

# Amendment 2 to the Puerto Rico, St. Croix and St. Thomas/St. John Fishery Management Plans: Trawl, Net Gear and Descending Devices



María López-Mercer, NMFS-SFD, Caribbean Branch
182<sup>nd</sup> Caribbean Fishery Management Council Meeting
August 15-16, 2023

Isla Verde, Puerto Rico



# Outcomes from April 2023 Council Meeting

- Council reviewed Draft Version 3 of Amendment 2 and selected preferred alternatives for all actions.
- IPT finalized development of Amendment 2 (Version 3.2 in briefing book), but is requesting revision of Actions 1(b), 2(b), and 3(b) (Gillnets in all three islands), before moving forward.

Action 1: Puerto Rico - Trawl, Gillnets, Trammel Nets, Purse Seines	Action 2: St. Croix - Trawl, Gillnets, Trammel Nets, Purse Seines	Action 3: St. Thomas/St. John - Trawl, Gillnets, Trammel Nets, Purse Seines	Action 4: PR, STX, STT/STJ - Descending Devices
Action 1(a): Trawl	2(a): Trawl	3(a): Trawl	Descending Devices
Action 1(b): Gillnets	2(b): Gillnets	3(b): Gillnets	All islands
Action 1(c): Trammel	2(c): Trammel	3(c): Trammel	
Action 1(d): Purse seines	2(d): Purse seines	3(d): Purse seines	



# Amendment 2 to the Island-based FMPs: Trawl and Net Gear, and Descending Devices

## **Statement of Purpose and Need**

- The <u>purpose</u> of this amendment is to prevent potential damage to habitats, including essential fish habitat, from certain gear types, protect species associated with such habitats, as well as to promote best fishing practices, and enhance the survival of released fish in the EEZ around Puerto Rico, St. Croix, and St. Thomas and St. John.
- The <u>need</u> for this amendment is to minimize potentially adverse effects of fishing to habitats and associated species, and to minimize the mortality of bycatch species.



## Summary of Actions with their Preferred Alternatives (as included in V3.2 Draft Amendment 2, Aug 2023)

**Trawl Net: Actions 1(a), 2(a), and 3(a).** Modify the Use of Trawl Gear in Federal Waters around Puerto Rico, St. Croix, and St. Thomas/St. John, respectively

**Alternative 3** (*Preferred for all three islands*). Prohibit the use of trawl gear for all fishing in the EEZ around Puerto Rico, St. Croix, or St. Thomas/St. John, respectively.

**Trammel Net: Actions 1(c), 2(c), and 3(c).** Modify the use of Trammel Nets in Federal waters around Puerto Rico, St. Croix, and St. Thomas/St. John, respectively

**Alternative 2** (*Preferred for all three islands*). Prohibit the use of trammel nets for all fishing in the EEZ around Puerto Rico, St. Croix, or St. Thomas/St. John, respectively.

**Purse Seines: Actions 1(d), 2(d), and 3(d).** Modify the use of Purse seines in Federal waters around Puerto Rico, St. Croix, and St. Thomas/St. John, respectively

**Alternative 2** (*Preferred for all three islands*). Prohibit the use of purse seines for all fishing in the EEZ around Puerto Rico, St. Croix, or St. Thomas/St. John, respectively.



# Action 4. Requirements for the Use of Descending Devices in the Reef Fish Component of the Puerto Rico, St. Croix, and St. Thomas/St. John FMPs

**Alternative 2** (*Preferred*). Require a descending device\* be on board a commercial or recreational vessel and readily available for use while fishing for or possessing species in the reef fish component of the Puerto Rico, St. Croix, and St. Thomas/St. John FMPs.

\* For the purpose of this requirement, a "descending device" means an instrument to which is attached a minimum of 16 ounces of weight and a length of line that will release the fish at the depth from which the fish was caught or a minimum of 60-ft (18-m). The descending device attaches to the fish's mouth or is a container that will hold the fish. The device MUST be capable of releasing the fish automatically, by the actions of the operator of the device, or by allowing the fish to escape on its own. Since minimizing surface time is critical to increasing survival, descending devices shall be readily available for use while engaged in fishing.



