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

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Outcomes from December 2022 Council Meeting

- Council reviewed Draft 1 of Amendment, selected preferred alternatives for some actions (see *Pref.* below) but recommended restructuring actions by island management area before moving forward (but see * below)
 - ✓ IPT restructured document into 4 Actions with sub-actions for Actions 1-3 (Doc in briefing book)

Action 1: PR* - Trawl, Gillnets, Trammel Nets, Purse Seines	Action 2: STX - Trawl, Gillnets, Trammel Nets, Purse Seines	Action 3: STT/STJ - Trawl, Gillnets, Trammel Nets, Purse Seines	Action 4: PR, STX, STT/STJ - Descending Devices
Action 1(a): Trawl (<i>Pref</i>)	2(a): Trawl (<i>Pref</i>)	3(a): Trawl (<i>Pref</i>)	<i>(Pref) all islands</i>
Action 1(b): Gillnets	2(b): Gillnets (<i>Pref</i>)	3(b): Gillnets (<i>Pref</i>)	
Action 1(c): Trammel	2(c): Trammel	3(c): Trammel	
Action 1(d): Purse seines	2(d): Purse seines	3(d): Purse seines	

(Pref) = Preferred alts. chosen in Dec 2022

** Puerto Rico had no DNER rep. at CFMC Dec 2022 Meeting, thus hold selection of preferred alts until further discussion*

Authorized Gear Types in the U.S. Caribbean EEZ

Gear Type	Authorized Fisheries (PR, STT, STX)	Notes
Trawl Gear	Commercial Non-FMP Species	Not Used. Banned in PR waters
Gillnets	Commercial FMP Pelagic Species Commercial Non-FMP Species Commercial Non-FMP Pelagic Species	Not allowed for CFMC Reef Fish, Spiny Lobster, MMAs. Allowed in Puerto Rico waters Not Allowed in USVI waters Specific gillnets used for baitfish allowed in USVI
Trammel Nets	Not Authorized	
Purse Seines	Not Authorized	Not Used

[600.725 Authorized gear types table](#)

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

Statement of Purpose and Need

- The purpose of this amendment is to prevent potential damage to habitats from certain gear types, including essential fish habitat, 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 need for this amendment is to minimize potentially adverse effects of fishing to habitats and associated species, and to minimize the mortality of bycatch species.



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Action 1: Use of Trawl Gear, Gillnets, Trammel Nets, and Purse Seines in the U.S. Caribbean Exclusive Economic Zone (EEZ) around Puerto Rico

Action 1(a). Modify the Use of Trawl Gear in federal waters around Puerto Rico

Alternative 1. No action. Retain trawl gear as an authorized gear type for the commercial harvest of non-federally managed species in federal waters around Puerto Rico that is not otherwise prohibited.

Alternative 2. Prohibit the use of trawl gear for all fishing in Caribbean Fishery Management Council (Council) seasonally closed areas/marine managed areas (MMA) year-round in federal waters around Puerto Rico.

Alternative 3 (Preferred). Prohibit the use of trawl gear for all fishing in federal waters around Puerto Rico.

Rationale for decision: Prevent potential impact to sensitive habitats in the Caribbean.

CFMC Seasonally Closed Areas/Marine Managed Areas (MMAs) in Puerto Rico – (1) Bajo de Sico; (2) Abrir La Sierra; (3) Tourmaline



Action 1(a). Modify the Use of Trawl Gear in federal waters around Puerto Rico

Comparison of Alternatives

Alternative 1 is the status quo and would not change any regulations applicable to the use of trawls in federal waters around Puerto Rico

Alternative 2 would prohibit all trawl gear year-round in all Puerto Rico Council MMAs, while **Preferred Alternative 3** would prohibit the use of trawl gear year-round applicable to all components of the Puerto Rico FMP.

Because trawl gear has not historically been used in the U.S. Caribbean EEZ and is not currently used, **Alternative 2** and **Preferred Alternative 3** are both administrative actions and are not expected to have any additional physical, biological/ecological, social, and economic effects when compared to **Alternative 1**.

