



Comprehensive Fishery Management Plan (FMP) for the Puerto Rico Exclusive Economic Zone (EEZ)

Summary of the proposed actions and preferred alternatives chosen by the Caribbean Fishery Management Council (Council) that will be presented at the April 2019 public hearings.

An executive summary is currently available at the Council website

<https://caribbeanfmc.com/meeting-documents>.

Management Actions and Preferred Alternatives

Action 1: Transition Fisheries Management in the Puerto Rico EEZ from a Species-based Approach to an Island-based Approach

Preferred Alternative 2: Establish a new Puerto Rico FMP to manage fishery resources in the Puerto Rico EEZ and repeal the Caribbean Fishery Management Council's (Council) Reef Fish, Spiny Lobster, Queen Conch, and Coral FMPs and replace them with the new Puerto Rico FMP. The new Puerto Rico FMP would include all fishery management measures presently included in the Spiny Lobster, Reef Fish, Queen Conch, and Coral FMPs that are applicable to the Puerto Rico EEZ.

Action 2: Stocks Managed under the Puerto Rico FMP (*See Table 1 below*)

Preferred Alternative 2. For those species for which landings data are available, the Council would follow a stepwise application of a set of criteria to determine if a species should be included for management in the Puerto Rico FMP. The criteria under consideration include, in order:

Criterion A. Include for management those species that are presently classified as overfished in U.S. Caribbean federal waters based on National Marine Fisheries Service (NMFS) determination, or for which historically identified harvest is now prohibited due to their ecological importance as habitat (corals presently included in the Coral FMP) or habitat engineers (midnight, blue, rainbow parrotfish), or those species for which seasonal closures or size limits apply.

Criterion B. From the remaining species, i.e., those not included via Criterion A, exclude from federal management those species that have been determined to infrequently occur in federal waters based on expert analysis guided by available data.

Criterion C. From the remaining species, i.e., those not included via Criterion A or excluded via Criterion B, include for management those species that are biologically vulnerable, constrained to a specific habitat that renders them particularly vulnerable, or have an essential ecological value, as determined by expert analysis.

Criterion D. From the remaining species, i.e., those not included via Criteria A and C or excluded via Criterion B, include those species possessing economic importance to the



national or regional economy based on a threshold of landings or value separately determined for each of the recreational, commercial, and aquarium trade sectors as appropriate (e.g., top 90%) and those representing an important component of bycatch, as established by expert analysis.

Criterion E. From the remaining list of species, include any other species that the Council determines are in need of conservation and management.

Action 3: Revise Stock or Stock Complex Groupings in the Puerto Rico FMP (*See Table 1*)

Preferred Alternative 3. Manage species included for management in the Puerto Rico FMP as individual stocks or as stock complexes, based on scientific analysis, including one or more of the following: cluster analysis based on landings patterns; outcomes from the Southeast Data, Assessment, and Review (SEDAR) Caribbean Data Evaluation Workshop (2009) (only for species previously managed that would remain in the FMP); biological/life history similarities and vulnerability (for all species); and, expert opinion from the scientific and fishing communities (for all species).

Preferred Alternative 4. Where there are stock complexes, determine whether to assign one or more indicator stocks as follows:

Preferred Sub-Alternative 4a. Indicator stocks would be used. One or more indicator stocks would be assigned within a stock complex based on the following criteria: percent of the catch, targeted, habitat co-occurrence, life history/vulnerability, catch co-occurrence, data, and market. For stock complexes for which harvest is allowed and for which one or more indicator stocks is assigned, stocks in the stock complex would be subject to accountability measures (AM) as a group based on the annual catch limit (ACL) established for the indicator stock(s).

Preferred Sub-Alternative 4b. No indicator stock(s) would be assigned. For stock complexes for which harvest is allowed, stocks in the complex would be subject to AMs as a group based on the aggregate ACL derived from information on all of the stocks in the complex.

Action 4: Status Determination Criteria (SDC) and Management Reference Points for Stocks/Stock Complexes in the Puerto Rico FMP.