# Actions 1(b), 2(b), and 3(b). Modify the use of Gillnets in federal waters around Puerto Rico, St. Croix, and St. Thomas/St. John, respectively

**Alternative 1.** No action. Retain gillnets as an authorized gear type for the commercial harvest of federally managed and non-federally managed pelagic species and the commercial harvest of non-federally managed species in the EEZ around Puerto Rico, St. Croix, or St. Thomas/St. John, and as a prohibited gear type for reef fish and spiny lobster in the EEZ around Puerto Rico, St. Croix, or St. Thomas/St. John and inside Council Seasonally Closed Areas or Council Marine Managed Areas.

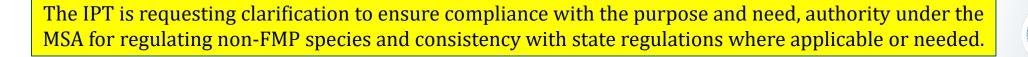
**Alternative 2.** Prohibit the use of gillnets in the EEZ around <u>Puerto Rico</u>, <u>St. Croix</u>, or <u>St. Thomas/St. John</u>:

Sub-alternative 2a. For all fishing.

**Sub-alternative 2b** (*Preferred for all three islands\**). For all fishing, except for the following fish species belonging to the halfbeaks (Family Hemiramphidae), gar (Family Belonidae), and flyingfish (Family Exocoetidae) (\*and for <u>Puerto Rico only</u>, the goggle eye (bigeye scad) (Family Carangidae, Genus Selar)). A surface gillnet used in the EEZ around *Puerto Rico, St. Croix, or St. Thomas/St. John* to fish for any baitfish must be tended at all times. Mesh size must not be smaller than 0.75 inches square or 1.5-inch stretch. Must be used 20 feet or more above the bottom.

**Sub-alternative 2c.** For fishing for federally managed pelagic species.







Actions 1(b), 2(b), and 3(b). Modify the use of Gillnets in federal waters around Puerto Rico, St. Croix, and St. Thomas/St. John, respectively

- 1. Non-FMP species and how they relate to the purpose and need of Amendment 2
- 2. Specify surface gillnet mesh size and other requirements (Sub-alternative 2b)
- 3. Consistency of regulations with state, as needed. Enforcement issues; landings, species, and number of fishers participating in the net fisheries of each island.
- 4. Clarify baitfish for each FMP (Sub-alternative 2b)
- 5. Clarify whether there is a need to distinguish between non-FMP pelagic species and other non-FMP species.





### 1) Non-FMP species and how they relate to the purpose and need of Amendment 2

This action includes regulations that pertain to fishing for non-managed species.

- Does the action provide benefit to federally managed species?
- Does it comply with the purpose of reducing bycatch of target or not target species?
- 2) Specify surface gillnet mesh size and other requirements
- 3) Consistency of regulations with state, as needed. Enforcement issues; landings, species, and number of fishers participating in the net fisheries of each island.
- 4) Clarify baitfish for each FMP
  - How does the Council want to specify the mesh size requirements in a way that makes clear it will reduce the potential for bycatch? For example, can the mesh size in Sub-alternative 2b include a specific size or a min/max size for the mesh?
  - Is the intent to be consistent with USVI regulations?
  - Should the sub-alternative specify the number of surface nets allowed per boat?
  - What would be implication if a fishing vessel possesses a gillnet that does not meet these specifications?





**Example from USVI Regulations:** The use of all gill and trammel nets (single or multiple wall entanglement nets) is prohibited in the territory, with the exception of single-wall surface gillnets for the baitfish ballyhoo (Family Hemiramphidae), gar (family Belonidae), and flying fish (family Exocotidae). Surface gillnets must be tended at all times, may not be more than 1,800 ft in length as measured by the float line, and may not be used within 20ft of the bottom. Mesh size may not be smaller than 0.75 inch square or 1.5 inch stretch. Only one 1,800 ft bait net is permitted per boat. Restricted gill and trammel nets may not be possessed onboard vessels in Territorial waters.

