

# Annual Catch Limits and Accountability Measures in the U.S. Caribbean

(including Puerto Rico, St. Croix, St. Thomas, and St. John)



Striped Parrotfish  
(courtesy of reefguide.org)



Queen Conch  
(courtesy of CFMC)



Nassau Grouper  
(courtesy of CFMC)

A list of the proposed actions in Amendment 2 to the Fishery Management Plan for the Queen Conch Fishery of Puerto Rico and the U.S. Virgin Islands and Amendment 5 to the Reef Fish Fishery Management Plan of Puerto Rico and the U.S. Virgin Islands



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# Introduction and Summary

What is the purpose of this amendment?

- Minimize, to the extent practicable, negative socioeconomic impacts that may result from the amendment actions;
- Specify annual catch limits (ACLs) and accountability measures (AMs) to prevent overfishing of these species/species groups;
- Revise management reference points and status determination criteria for the Caribbean queen conch, snapper, grouper, and parrotfish;
  - Reference Points: Maximum Sustainable Yield (MSY); and Optimum Yield (OY)
  - Status Determination Criteria: Minimum Stock Size Threshold (MSST); and Maximum Fishing Mortality Threshold (MFMT)
- Establish framework measures to facilitate regulatory modifications; and
- Adjust management measures as needed to constrain harvest to specified annual catch limits.

Why do we need Annual Catch Limits and Accountability Measures?

- In 2007, the Magnuson-Stevens Fishery Conservation and Management Act was amended by the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act (MSRA)
- The MSRA required fishery managers to establish ACLs and AMs for all species listed in Fishery Management Plans (FMPs)
  - Species undergoing overfishing must have ACLs and AMs set in the 2010 fishing year;
  - All other species must have ACLs and AMs set in the 2011 fishing year.

What are Annual Catch Limits (ACLs)?

- An ACL is the amount of a fish that can be taken by fishermen over a period of one year.
  - Can be measured in pounds or numbers.
- In the U.S. Caribbean, separate ACLs may be set for Puerto Rico, St. Croix, and St. Thomas/St. John.
- An ACL can apply to a single species of fish (for example Nassau grouper, goliath grouper, queen conch) or a group of species (for example parrotfish, some snapper, some grouper).
- The ACL requirement applies to commercial and recreational fisheries.
  - May be set as a single ACL for both commercial and recreational fisheries or each fishery may have separate ACLs.

# Introduction and Summary

What happens if the ACL is exceeded?

- Specific action must be implemented to ensure that subsequent years harvest remains below the ACL (known as accountability measures).
- Possible accountability measures include:
  - Reducing the ACL in the following season;
  - Shortening the fishing season;
  - Establishing a commercial trip limit and/or recreational bag limit;
  - Limiting the type and number of gear(s) used to catch the species; or
  - Some other measure determined by the Council.

Which Caribbean species will have ACLs and AMs in 2010?

- Snapper Unit 1 (Silk, Black, Vermilion, Blackfin, Wenchman)
- Snapper Unit 2 (Queen, Cardinal)
- Grouper Unit 1 (Nassau)
- Grouper Unit 2 (Goliath)
- Grouper Unit 3 (Red hind, Coney, Rock hind, Graysby)
- Grouper Unit 4 (Red, Tiger, Yellowfin, Black)
- Grouper Unit 5 (Yellowedge, Misty)
- Parrotfish (Blue, Midnight, Princess, Queen, Rainbow, Redfin, Redtail, Stoplight, Redband, Striped)
- Queen Conch

How do NOAA Fisheries Service and the Council work together to create management regulations?

- The Council consists of recreational and commercial fishermen, territorial fishery managers and other industry experts .
- The Council initiates and develops new management measures through a process during which the public has a chance to make comments on issues brought up for the consideration of the Council.
- After the Council develops and votes to adopt the new measures, they submit the action to the Secretary of Commerce via NOAA Fisheries Service for approval.
- Once approved by the Secretary of Commerce, regulations are published in the *Federal Register* and Code of Federal Regulations.