Preferred Alternative 2. Where data are available, use sector (i.e., commercial, recreational) information to establish reference points and SDC and set ACLs by sector. Reference points (maximum sustainable yield [MSY], acceptable biological catch [ABC]) and SDC would apply to the fishery, accounting for recreational and commercial information, but ACLs would apply at the sector level. Where separate sector landings data are not available for comparison to the sector ACL, there would not be separate sector ACLs. Instead, the ACLs for the sector with appropriate available landings data would be the applicable ACLs and would govern the application of AMs.



Preferred Alternative 3. Apply the three-step process to define MSY (or its proxy), SDC, ABC, and ACL for each stock or stock complex in the Puerto Rico FMP.

Preferred Alternative 3 - Step 1. Adopt and apply the ABC Control Rule developed by the Council’s Scientific and Statistical Committee.

Preferred Alternative 3 - Step 2. Establish the proxy that would be used when F_{MSY} cannot be determined:

Preferred Sub-Alternative 3c. The proxy for $F_{MSY} = F_{30\%SPR}$

Preferred Alternative 3 - Step 3. Determine the optimum yield (OY) and the ACL based on the formula in one of the sub-alternatives below and the ABC established in Preferred Alternative 3, Step 1 above.

Sub-Alternative 3e (Preferred for all except angelfish, parrotfish, surgeonfish).
 $OY = ACL = ABC \times 0.95$

Sub-Alternative 3g (Preferred for angelfish, parrotfish, surgeonfish).
 $OY = ACL = ABC \times 0.85$

Table 1. Stocks proposed for management in the Puerto Rico FMP (Action 2), stock organization and indicator stocks (as applicable, Action 3), and proposed annual catch limits (Action 4) (= optimum yield) for the commercial and recreational harvest of stocks/stocks complexes in the Puerto Rico FMP. ACL values are in pounds (lbs) of whole weight (ww). Indicator stocks are marked in bold text.

Stock/Stock Complex	Commercial Annual Catch Limit (lbs)	Recreational Annual Catch Limit (lbs)
Spiny Lobster	527,232	N/A
Snapper 1 (black, blackfin, silk , vermillion, wenchman)	424,009	111,942
Snapper 2 (cardinal, queen)	257,236	24,974
Snapper 3 (lane)	244,376	21,603
Snapper 4 (mutton , dog, schoolmaster,	116,434	76,625
Snapper 5 (yellowtail)	315,806	23,988
Snapper 6 (cubera)	119	6,448
Grouper 3 (graysby, coney)	23,890	19,635
Grouper 4 (black, red, tiger, yellowfin, yellowmouth)	2,492	5,867
Grouper 5 (yellowedge, misty)	15,327	4,226
Grouper 6 (red hind , rock hind)	121,729	34,494
Parrotfish 2 (queen, princess, redbtail, stoplight, redband, striped)	147,774	17,052
Surgeonfish (blue tang, ocean, doctorfish)	147	860
Triggerfish (queen , ocean, gray)	83,099	7,453
Wrasses 1 (hogfish)	70,139	8,263
Wrasses 2 (puddingwife, Spanish hogfish)	20,127	5,372



Stock/Stock Complex	Commercial Annual Catch Limit (lbs)	Recreational Annual Catch Limit (lbs)
Angelfish (queen, gray, French)	137	2,985
Barracuda (great barracuda)	495	167,693
Tripletail	270	39,005
Grunts (white grunt)	177,923	2,461
Jacks 1 (crevalle jack)	46	41,894
Jacks 2 (African pompano)	1,053	5,719
Jacks 3 (rainbow runner)	914	8,091
Dolphinfish (dolphin [dorado] , pompano dolphin)	232,173	1,513,873
Tuna (little tunny, blackfin tuna)	82,778	34,485
Mackerel (king, cero)	232,422	129,180
Wahoo	25,911	210,738
Queen conch	0	0
Grouper 1 (Nassau)	0	0
Grouper 2 (goliath)	0	0
Parrotfish 1 (midnight, blue, rainbow)	0	0
Sea cucumbers (all species)	0	0
Sea urchins (all species)	0	0
Rays 1 (giant manta ray)	0	0
Rays 2 (spotted eagle ray)	0	0
Rays 3 (southern sting ray)	0	0
Corals (all species)	0	0

Action 5: Accountability Measures for Stocks and Stock Complexes in the Puerto Rico FMP

