

occur in the Puerto Rico EEZ would fall under this category (Table 2.2.5). These groups were added to the Puerto Rico FMP by Council motion at their 153rd regular meeting in August 2015, because as slow-moving benthic invertebrates, they are commercially exploited for consumption through export to Asian markets and are highly vulnerable to overharvest.

When applying the criteria included in **Preferred Alternative 2**, divergent perspectives arose both within the SSC and the Puerto Rico DAP and between these two entities. For example, the Puerto Rico DAP recommended that barracuda not be included for management because they are not commercially targeted due to their ciguatoxicity and are therefore not a key component of the commercial fishery. However, the SSC noted that barracuda occurs in the EEZ (not excluded under *Criterion B*) and opined that although they are not targeted or landed often nor are they biologically vulnerable, they are ecologically important as top-level predators. The Council considered both perspectives and chose to include the barracuda. Redfin parrotfish is another example where the DAP and SSC provided different recommendations to the Council. The Puerto Rico DAP recommended redfin parrotfish be included for management, but the SSC did not, noting that the redfin parrotfish stock rarely occurs in waters subject to federal management (i.e., those waters at least 9 nautical miles from shore, generally equivalent to those waters > 30 meters (m) depth). For this reason, the SSC recommended that redfin be excluded from management in the Puerto Rico FMP based on application of *Criterion B*. After considering this information, the Council chose to exclude the redfin parrotfish from the list of species to be included in the Puerto Rico FMP (Table 2.2.6).

In summary, **Preferred Alternative 2** would result in the following list of species to be included in the Puerto Rico FMP: queen conch, spiny lobster, all species of sea cucumbers, sea urchins, and coral occurring in Puerto Rico EEZ waters, and 63 species of finfish (Table 2.2.6).

Table 2.2.6. Species included in the Puerto Rico FMP based on Criteria A-E of Preferred Alternative 2. The Council proposed these species for management at their 153rd Regular Meeting (August 2015). Species marked with an asterisk would be new to federal management.

Family or Class	#	Species Name	Common Name	Criterion
Strombidae -- True conchs	1	<i>Lobatus (Strombus) gigas</i>	Queen conch	A
Palinuridae -- Spiny lobster	2	<i>Panulirus argus</i>	Caribbean spiny lobster	A
Lutjanidae -- Snappers	3	<i>Apsilus dentatus</i>	Black snapper	A
	4	<i>Lutjanus buccanella</i>	Blackfin snapper	A
	5	<i>Lutjanus vivanus</i>	Silk snapper	A
	6	<i>Rhomboplites aurorubens</i>	Vermilion snapper	A
	7	<i>Lutjanus synagris</i>	Lane snapper	A
	8	<i>Lutjanus analis</i>	Mutton snapper	A
	9	<i>Ocyurus chrysurus</i>	Yellowtail snapper	A
	10	<i>Pristipomoides aquilonaris</i>	Wenchman	D

Family or Class	#	Species Name	Common Name	Criterion
	11	<i>Pristipomoides macrophthalmus</i>	Cardinal snapper	D
	12	<i>Etelis oculatus</i>	Queen snapper	D
	13	<i>Lutjanus jocu</i>	Dog snapper	C
	14	<i>Lutjanus apodus</i>	Schoolmaster	C
	15	<i>Lutjanus cyanopterus</i> *	Cubera snapper*	C
Serranidae -- Groupers	16	<i>Epinephelus striatus</i>	Nassau Grouper	A
	17	<i>Epinephelus itajara</i>	Goliath grouper	A
	18	<i>Epinephelus guttatus</i>	Red hind	A
	19	<i>Mycteroperca bonaci</i>	Black grouper	A
	20	<i>Epinephelus morio</i>	Red grouper	A
	21	<i>Mycteroperca tigris</i>	Tiger grouper	A
	22	<i>Mycteroperca venenosa</i>	Yellowfin grouper	A
	23	<i>Hyporthodus flavolimbatus</i>	Yellowedge grouper	A
	24	<i>Cephalopholis fulva</i>	Coney	C
	25	<i>Cephalopholis cruentatus</i>	Graysby	C
	26	<i>Epinephelus adscensionis</i>	Rock hind	C
	27	<i>Hyporthodus mystacinus</i>	Misty grouper	C
	28	<i>Mycteroperca interstitialis</i> *	Yellowmouth grouper*	C
Scaridae -- Parrotfishes	29	<i>Scarus coeruleus</i>	Blue parrotfish	A
	30	<i>Scarus coelestinus</i>	Midnight parrotfish	A
	31	<i>Scarus guacamaia</i>	Rainbow parrotfish	A
	32	<i>Scarus vetula</i>	Queen parrotfish	C
	33	<i>Scarus taeniopterus</i>	Princess parrotfish	C
	34	<i>Sparisoma chrysotermum</i>	Redtail parrotfish	C
	35	<i>Sparisoma viride</i>	Stoplight parrotfish	C
	36	<i>Sparisoma aurofrenatum</i>	Redband parrotfish	C
	37	<i>Scarus iseri</i>	Striped parrotfish	C
Acanthuridae -- Surgeonfishes	38	<i>Acanthurus coeruleus</i>	Blue tang	C
	39	<i>Acanthurus bahianus</i>	Ocean surgeonfish	C
	40	<i>Acanthurus chirurgus</i>	Doctorfish	C
Balistidae -- Triggerfishes	41	<i>Canthidermis sufflamen</i>	Ocean triggerfish	C
	42	<i>Balistes vetula</i>	Queen triggerfish	C
	43	<i>Balistes caprisus</i> *	Gray triggerfish*	C
Labridae -- Wrasses	44	<i>Lachnolaimus maximus</i>	Hogfish	C
	45	<i>Halichoeres radiatus</i>	Puddingwife	C
	46	<i>Bodianus rufus</i>	Spanish hogfish	C
Pomacanthidae -- Angelfishes	47	<i>Holacanthus ciliaris</i>	Queen angelfish	C
	48	<i>Pomacanthus arcuatus</i>	Gray angelfish	C
	49	<i>Pomacanthus paru</i>	French angelfish	C
Sphyraenidae -- Barracudas	50	<i>Sphyraena barracuda</i> *	Great barracuda*	C
Lobotidae -- Tripletail	51	<i>Lobotes surinamensis</i> *	Tripletail*	C
Myliobatidae -- Eagle and Manta Rays	52	<i>Manta birostris</i> *	Giant manta ray*	C
	53	<i>Aetobatus narinari</i> *	Spotted eagle ray*	C
Dasyatidae - Stingrays	54	<i>Hypanus americanus</i> *	Southern stingray*	C
Haemulidae -- Grunts	55	<i>Haemulon plumieri</i>	White grunt	D