# List of All Actions and Sub-Actions

## **ACTION 1: Amend the Stock Complexes in the Reef Fish Fishery Management Units (FMUs)**

Action 1(a) Grouper complex

Action 1(b) Snapper complex

## **ACTION 2: Management Reference Points**

Action 2(a) Snapper, Grouper and Parrotfish Complexes

Action 2(b) Queen Conch Complex

## **ACTION 3: Annual Catch Limit Allocation/Management**

Action 3(a) Snapper and grouper unit allocation/management

Action 3(b) Commercial and recreational sector allocation/management (Puerto Rico only)

Action 3(c) Geographic allocation/management

## **ACTION 4: Management Measures**

Action 4(a) Species-specific parrotfish prohibitions

Action 4(b) Recreational bag limits

## **ACTION 5: Accountability Measures**

Action 5(a) Triggering accountability measures

Action 5(b) Applying accountability measures

## **ACTION 6: Framework Measures**

Action 6(a): Establish Framework Measures for Reef Fish FMP

Action 6(b): Establish Framework Measures for Queen Conch FMP

# ACTION 1: Amend the Stock Complexes in the Reef Fish Fishery Management Units (FMUs)

## Action 1(a): Grouper complex

**Alternative 1:** No action. Do not change the species groupings within the grouper complex.

**Alternative 2 (PREFERRED):** Separate Grouper Unit 4 into Grouper Unit 4 (yellowfin, red, tiger plus black grouper) and Grouper Unit 5 (yellowedge and misty grouper). Move creole-fish from Grouper Unit 3 into the 'data collection only' unit.



Red Grouper (courtesy of FishWatch)

## Action 1(b): Snapper complex

**Alternative 1:** No action. Do not change the species groupings within the snapper complex.

**Alternative 2 (PREFERRED):** Modify the snapper FMUs by adding cardinal snapper (*Pristipomoides macrophthalmus*) to Snapper Unit 2 and moving wenchman (*Pristipomoides aquilonaris*) into Snapper Unit 1.



Wenchman (courtesy of fishbase.org)

## Action 2(a) Snapper, Grouper and Parrotfish Complexes

- Alternative 1:** No action. Retain current management reference points or proxies for species/species groups within the snapper, grouper and/or parrotfish complexes.
- Alternative 2 (PREFERRED):** Redefine management reference points or proxies for the snapper, grouper and/or parrotfish complexes based on the longest time series of pre-Comprehensive SFA Amendment catch data that is considered to be consistently reliable across all islands.
- Alternative 3:** Redefine management reference points or proxies for the snapper, grouper and/or parrotfish complexes based on the longest time series of catch data that is considered to be consistently reliable across all islands.
- Alternative 4:** Redefine management reference points or proxies for the snapper, grouper and/or parrotfish complexes based on the most recent five years of available catch data.



Stoplight Parrotfish (courtesy of Wikipedia)

## Action 2(b) Queen Conch Complex

**Alternative 1:** No action. Retain current management reference points or proxies for the queen conch complex.

**Alternative 2 (PREFERRED):** Redefine management reference points or proxies for queen conch based on the longest time series of pre-Comprehensive SFA Amendment catch data that is considered to be consistently reliable across all islands.

**Alternative 3:** Redefine management reference points or proxies for queen conch based on the longest time series of catch data that is considered to be consistently reliable across all islands.

**Alternative 4:** Redefine management reference points or proxies for queen conch based on the most recent five years of available catch data.



Queen Conch (courtesy of CFMC)

## **Action 3(a) Snapper and Grouper Unit Allocation/Management**

**Alternative 1:** No action. Define reference points for sub-units within the snapper and grouper units.

**Alternative 2:** Define aggregate reference points for the snapper and grouper units:

- A. Puerto Rico only
- B. USVI only
- C. Both Puerto Rico and the USVI

**Alternative 3:** Define aggregate reference points for the grouper unit:

- A. Puerto Rico only
- B. USVI only
- C. Both Puerto Rico and the USVI

**Alternative 4 (PREFERRED):** Define aggregate reference points for snapper and grouper in the USVI and define aggregate reference points for grouper but not snapper in Puerto Rico.

## **Action 3(b) Commercial and Recreational Sector Allocation/Management (Puerto Rico Only)**

**Alternative 1:** No action. Do not specify sector-specific annual catch limits.

**Alternative 2 (PREFERRED):** Specify separate commercial and recreational annual catch limits based on the preferred management reference point time series.