Alternatives 2 and 3 (Preferred) could be more beneficial to the physical and biological environment by preventing potential bycatch and/or habitat effects from any future trawling activities in all federal waters. Preferred Alt. 3 more beneficial than Alt. 2

Prohibiting the use of trawl gear applicable to all fishery components of the Puerto Rico EEZ (**Preferred Alternative 3**) would prevent future use through a petition, which could occur under **Alternative 1** and **Alternative 2**, thus providing more benefits to the physical, biological/ecological environment.



Action 1(b). Modify the use of Gillnets in federal waters around Puerto Rico

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 all fishing, except for the following fish species belonging to the halfbeaks (Family Hemiramphidae), gar (Family Belonidae), and flyingfish (Family Exocoetidae), **goggle eye (bigeye scad) (Family Carangidae, Genus Selar)**. A surface gillnet used in the EEZ around Puerto Rico to fish for any baitfish must be tended at all times. **Mesh size may not be smaller than 0.75 inches square or 1.5-inch stretch. May not be used 20 ft from bottom.**

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



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Gillnets and Trammel Nets (Background)

- The use of gillnets, trammel nets, as well as pots, traps, or bottom longlines is currently prohibited year-round in the seven Council-managed seasonally closed areas (also called Marine Managed Areas (MMAs) in this document): Puerto Rico – (1) Bajo de Sico; (2) Abrir La Sierra; (3) Tourmaline; in U.S. Virgin Islands – (4) Grammanik Bank; (5) Mutton Snapper Spawning Aggregation Area; 6) Hind Bank; and (7) Red Hind Spawning Aggregation Area East of St. Croix.
- The use of gillnets and trammel nets has been prohibited for the harvest of federally managed reef fish and spiny lobster since 2005 due to the potential for bycatch (CFMC 2005) (50 CFR 622.433(c) and 50 CFR 622.452(b)).
- Surface gillnets and trammel nets are allowed for the harvest of other species (e.g., baitfish [where baitfish refers to species other than federally managed reef fish]) in federal waters but they must be tended at all times (50 CFR 622.437(a)(3) & (c)(2); 50 CFR 622.477(a)(3) & (c)(2); 50 CFR 622.512(a)(3), (c)(2)).



Bait Nets Regulations in Puerto Rico Waters

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

- 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).
- DRNA Regulation 7949, permits 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 lionfish⁷.

Council-managed species reported in Puerto Rico commercial landings with **gillnets** from federal waters include barracuda, cero and king mackerels, blackfin, and little tunny (Table 2.2.1) (Note that “federal waters” may also include harvest from waters around offshore islands belonging to Puerto Rico’s jurisdiction).

Management Status	Species	GILL NET			TRAMMEL NET		
		State	Federal	Unknown	State	Federal	Unknown
Managed	BARRACUDA	2,251	Conf	429	.	.	.
Managed	DOLPHINFISH	Conf	.	.	Conf	.	Conf
Managed	MACKEREL,CERO	11,641	733	593	Conf	.	.
Managed	MACKEREL,KING	8,756	1,117	933	62	.	Conf
Managed	TUNA,BLACKFIN	1,222	.	241	.	.	Conf
Managed	TUNNY,LITTLE	1,460	Conf	Conf	449	.	Conf
Managed	WAHOO	Conf	.	.	.	.	.
Not-managed	BALLYHOO	214,720	2,608	42,371	832	Conf	Conf
Not-managed	BARBU	142	.	.	.	.	.
Not-managed	BARRACUDA,SOUTHERN	Conf	.	.	.	.	.
Not-managed	JACK,BAR	36,374	1,767	3,907	530	.	38
Not-managed	JACK,HORSE-EYE	3,845	105	796	.	.	.
Not-managed	JACK,YELLOW	258	.	83	.	.	.
Not-managed	JACKS	7,002	297	821	200	.	.
Not-managed	MOJARRA,YELLOWFIN	1,014	.	750	.	.	.
Not-managed	MOJARRAS,UNSPECIFIE	26,100	1,136	1,725	Conf	.	.
Not-managed	MULLET,WHITE	42,196	1,164	4,875	Conf	.	Conf
Not-managed	SNOOK,COMMON	55,871	2,733	4,966	Conf	Conf	Conf
Not-managed	STINGRAYS,UNSPECIFI	Conf	Conf	Conf	3,115	.	Conf
Not-managed	TUNA AND MACKERELS,	312	.	.	.	.	.
Not-managed	TUNA,ALBACORE	2,792	.	Conf	.	.	.
Not-managed	TUNA,SKIPJACK	725	Conf	.	.	.	.
Not-managed	TUNA,YELLOWFIN	Conf	.	Conf	.	.	.
Conf = confidential information							