#### **Gillnets - Background (USVI)**

#### St. Croix

- Net gear types reported to catch managed and non-managed reef fish and pelagic species, and other non-managed species in federal and state waters around St. Croix include gillnets (surface, used with scuba, etc.), cast nets, drop nets, seine net, and beach seines.
- Federal regulations allow for the use of gillnets for the commercial harvest of non-federally managed species (e.g., baitfish such as ballyhoo or flying fish, pelagics), subject to a requirement that the gear be tended at all times, and the use of gillnets is prohibited year-round for fishing for spiny lobster and federally managed reef fish.
- USVI regulations prohibit the use of gillnets in territorial waters, except for surface gillnets for the harvest of certain species of baitfish.
- Most of the gillnet landings reported from St. Croix waters are from surface gillnets.



Table 3.3.4. Total landings in pounds for all species (Managed and Non-Managed) reported for gillnet gear in St. Croix Commercial Landings for 2012-2021 by State, Federal, or Unknown waters.

Management Status	Species	State	Unknown	Federal
	GRUNT,BLUESTRIPED	15		
	GRUNT,WHITE	37		
	LOBSTERS,SPINY	25		
	PARROTFISH,PRINCESS	1,195		
	PARROTFISH,QUEEN	875		
	PARROTFISH,REDBAND	905		
Managed	PARROTFISH,REDFIN	561		
	PARROTFISH,REDTAIL	1,299		Conf
	PARROTFISH,STOPLIGHT	706		
	SURGEONFISH,BLUE TANG	401		
	SURGEONFISH,DOCTORFISH	77		
	SURGEONFISH,OCEAN	10		
	TRIGGERFISH,QUEEN	51		
	BALLYHOO	17,334	2,597	6,211
	BLUE RUNNER	160		
	FLYINGFISH,UNSPECIFIED		120	
	GOATFISH,UNSPECIFIED	15		
Non managed	JACK,BAR	3,063	400	
Non-managed	NEEDLEFISH,UNSPECIFIED	85		100
	SCAD,BIGEYE	170	159	
	SCAD,ROUND	190		
	SQUIRRELFISH	50		
	TRUNKFISH	10		

#### **Landings from 2012-2021:**

- The only federally managed species harvested with surface gillnets from federal waters around St. Croix was redtail parrotfish (confidential data, which means that three or less fishermen reported landings with this gear type).
- The two non-managed species shown as harvested with surface gillnets from federal waters around St. Croix were ballyhoo (6,211 pounds [lbs]) and needlefish (100 lbs).
- Landings from "unknown" waters include flyingfish and big eye scad.

#### Gillnets - Background (USVI)

#### St. Thomas/St. John

- Managed species reported with surface gillnets in St. Thomas/St. John commercial landings from 2012 through 2021 are all from state waters and include red hind, coney, yellowtail snapper, and blue runner.
   All landings are minor, sporadic through time, and confidential.
- Non-managed species reported with surface gillnets are all from state waters and include herrings and ballyhoo (approximately 400 pounds total).
- During the 10-year period ending in 2021, the number of fishermen reporting landings with gillnets was between zero and two.



## **Gillnets - Summary USVI**

#### **Current Text in Draft V 3.2 (Aug 2023):**

**Sub-alternatives 2b and 3b (***Preferred for St. Croix and St. Thomas/St. John***).** For all fishing, except for surface gillnets used to catch baitfish species belonging to the halfbeaks (Family Hemiramphidae), gar (Family Belonidae), and flyingfish (Family Exocoetidae). A surface gillnet used in the EEZ around *St. Croix or St. Thomas/St. John*, to fish for these baitfish must be tended at all times. Surface gillnet mesh size must not be smaller than 0.75 inches square or 1.5-inch stretch. The surface gillnet must be used 20 feet or more above the bottom.