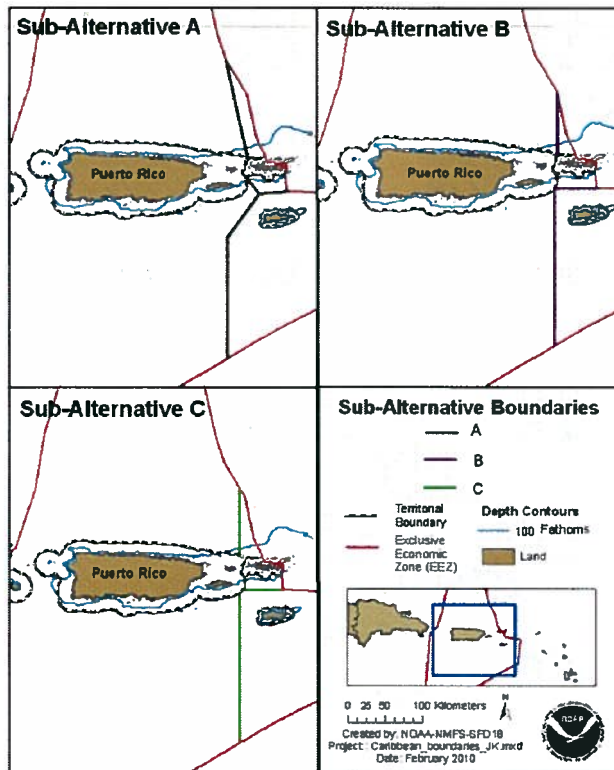


# Action 3(c) Geographic Allocation/Management

**Alternative 1:** No Action. Maintain U.S. Caribbean-wide reference points.

**Alternative 2 (PREFERRED):** Divide and manage annual catch limits by island group (i.e., Puerto Rico, St. Thomas, /St. John, and St. Croix) based on the preferred management reference point time series (Table 4.3.1 and Action 2).

- A. (PREFERRED) Use a mid-point or equidistant method for dividing the EEZ among islands.
- B. Use a straight line approach for dividing the EEZ among islands.
- C. Use the St. Thomas Fishermen's Association line.



## Action 4(a) Species-Specific Parrotfish Prohibitions

**Alternative 1:** No action. Do not establish species-specific prohibitions on parrotfish harvest.

**Alternative 2 (PREFERRED):** Prohibit fishing for or possessing in the EEZ:

- A. Midnight parrotfish
- B. Blue parrotfish
- C. Rainbow parrotfish



Midnight Parrotfish (courtesy of Wikipedia)



Blue Parrotfish (courtesy of ncaquariums.net)



Rainbow Parrotfish (courtesy of fishbase.org)

## Action 4(b) Recreational bag limits

**Alternative 1:** No action. Do not establish bag limit restrictions on recreational reef fish harvest.

**Alternative 2:** Specify a 10-fish aggregate bag limit per person (would not apply to a fisherman who has a valid commercial fishing license issued by Puerto Rico or the USVI) for:

- A. Species in the Snapper FMU
- B. Species in the Grouper FMU
- C. Species in the Parrotfish FMU

**Alternative 3:** Specify a 5-fish aggregate bag limit per person (would not apply to a fisherman who has a valid commercial fishing license issued by Puerto Rico or the USVI) for:

- A. Species in the Snapper FMU
- B. Species in the Grouper FMU
- C. Species in the Parrotfish FMU

**Alternative 4:** Specify a 2-fish aggregate bag limit per person (would not apply to a fisherman who has a valid commercial fishing license issued by Puerto Rico or the USVI) for:

- A. Species in the Snapper FMU
- B. Species in the Grouper FMU
- C. Species in the Parrotfish FMU

**Alternative 5:** Establish a 0-fish aggregate bag limit per person (would not apply to a fisherman who has a valid commercial fishing license issued by Puerto Rico or the USVI) for species in the Parrotfish FMU.

**Alternative 6:** Establish a vessel limit (would not apply to a fisherman who has a valid commercial fishing license issued by Puerto Rico or the USVI) equivalent to the combined bag limit of:

- A. Two fishers
- B. Three fishers
- C. Four fishers

**Alternative 7 (PREFERRED):** Establish an aggregate bag limit for snapper, grouper and parrotfish FMUs of: 10 per fisher including not more than two parrotfish per fisher or six parrotfish per boat, and 30 aggregate snapper, grouper, and parrotfish per boat on a fishing day.

# Action 5(a) Triggering Accountability Measures

**Alternative 1:** No Action. Do not trigger AMs.

**Alternative 2:** Trigger AMs if the annual catch limit is exceeded based upon:

- A. A single year of landings beginning with landings from 2010.
- B. A single year of landings beginning with landings from 2010, then a 2-year running average of landings in 2011 (average of 2010+2011) and thereafter (i.e., 2010, 2010-2011, 2011-2012, etc.).
- C. A single year of landings beginning with landings from 2010, a 2-year average of landings in 2011 (average of 2010+2011), then a 3-year running average of landings in 2012 (average of 2010+2011+2012) and thereafter (i.e., 2010, 2010-2011, 2010-2012, 2011-2013, etc.).