Preferred Alternative 2 (preferred for reef fish and spiny lobster). For a stock/ stock complex in the Puerto Rico FMP, trigger an AM if the total landings (commercial + recreational [as applicable]), as determined in one of the sub-alternatives below, exceeds the total ACL (commercial plus recreational, as applicable) for that stock/ stock complex, unless NMFS' southeast fisheries science center (SEFSC) determines the overage occurred because data collection/monitoring improved rather than because catch increased. The AM would be triggered only for the sector(s) that exceeded its applicable ACL. If an AM is triggered, NMFS would reduce the length of the fishing season for the applicable stock/stock complex for the applicable sector(s) the year following the overage determination by the amount necessary to ensure (to the greatest practicable extent) landings do not again exceed the ACL in the year of application. Any fishing season reduction resulting from an AM application would be applied from September 30 backward, toward the beginning of the fishing year. If the length of the required fishing season reduction exceeds the time period of January 1 through September 30, any additional fishing season reduction would be applied from October 1 forward, toward the end of the fishing year.

However, if applicable landings for one sector are not available for the averaging period, the sector would not be managed by a separate sector ACL. The ACL for the sector with



available data would be the applicable ACL for the fishery. When landings exceed the applicable ACL for that stock/stock complex, the AM would be triggered, unless NMFS' SEFSC determines that the overage occurred because data collection/monitoring improved rather than because catch increased. The AM would operate to reduce the length of the fishing season for all sectors by the amount necessary to ensure (to the greatest practicable extent) landings do not again exceed the ACL in year of application. Any fishing season reduction resulting from an AM application would be applied on the same timeframe as above.

Preferred Sub-Alternative 2d. A single year of applicable landings, using landings from 2018; then a single year of applicable landings, using landings from 2019; then a 2-year average of applicable landings from 2019 and the subsequent year (2019-2020); then a three-year average of applicable landings from those two years and the subsequent year (2019-2021); and thereafter a progressive running three-year average (2020-2022, 2021-2023, etc.). The Regional Administrator in consultation with the Council may deviate from the specific time sequences based on data availability.

Preferred Alternative 3. For the pelagic stocks/stock complexes (dolphinfish, tripletail, tunas, mackerel, and wahoo) only, apply a two-step process to establish an annual catch target (ACT) for each stock/stock complex that would be used as an AM (Step 1), and establish the determinant for triggering an AM (Step 2). Choose a sub-alternative from each step, for each stock.

Preferred Alternative 3 - Step 1. Establish an ACT for each pelagic stock/stock complex, using any of Sub-Alternatives 3a-3c listed below, and use the established ACT as the AM. (See Table 2)

Preferred Sub-Alternative 3a. The ACT would be 90% of the applicable ACL.

Preferred Alternative 3 - Step 2. Trigger an AM if the applicable landings (defined above), as determined in one of the sub-alternatives below, exceeds the ACT for that stock/stock complex. If an AM is triggered, the Council in consultation with the Southeast Fisheries Science Center (SEFSC) would assess whether corrective action is needed.

Preferred Sub-Alternative 3g. A single year of applicable landings, using landings from 2018; then a single year of applicable landings, using landings from 2019; then a 2-year average of applicable landings from 2019 and the subsequent year (2019-2020); then a three-year average of applicable landings from those two years and the subsequent year (2019-2021); and thereafter a progressive running three-year average (2020-2022, 2021-2023, etc.).

Preferred Alternative 5. For a stock with harvest prohibitions (See Table 1 where $ACL = 0$), the prohibition would serve as the AM.



Table 2. Annual catch targets (ACT) for pelagic stocks/stock complexes in the Puerto Rico FMP.

Stock/Stock Complex	ACT (lbs)
Tripletail	35,348
Dolphin complex	1,571,441
Wahoo	212,984
Mackerel complex	325,442
Tuna complex	105,537

Action 6: Essential Fish Habitat (EFH) Description and Identification for Species Not Previously Managed in Federal Waters of Puerto Rico.

Preferred Alternative 2. Describe and identify EFH according to functional relationships between life history stages of federally managed species and Puerto Rico marine and estuarine habitats.