- Are these species harvested from federal waters?
- Is there any bycatch from this size mesh? Would this alternative minimize bycatch?
- If the use of surface gillnets is minimal in federal waters, is there a need to continue to allow the use of surface gillnets for baitfish in federal waters?

#### To address:

- 1) Re-specify mesh size
- 2) Specify length of the net
- 3) Specify the number of nets allowed per boat (e.g. one per boat)
- 4) Clarify baitfish for each FMP
- 5) Include possession restrictions

## **Gillnets - USVI (Example of alternative text)**

**Alternative 1.** No action. Retain gillnets as an authorized gear type for the commercial harvest of federally managed and non-federally managed pelagic species and the commercial harvest of non-federally managed species in federal waters around *St. Croix or St. Thomas/St. John*, and as a prohibited gear type for reef fish and spiny lobster in the EEZ around *St. Croix or St. Thomas/St. John* and inside Council Seasonally Closed Areas or Council MMAs.

**Alternative 2.** Prohibit the use of gillnets in federal waters around *St. Croix or St. Thomas/St. John*:

Sub-alternative 2a. For all fishing.

**Sub-alternative 2b.** For fishing for all federally managed fish species, and limit the use of gillnets in the EEZ around *St. Croix or St. Thomas/St. John* to fish for non-federally managed fish species to surface gillnets that meet the following specifications and requirements: (1) mesh size of the surface gillnet must not be smaller than 0.75 inches square or 1.5-inch stretched; (2)the surface gillnet must be used 20 feet or more above the bottom; and (3) the surface gillnet must be tended at all times.

**Sub-alternative 2c.** For fishing for all federally managed species.

#### Gillnets and trammel nets - Background (Puerto Rico)

**In Puerto Rico**, this fishery uses bottom and surface gillnets (*trasmallo de ahorque or filete*) (single pane) and trammel nets (*mallorquín*) consisting of a trammel with three net cloths tied to a line of buoys.

DRNA Fishing Regulations 7949, allow the use of gillnets and trammel nets, except in inner water and rivers mouths. Additionally, it prohibits the use of gillnets and trammel nets in conjunction with diving equipment ("Scuba"), except by written authorization from the Secretary for the capture of lionfish<sup>7</sup>.

- Gillnets or trammel nets cannot have mesh size greater than 6 inches (as measured from knot to knot of extension).
- For trammel nets, the outer cloths may not have a mesh larger than 6 inches (from knot to knot). Additionally, trammel nets used for bait fishing may not be more than a quarter 0.25 inch (knot-to-knot opening).

#### Gillnets and trammel nets - Background (Puerto Rico)

- Use of gillnets for the commercial harvest of federally managed and non-federally managed pelagic species or other non-federally managed species in federal waters is considered to be <u>minimal due to depth and distance from the coast of the location of federal waters.</u>
- Net gear types used to catch managed and non-managed reef fish and pelagic species, and other non-managed species in federal and state waters include gillnets, trammel nets, cast nets, and beach seines.

Although gillnets and trammel nets are specifically prohibited for harvesting reef fish and spiny lobster in federal waters around Puerto Rico, there are some landings reported of reef fish species and spiny lobster with these gears from federal waters. Both trammel nets and gillnets are allowed, and widely used, in Puerto Rico state waters.

# Gillnets and Trammel Nets - Background (Fishers and Landings from Puerto Rico State & Federal Waters)

From 2014-2019, which represents the most recent and complete landings at the time this amendment was drafted, an average of **127 fishermen** reported landings using gillnets and/or trammel nets in <u>all Puerto Rico waters</u> (Table 3.3.3 in V3.2 Amendment).

From 2014 through 2019, an average of **16 fishermen** reported using gillnets for managed and non-managed species in federal waters around Puerto Rico and an average of 5 fishermen reported using trammel nets to fish for managed and non-managed species in federal waters around Puerto Rico (Table 3.4.4 in Section 3.4.1.1)

**Table 3.3.3.** Annual commercial landings totals in pounds for managed and non-managed species harvested with gillnet and trammel net gear by state, federal, or unknown waters around Puerto Rico from 2014-2019 (most recent available data).

