

**Select Finfish and Invertebrate Species for Management in the New Island-Based Fishery Management Plans (FMPs)**

**Draft Action 1 and Alternatives – To be customized for each FMP**

**Revised Following March Meetings of District Advisory Panels**

**Action 1. Determine species to be included for management in the Puerto Rico FMP.**

**Alternative 1.** No action. The Puerto Rico FMP is composed of all species within the fishery management units (FMUs) historically managed under the Spiny Lobster FMP, Reef Fish FMP, Queen Conch FMP, and the Corals and Reef Associated Plants and Invertebrates FMP.

**Alternative 2.** Identify species to be managed in Puerto Rico EEZ waters using all or some of the criteria listed below.

For those species for which landings data are available, indicating the species is in the fishery, the Council will choose a set of criteria to determine if a species should be managed under the Puerto Rico FMP. The criteria under consideration include, in order, (A) the status of the stock and/or harvest prohibition, (B) the degree to which the species occurs in state rather than federal waters and can therefore be affected by federal management, (C) the extent of harvest relative to a pre-established threshold, and (D) if the species is ecologically essential within the coral reef ecosystem. The selected criteria will identify the species to be managed.

**Criterion A.** Status of the stock and/or harvest prohibition. This criterion evaluates the condition of fish and whether an FMP can improve or maintain that condition (Magnuson – Stevens Fishery Conservation and Management Act (MSA) National Standard (NS) 7).

Include for management those species that are classified as overfished in U.S. Caribbean waters based on NOAA Fisheries' determination, or for which historically identified harvest is now prohibited due to their ecological importance as habitat or habitat engineers (midnight, blue, rainbow parrotfish, and corals presently included in the Corals and Reef Associated Plants and Invertebrates FMP).

**Criterion B.** Species occurrence in state waters. This criterion identifies the extent to which the fishery could be or is already adequately managed by a state (Magnuson –Stevens Fishery Conservation and Management Act (MSA) National Standard (NS) 7).

Exclude from federal management those species that have been determined to not occur in federal waters based on expert analysis of the species distribution and range.

**Criterion C.** Species as a component of the catch. This criterion evaluates the importance of the fishery to the Nation and the regional economy (NS 7).

**Sub-alternative C1.** Include the species for federal management if it is included as a member of the group that constitutes the top x% of average landings.

**Sub-alternative C2.** Include the species for federal management if its average annual landings are  $\geq x$  pounds.

**Criterion D.** Ecologically essential species. This criterion evaluates if a species has an essential ecological role in the coral reef ecosystem (i.e., herbivores, spongivores) in order to determine its inclusion in the Puerto Rico FMP.

Include the species for federal management if it plays an essential ecological role in the coral reef ecosystem (i.e., herbivores, spongivores).

**Alternative 3.** For those species for which landings data are available, indicating the species is in the fishery, the Council will follow a stepwise application of a set of criteria to determine if a species should be managed under the Puerto Rico FMP. The criteria under consideration include, in order, (A) the status of the stock and/or harvest prohibition, (B) the degree to which the species occurs in state rather than federal waters and can therefore be affected by federal management, and (C) the extent of harvest relative to a pre-established threshold. Following the stepwise application of these three criteria, criterion (D) involves evaluating the species remaining for consideration via an integrated attributes analysis. Six attributes are included in Table 1. Each attribute will be scored by a panel of experts. An average of the scores will be determined for each species, and species that rank above the threshold value chosen by the Council will be included for management under the Puerto Rico FMP.

**Criterion A.** Status of the stock and/or harvest prohibition. This criterion evaluates the condition of fish and whether an FMP can improve or maintain that condition (Magnuson – Stevens Fishery Conservation and Management Act (MSA) National Standard (NS) 7).

Include for management those species that are classified as overfished in U.S. Caribbean waters based on NOAA Fisheries' determination, or for which historically identified harvest is now prohibited due to their ecological importance as habitat or habitat engineers (midnight, blue, rainbow parrotfish, and corals presently included in the Corals and Reef Associated Plants and Invertebrates FMP).

**Criterion B.** Species occurrence in state waters. This criterion identifies the extent to which the fishery could be or is already adequately managed by a state (Magnuson –Stevens Fishery Conservation and Management Act (MSA) National Standard (NS) 7).

*If the species was not already included for management by application of Criterion A:*

Exclude from federal management those species that have been determined to not occur in federal waters based on expert analysis of the species distribution and range.

**Criterion C.** Species as a component of the catch. This criterion evaluates the importance of the fishery to the Nation and the regional economy (NS 7).

*If the species was not already included for management by application of Criterion A or excluded from management by application of Criterion B:*

**Sub-alternative C1.** Include the species for federal management if it is included as a member of the group that constitutes the top x% of average landings.

**Sub-alternative C2.** Include the species for federal management if its average annual landings are  $\geq x$  pounds.

**Criterion D.** Integrated attributes analysis. This criterion utilizes an integrated attributes analysis to score all species remaining for consideration after the stepwise application of Criteria A, B, and C. Those species scoring above a threshold chosen by the Council will be included for federal management.

*If the species was not already included for management by application of Criteria A or C, or excluded from management by application of Criterion B:*

Include the species for federal management if its attribute score, developed from Table 1, exceeds the threshold value of y on a scale of x-z.

**Table 1.** *Example* of the attribute-based selection table that would be used to score all the species. Scoring will be conducted by an expert panel and the resultant average score compared against a threshold selected by the Council. Species whose average score is above that threshold will be included for federal management in Puerto Rico EEZ waters.

Species/ Species Complex	Biology	Habitat Specificity	Economic Importance	Target Species	Bycatch	Ecological Importance	Score	Result
Species 1								
Species 2								
Species 3								
Species 4								