Table 2.2.1. 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*.

Action 1(b). Modify the use of Gillnets in federal waters around Puerto Rico

Comparison of alternatives

	Action	Physical	Biological/Ecological	Socio-economic	Administrative
Alt. 1	No changes. Allowed for commercial FMP-pelagic species and non-FMP species	No effect*	Continue potential of adverse effects	Allow fishers to continue using gillnet for these sps. (short-term benefit, long-term adverse effect to popns)	Status quo
Alt. 2					
Sub-alt. 2a	No use of gillnets for any fishing	No effect*	More beneficial than all alternatives	Less beneficial than Alt. 1, fishers no longer able to use gillnets in the EEZ	Education and outreach for compliance.
Sub-alt. 2b	No gillnet use except for certain baitfish, specifies min. mesh size, distance from bottom, tend all times.	No effect*	More beneficial than Alt 1 and Sub-alt c - prevent bycatch by setting a min. mesh size and other specs and allowing the catch of only certain baitfish species.	More beneficial than Sub-alt 2a - allows fishers to continue using gillnets for some bait species in EEZ, but affects those that use for pelagics.	Difficult to enforce due to differences in species allowed vs PR waters, mesh sizes
Sub-alt 2c	No gillnet use for pelagics (continue allow for FMP species, including bait species)	No effect	Potential for adverse effects; less beneficial than 2a, but more beneficial than Alt. 1	Fishers continue to use gillnets for other species, but affect those using gillnets for pelagic	Most difficult to enforce



Action 1(c). Modify the use of Trammel nets in federal waters around Puerto Rico

Alternative 1. No action. Retain trammel nets as neither an authorized gear type for any fisheries in the EEZ around Puerto Rico, nor an otherwise prohibited gear type, except for federally managed reef fish and spiny lobster.

Alternative 2. Prohibit the use of trammel nets for all fishing in the EEZ around Puerto Rico.

Action 1(d). Modify the use of Purse seines in federal waters around Puerto Rico

Alternative 1. No action. Retain purse seines as neither an authorized gear type for any fisheries in the EEZ around Puerto Rico, nor an otherwise prohibited gear type.

Alternative 2. Prohibit the use of purse seines for all fishing in federal waters around Puerto Rico.



Trammel Nets and Purse Seines (Background)

Purse Seines: large wall of netting deployed around an entire area or school of fish.

Purse seines and Trammel Nets are not authorized for any fishery in any of the three island-management areas.

For purse seines and trammel nets (and other non-authorized gear), a person could petition the Council to use these gear types. At that time, the Council and NMFS could take action whether to allow or prohibit the use of the gear.

50 CFR 600.725(v): A person or vessel is prohibited from engaging in fishing or employing fishing gear when such fishing gear is prohibited or restricted by regulation under an FMP or other applicable law. However, after December 1, 1999, an individual fisherman may notify the appropriate Council, or the Director, in the case of Atlantic highly migratory species, of the intent to use a gear or participate in a fishery not already on the list. Ninety days after such notification, the individual may use the gear or participate in that fishery unless regulatory action is taken to prohibit the use of the gear or participate in the fishery (*e.g.*, through emergency or interim regulations).