			Managed Species		Non-Managed Species			
	#	#	State	Federal		State	Federal	
Year	Fishers	Trips	Waters	Waters	Unknown	Waters	Waters	Unknown
2014	154	2,548	59,601	2,948	7,288	84,747	2,772	25,006
2015	121	2,540	48,426	2,102	6,181	83,375	2,369	29,342
2016	114	2,237	48,065	2,053	2,904	104,118	2,362	17,573
2017	113	1,707	32,479	2,261	418	96,931	1,646	1,189
2018	118	2,101	43,577	946	2,520	90,169	1,254	5,555
2019	141	2,167	54,887	1,510	2,341	105,908	3,345	3,864

Table 3.3.1. Adjusted landings in pounds for the top species (Managed and Non-Managed) reported for gillnet gear and trammel net gear in Puerto Rico Commercial Landings for 2014-2019 by State, Federal, or Unknown waters.

Management	Cuacias	GILL NET			
Status	Species	State	Federal	Unknown	
Managed	Barracuda	2,251	Conf	429	
Managed	Grouper,Coney	836	Conf	98	
Managed	Grouper,Red Hind	1,022	212	Conf	
Managed	Grunt,White	4,731	Conf	Conf	
Managed	Hogfish	1,160	Conf	82	
Managed	Mackerel,Cero	11,641	733	593	
Managed	Mackerel,King	8,756	1,117	933	
Managed	Parrotfishes, Unspecified	17,212	1,205	3,418	
Managed	Snapper,Black	Conf	196	Conf	
Managed	Snapper,Cardinal	1,818	Conf	652	
Managed	naged Snapper,Cubera		Conf	316	
Managed	Snapper,Lane	30,003	2,478	1,696	
Managed	Snapper,Mutton	7,571	300	1,056	
Managed	Snapper,Silk	809	504	Conf	
Managed	Snapper,Yellowtail	14,644	327	1,260	
Managed	Triggerfish,Queen	3,866	172	442	
Managed	Tuna,Blackfin	1,222		241	
Managed	Tunny,Little	1,460	Conf	Conf	

The top Council-managed finfish species reported with gillnets from federal waters from 2014 through 2019 include king and cero mackerels, parrotfish (unspecified), and lane snapper.

Note that the total landings reported from federal waters only represent a small percentage of the total landings from state waters.

Conf = confidential information

<sup>\*</sup>The values for the federal waters and unknown categories may include landings from waters around Puerto Rico jurisdictional offshore islands that are within the 9-200 nm.

Table 3.3.1 (*Cont*). Adjusted landings in pounds for the top species (Managed and Non-Managed) reported for gillnet gear and trammel net gear in Puerto Rico Commercial Landings for 2014-2019 by State, Federal, or Unknown waters

Management Status	Species	GILL NET		
		State	Federal	Unknown
Not-managed	Ballyhoo	214,720	2,608	42,371
Not-managed	Boxfish,Unspecified	12,640	89	1,334
Not-managed	Drummer,Whitemouth	6,685	Conf	388
Not-managed	Fishes,Bony,Unspecified	4,421	Conf	36
Not-managed	Goatfish,Spotted	801	Conf	Conf
Not-managed	Goatfish,Yellow	250		
Not-managed	Grouper,Unspecified	193	Conf	
Not-managed	Grunt,Unspecified	13,924	346	2,824
Not-managed	Herring,Sardinella	12,139	806	2,863
Not-managed	Jack,Bar	36,374	1,767	3,907
Not-managed	Jack,Horse-Eye	3,845	105	796
Not-managed	Jack,Yellow	258		83
Not-managed	Jacks	7,002	297	821
Not-managed	Lionfish	332	Conf	Conf
Not-managed	Mojarra,Yellowfin	1,014		750
Not-managed	Mojarras,Unspecified	26,100	1,136	1,725
Not-managed	Mullet,White	42,196	1,164	4,875
Not-managed	Octopus, Unspecified	167		Conf
Not-managed	Porgy,Unspecified	21,417	411	2,043
Not-managed	Snapper,Unspecified	11,840	351	2,288
Not-managed	Squids,Unspecified	519		121
Not-managed	Squirrelfish	1,542	Conf	133
Not-managed	Tuna And Mackerels	312		
Not-managed	Tuna,Albacore	2,792		Conf
Not-managed	Tuna,Skipjack	725	Conf	

The top non-managed finfish species reported with gillnets from federal waters from 2014 through 2019 include ballyhoo, bar jack, mullet, herring, and mojarras.