Family or Class	#	Species Name	Common Name	Criterion
Carangidae -- Jacks	56	<i>Caranx hippos</i> *	Crevalle jack*	D
	57	<i>Alectis ciliaris</i> *	African pompano*	D
	58	<i>Elagatis bipinnulata</i> *	Rainbow runner*	D
Coryphaenidae -- Dolphinfin	59	<i>Coryphaena hippurus</i> *	Dolphin*	D
	60	<i>Coryphaena equiselis</i> *	Pompano dolphin*	D
Scombridae -- Mackerels and tunas	61	<i>Euthynnus alletteratus</i> *	Little tunny*	D
	62	<i>Thunnus atlanticus</i> *	Blackfin tuna*	D
	63	<i>Scomberomorus cavalla</i> *	King mackerel*	D
	64	<i>Scomberomorus regalis</i> *	Cero mackerel*	D
	65	<i>Acanthocybium solandri</i> *	Wahoo*	D
Class Holothuroidea -- Sea Cucumbers	66	All (See Appendix E)	Sea cucumbers	E
Class Echinoidea* -- Sea Urchins	67	All (See Appendix E)	Sea urchins	E
All Corals (soft, hard, mesophotic, deep-water)	68	All (See Appendix E)	Corals	A

* Orders Arbacioida, Camarodonta, Cassiduloida, Cidaroida, Diadematoidea, Echinolampadoida, Echinoneoida, Echinothurioida, Pedinoida, Salenioida, and Spatangoida.

Comparison of Action 2 Alternatives and Summary of Effects

Alternative 1 would continue management of those stocks that are included under the existing U.S. Caribbean-wide FMPs, without alteration. When compared to the no action **Alternative 1**, **Preferred Alternative 2** would identify species in need of conservation and management using an expert-based analysis of available data and information applied within an ordered set of evaluation criteria. The outcome of this ordered selection process would result in a change in the number of stocks subject to federal management in Puerto Rico EEZ waters relative to **Alternative 1**. Although 18 finfish stocks would be newly included in the federal management regime, 36 finfish stocks would be simultaneously removed from management, resulting in an overall decrease in the number and composition of managed fish (from 81 to 63). Both alternatives would continue to include spiny lobster and queen conch. Under **Preferred Alternative 2**, all species of corals, sea cucumbers, and sea urchins that occur in Puerto Rico EEZ waters would be added to the federal management regime (See Appendix E). In contrast, under **Alternative 1**, only the species or genera of corals, sea cucumbers, and sea urchins that were included in the Coral FMP would be managed in Puerto Rico EEZ waters.

Alternative 1 would not have direct physical, biological/ecological, socio-economic, or administrative effects relative to the present situation. **Alternative 1** would be expected to have indirect biological/ecological and socio-economic effects because it would not extend management to other species in need of conservation and management based on the criteria established in the guidance on the Magnuson-Stevens Act. The Council would not set management reference points or other conservation measures for those species, or otherwise