 13. (SAFMC | |
| | 2013b). | |
| August 23, 2013 | As the red snapper stock | Modify red snapper |
| | rebuilds, some allowable | management measures |
| | harvest could occur if | including the establishment |
| | rebuilding is not affected. | of a process to determine |
| | Snapper Grouper | future annual catch limits |
| | Amendment 28 (SAFMC | and fishing seasons. |
| | 2013d). | |
| September 12, | New stock assessments | Adjust ACLs and |
| 2013 | completed for vermilion | management measure for |
| | snapper and red porgy. | vermilion snapper and red |
| | Regulatory Amendment 18 | porgy based on results from |
| | (SAFMC 2013e). | new update assessment. |
| September 23, | New stock assessment for | Increase recreational and |
| 2013 | black sea bass indicates the | commercial ACLs for black |
| | stock is rebuilt and catch | sea bass. |
| | levels can be increased. | Black sea bass pots |
| | Regulatory Amendment 19 | prohibited from November |
| | (SAFMC 2013f). | 1 through April 30 |
| | | (effective October 23, |
| | | 2013). |

| Time period/dates | Cause | Observed and/or Expected Effects |
|----------------------|------------------------------|--|
| September 5, | New stock assessment | Increase yellowtail snapper |
| 2013 | indicates catch levels of | ACL, remove accountability |
| | yellowtail snapper can be | measure for gag that closes |
| | increased. Accountability | commercial harvest for all |
| | measures for gag can be | shallow water grouper |
| | adjusted because effective | species when the gag ACL |
| | means are in place to ensure | is met. Reduce gag ACL to |
| | overfishing does not occur. | account for dead discards |
| | Regulatory Amendment 15 | when fishermen target co- |
| | (SAFMC 2013c). | occurring shallow water |
| 1 07 0014 | | grouper species. |
| January 27, 2014 | Blue runner are caught | Establish the South Atlantic |
| | primarily in state waters of | Council as the managing |
| | FL, and it is not clear if | entity for yellowtail and |
| | federal management is | mutton snappers and Nassau |
| | needed. Nassau grouper is | grouper in the Southeast |
| | no longer managed by Gulf | U.S., modify the SG |
| | Council. South Atlantic | framework; modify |
| | Council would like to be | placement of blue runner in |
| | able to make adjustment to | an FMU or modify |
| | ACLs more quickly after a | management measures for |
| | stock assessment has been | blue runner |
| | completed. Snapper | |
| 1 07 0014 | Grouper Amendment 27 | |
| January 27, 2014 | Southeast Fisheries Science | Require all federally- |
| | Center has established a | permitted headboats in the |
| | program that allows | South Atlantic to report |
| | headboats to report landings | landings information |
| | through electronic means. | electronically and on a |
| | Generic For-Hire Reporting | weekly basis. |
| T + 2014 | Amendment. | |
| Target 2014 | There is a need to control | Develop a recreational tag |
| | recreational harvest of | program for snapper |
| | snapper grouper species | grouper species in the South |
| | with very small ACLs. | Atlantic. |
| | Snapper Grouper | |
| | Amendment 22 (under | |
| | development). | |

| Time period/dates | Cause | Observed and/or Expected Effects |
|----------------------|--|--|
| 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. |
| 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 AtlanticEEZ. 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. Regulatory measures have obviously affected the quantity and composition of harvests of snowy grouper, through the various size limits, seasonal restrictions, trip or bag limits, and quotas. 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 p | reparers of | the document. |
|------------|-----------|-------------|---------------|
|------------|-----------|-------------|---------------|

| Name | SAFMC | Title |
|----------------------|------------|----------------------------|
| Brian Cheuvront | SAFMC | IPT Lead/Economist |
| David Dale | NMFS/HC | EFH Specialist |
| Nikhil Mehta | NMFS/SF | IPT Lead/Fishery Biologist |
| Nick Farmer | NMFS/SF | Data Analyst |
| Adam Brame | NMFS/PR | Fishery Biologist |
| Brent Stoffle | NMFS/SEFSC | Social Scientist |
| Jack McGovern | NMFS/SF | Fishery Biologist |
| Roger Pugliese | SAFMC | Senior Biologist |
| Monica Smit-Brunello | NMFS/GC | Attorney |
| Kari MacLauchlin | SAFMC | Social Scientist |
| Scott Sandorf | NMFS/SF | Technical Writer Editor |
| | | |
| Stephen Holiman | NMFS/SF | Economist |

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

| Name | Organization | Title |
|----------------------|--------------|---|
| Brian Cheuvront | SAFMC | IPT Lead/Economist |
| Scott Sandorf | NMFS/SF | Technical Writer Editor |
| Brent Stoffle | NMFS/SEFSC | Social Scientist |
| David Dale | NMFS/HC | EFH Specialist |
| Nikhil Mehta | NMFS/SF | IPT Lead/Fishery Biologist |
| Nick Farmer | NMFS/SF | Data Analyst |
| Ron Messa | NMFS/LE | Special Agent |
| Adam Brame | NMFS/PR | Fishery Biologist (Protected Resources) |
| David Keys | NMFS/SER | Regional NEPA Coordinator |
| Roger Pugliese | SAFMC | Senior Biologist |
| Stephen Holiman | NMFS/SF | Economist |
| Kari MacLauchlin | SAFMC | Fishery Social Scientist |
| Gregg Waugh | SAFMC | Deputy Executive Director |
| Monica Smit-Brunello | NOAA/GC | Attorney |
| Jack McGovern | NMFS/SF | Fishery Biologist |
| Erik Williams | NMFS/SEFSC | Fishery Biologist |

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

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

Chapter 8. Agencies and Persons Consulted

<u>Responsible Agency for CE</u> NMFS, Southeast Region 263 13th Avenue South St. Petersburg, Florida 33701 (727) 824-5301 (TEL) (727) 824-5320 (FAX)

List of Agencies, Organizations, and Persons Consulted 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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