For stocks new to management under the Puerto Rico FMP¹, EFH consists of all waters from the mean high water to the outer boundary of the Puerto Rico EEZ – habitats used by eggs, larvae, juveniles and adults.

Action 7: Framework Procedures for the Puerto Rico FMP

Preferred Alternative 2. Adopt the Framework Procedures listed below (Table 3).

Table 3. Base framework procedures under Preferred Alternative 2 in Action 7.

OPEN FRAMEWORK
1. Situations under which this open framework procedure can be used: A. A new stock assessment or other information indicates changes should be made to: MSY, OFL, ABC, or other related management reference points and status determination criteria (SDC).
B. New information or circumstances indicates management measures should be changed. - The Council will, as part of a proposed framework action, identify the new information and provide rationale as to why this new information indicates that management measures should be changed.

¹ Cubera snapper, yellowmouth grouper, dolphin and pompano dolphin, little tunny, blackfin tuna, king mackerel, cero mackerel, wahoo, gray triggerfish, great barracuda, tripletail, crevalle jack, African pompano (jack), rainbow runner (jack), giant manta ray, spotted eagle ray, southern sting ray, all species of sea urchins, sea cucumbers and corals.



C. Changes are required to comply with applicable laws such as MSA, ESA, MMPA, or are required as a result of a court order.

- In such instances, the RA will notify the Council in writing of the issue and the action that is required. If there is a legal deadline for taking action, the deadline will be included in the notification.

2. Types of Open Frameworks:

Abbreviated Framework

Can be used for routine or insignificant changes

Request is made with letter or memo from the Council to the RA with supporting analyses (biological, social, economic).

If RA concurs and approves action, it will be implemented through publication of FR Notice.

Standard Framework

Regulatory changes that do not qualify as routine or insignificant.

Requires a completed framework document with supporting analyses.

Actions that can be taken under each Framework

Abbreviated Framework

- i. Gear marking requirements
- ii. Vessel marking requirements
- iii. Restrictions related to maintaining fish in a specific condition (whole condition, filleting, use as bait, etc.)
- iv. Recreational bag and possession limit changes of not more than 1 fish per boat
- v. Size limit changes of not more than one inch of the prior size limit for reef fish.
- vi. Commercial vessel trip limit changes of not more than 10% of the prior trip limit
- vii. Changes to the length of an established closed season by no more than 1 day of the existing season.
- viii. Minor changes to gear modifications to address conservation issues including to respond to interactions with listed species.

Standard Framework

In addition to making changes specified under Abbreviated Framework (left column) that exceed the established thresholds, the following actions can be completed via a standard framework:

- i. Re-specify ABC
- ii. Re-specify MSY and OY, and SDC
- iii. Re-specify SYL
- iv. Re-specify ACLs
- v. Re-specify ACTs
- vi. Rebuilding plans and revisions to approved rebuilding plans
- vii. Revise accountability measures (e.g., change AM triggers and AM timing)
- viii. Modify reporting and monitoring requirements
- ix. Modify seasonal or year-round closures and closure procedures
- x. Modify area closures and closure procedures

3. The Council will initiate the open framework process to inform the public of the issues and develop potential alternatives to address the issues. The framework process will include the development of documentation and public discussion during at least one council meeting.

4. Prior to taking final action on the proposed framework action, the Council may convene its Scientific and Statistical Committee (SSC) or applicable Advisory Panel (AP), as appropriate, to provide recommendations on the proposed actions.

5. For all framework actions, the Council will provide the letter, memo, or the completed framework document along with proposed regulations to the Regional Administrator in a timely manner following final action by the Council.



6. For all framework action requests, the Regional Administrator will review the Council's recommendations and supporting information and notify the Council of the determinations, in accordance with the MSA and other applicable law.

CLOSED FRAMEWORK

Consistent with existing requirements in the FMP and implementing regulations, the RA is authorized to conduct the following closed framework actions through appropriate notification in the Federal Register:

- a. Reopen any sector of the fishery that had been prematurely closed.
- b. Implement AMs, either in-season or post-season. Implement an in-season AM for a sector that has reached or is projected to reach, or is approaching or is projected to approach its ACL, or implement a post-season AM for a sector that exceeded its ACL according to the process established in the FMP, or any other established AM.

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