**Alternative 3 (PREFERRED):** Trigger AMs if the annual catch limit is exceeded as defined below and NMFS' SEFSC (in consultation with the Caribbean Fishery Management Council and its Scientific and Statistical Committee) determines the overage occurred because catches increased versus data collection/monitoring improved:

- A. A single year of landings effective beginning 2010.
- B. A single year of landings effective beginning 2010, then a 2-year running average of landings effective 2011 and thereafter (i.e., 2010, 2010-2011, 2011-2012, etc.).
- C (**PREFERRED**). A single year of landings effective beginning 2010, a 2-year running average of landings effective 2011, then a 3-year running average of landings effective 2012 and thereafter (i.e., 2010, 2010-2011, 2010-2012, 2011-2013, etc.).

## Action 5(b) Applying Accountability Measures

**Alternative 1:** No Action. Do not apply AMs.

**Alternative 2 (PREFERRED):** If AMs are triggered, then reduce the length of the fishing season for that species or species group the year following the trigger determination by the amount needed to prevent such an overage from occurring again. The needed changes will remain in effect until modified.

**Alternative 3:** If AMs are triggered, then reduce the length of the fishing season for that species or species group the year following the trigger determination by the amount needed to prevent such an overage from occurring again and to pay back the overage. The needed changes will remain in effect until modified.



Healthy Coral Reef (courtesy of NOAA Ocean Service)

## **Action 6(a): Establish Framework Measures for Reef Fish FMP**

**Alternative 1:** No Action. Do not amend the framework measures for the Reef Fish FMP

**Alternative 2:** Amend the framework procedures for the Reef Fish FMP to provide a mechanism to expeditiously adjust the following reference points and management measures through framework action:

- a. Quota Requirements
- b. Seasonal Closures
- c. Area Closures
- d. Fishing Year
- e. Trip/Bag Limit
- f. Size Limits
- g. Gear Restrictions or Prohibitions
- h. Fishery Management Units (FMUs)
- i. Total Allowable Catch (TAC)
- j. Annual Catch Limits (ACLs)
- k. Accountability Measures (AMs)
- l. Annual Catch Targets (ACTs)
- m. Maximum Sustainable Yield (MSY)
- n. Optimum Yield (OY)
- o. Minimum Stock Size Threshold (MSST)
- p. Maximum Fishing Mortality Threshold (MFMT)
- q. Overfishing Limit (OFL)
- r. Acceptable Biological Catch (ABC) control rules
- s. Actions to Minimize the Interaction of Fishing Gear with Endangered Species or Marine Mammals

**Alternative 3:** Amend the framework procedures for the Reef Fish FMP to provide the Council with a mechanism to expeditiously adjust a subset of management measures outlined in **Alternative 2**.

## **Action 6(b): Establish Framework Measures for Queen Conch FMP**

**Alternative 1:** No Action. Do not amend the framework measures for the Queen Conch FMP

**Alternative 2:** Amend the framework procedures for the Queen Conch FMP to provide a mechanism to expeditiously adjust the following reference points and management measures through framework action:

- a. Quota Requirements
- b. Seasonal Closures
- c. Area Closures
- d. Fishing Year
- e. Trip/Bag Limit
- f. Size Limits
- g. Gear Restrictions or Prohibitions
- h. Total Allowable Catch (TAC)
- i. Annual Catch Limits (ACLs)
- j. Accountability Measures (AMs)
- k. Annual Catch Targets (ACTs)
- l. Maximum Sustainable Yield (MSY)
- m. Optimum Yield (OY)
- n. Minimum Stock Size Threshold (MSST)
- o. Maximum Fishing Mortality Threshold (MFMT)
- p. Overfishing Limit (OFL)
- q. Acceptable Biological Catch (ABC) control rules
- r. Actions to Minimize the Interaction of Fishing Gear with Endangered Species or Marine Mammals

**Alternative 3:** Amend the framework procedures for the Queen Conch FMP to provide the Council with a mechanism to expeditiously adjust a subset of management measures outlined in **Alternative 2**.

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The information discussed in this publication is a brief outline of the actions and alternatives in Amendment 2 to the Fishery Management Plan for the Queen Conch Fishery of Puerto Rico and the U.S. Virgin Islands and Amendment 5 to the Reef Fish Fishery Management Plan of Puerto Rico and the U.S. Virgin Islands.

The entire document can be found at <http://www.caribbeanfmc.com>

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