Note that the total landings reported from federal waters only represent a small percentage of the total landings from state waters.

Conf = confidential information

<sup>\*</sup>The values for the federal waters and unknown categories may include landings from waters around Puerto Rico jurisdictional offshore islands that are within the 9-200 nm.

## **Gillnets - Summary Puerto Rico**

#### **Current Text in Draft V 3.2 (Aug 2023):**

**Sub-alternative 2b in Action 1b (***Preferred for Puerto Rico***).** For all fishing, except for surface gillnets used to catch baitfish species belonging to the halfbeaks (Family Hemiramphidae), gar (Family Belonidae), and flyingfish (Family Exocoetidae) and the goggle eye (bigeye scad) (Family Carangidae, Genus Selar). A surface gillnet used in the EEZ around Puerto Rico, to fish for these baitfish must be tended at all times. Surface gillnet mesh size must not be smaller than 0.75 inches square or 1.5-inch stretch. The surface gillnet must be used 20 feet or more above the bottom.

- Are these species harvested from federal waters?
- Is there any bycatch from this size mesh? Would this alternative minimize bycatch?
- Gillnets use appears to be minimal in federal waters and gillnets are allowed in state waters. Is there a need to continue to allow the use of surface gillnets for baitfish in federal waters?
- If the regulation is implemented, would it be enforceable given that there are different mesh sizes for gillnets in state waters

#### To address:

- 1. Re-specify mesh size
- 2. Specify length of the net
- 3. Specify the number of nets allowed per boat (e.g. one per boat)

- 4. Clarify baitfish for each FMP
- 5. Include possession restrictions
- 6. Discuss enforceability of surface gillnet regulations

## **Gillnets - Puerto Rico (Example of alternative text)**

**Alternative 1.** No action. Retain gillnets as an authorized gear type for the commercial harvest of federally managed and non-federally managed pelagic species and the commercial harvest of non-federally managed species in federal waters around Puerto Rico, and as a prohibited gear type for reef fish and spiny lobster in the EEZ around Puerto Rico and inside Council Seasonally Closed Areas or Council MMAs.

**Alternative 2.** Prohibit the use of gillnets in federal waters around Puerto Rico:

**Sub-alternative 2a.** For all fishing.

**Sub-alternative 2b.** For fishing for all federally managed fish species, and limit the use of gillnets in the EEZ around Puerot Rico to fish for non-federally managed fish species to surface gillnets that meet the following specifications and requirements: (1) mesh size of the surface gillnet must not be smaller than 0.75 inches square or 1.5-inch stretched; (2)the surface gillnet must be used 20 feet or more above the bottom; and (3) the surface gillnet must be tended at all times.

**Sub-alternative 2c.** For fishing for all federally managed species.

#### Gillnets - Additional Items to address

600.725 regulations Part V. Caribbean Fishery Management Council - Authorized gear table by fishery:

For each island management area, consider consolidating G. Commercial Fishery (Non-FMP) category with F. Pelagic Fishery (Non-FMP) i. Commercial fishery category and the H. Recreational Fishery (Non-FMP) category with the F. Pelagic Fishery (Non-FMP) ii. Recreational fishery category.



# Action Items and Next Steps

August 2023

- Council revise document as needed
- Council tasks IPT to finalize amendment incorporating any new changes and analyses. Staff will prepare codified text for Council review at the next meeting

December 2023

- Council reviews final draft amendment and the draft codified text
- Council approves amendment for submission to the Secretary of Commerce (allowing staff to make editorial edits)