Action 1(c) Trammel Nets and Action 1(d) Purse Seines

Comparison of alternatives

- **Administrative actions** – gear types not listed as authorized under any fishery (managed or unmanaged). Little harvest with trammel net in federal waters (see Table 2.2.1 – slide 9).
- Effects to the physical, biological/ecological, and socio-economic environments from prohibiting the use of trammel nets and/or purse seines (**Alternatives 2 in Actions 1(c) and 1(d)**) not different than **Alternative 1 for each action**, because both trammel nets and purse seines are currently not authorized for use in federal waters for any fishing.
- **Alternatives 2 in Actions 1(c) and 1(d)** could be slightly more beneficial to the biological/ecological environment of Puerto Rico because they further restrict potential future use of these gear types through a petition to the Council, thus eliminating any potential effects from bycatch of undersized organisms or large amounts, preventing overfishing, and also preventing any effects to ESA listed species such as sea turtles.
- Socio-economic: for trammel nets, landings seem to be constrained to Puerto Rico state waters, where this gear type is allowed (there is no significant landings history in federal waters), thus loss of fishing opportunities not expected. Long-term socio-economic effects from healthy fisheries.

Action 2: Use of Trawl Gear, Gillnets, Trammel Nets, and Purse Seines in the U.S. Caribbean EEZ around St. Croix

Action 2(a). Modify the Use of Trawl Gear in federal waters around St. Croix

Alternative 1. No action. Retain trawl gear as an authorized gear type for the commercial harvest of non-federally managed species in federal waters around St. Croix that is not otherwise prohibited.

Alternative 2. Prohibit the use of trawl gear for all fishing in Council seasonally closed areas/marine managed areas (MMA) year-round in federal waters around St. Croix.

Alternative 3 (Preferred). Prohibit the use of trawl gear for all fishing in federal waters around St. Croix.

Rationale for decision: Prevent potential impact to sensitive habitats in the Caribbean.

CFMC Seasonally Closed Areas/Marine Managed Areas (MMAs) are: in U.S. Virgin Islands – Mutton Snapper Spawning Aggregation Area; and Red Hind Spawning Aggregation Area East of St. Croix.



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Action 2(a). Modify the Use of Trawl Gear in federal waters around St. Croix

Comparison of Alternatives

Alternative 1 is the status quo and would not change any regulations applicable to the use of trawls in federal waters around St. Croix.

Alternative 2 would prohibit all trawl gear year-round in all St. Croix Council MMAs, while **Preferred Alternative 3** would prohibit the use of trawl gear year-round in all St. Croix EEZ.

Because trawl gear has not historically been used in the U.S. Caribbean EEZ and is not currently used, **Alternative 2** and **Preferred Alternative 3** are both administrative actions and are not expected to have any additional physical, biological/ecological, social, and economic effects when compared to **Alternative 1**.

Alternatives 2 and 3 (Preferred) could be more beneficial to the physical and biological environment by preventing potential bycatch and/or habitat effects from any future trawling activities in all federal waters. Preferred Alt. 3 more beneficial than Alt. 2

Prohibiting the use of trawl gear applicable to all fishery components of the St. Croix EEZ (**Preferred Alternative 3**) would prevent future use through a petition, which could occur under **Alternative 1** and **Alternative 2**, thus providing more benefits to the physical, biological/ecological environment.



Action 2(b). Modify the use of Gillnets in federal waters around St. Croix

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, and as a prohibited gear type for reef fish and spiny lobster in the EEZ around St. Croix and inside Council Seasonally Closed Areas or Council MMAs.

Alternative 2. Prohibit the use of gillnets in federal waters around St. Croix:

Sub-alternative 2a. For all fishing.

Sub-alternative 2b. (Preferred) For all fishing, except for the following fish species belonging to the halfbeaks (Family Hemiramphidae), gar (Family Belonidae), and flyingfish (Family Exocoetidae). A surface gillnet used in the EEZ around St. Croix to fish for any baitfish must be tended at all times. Mesh size may not be smaller than 0.75 inches square or 1.5-inch stretch. **May not be used 20 ft from bottom.**



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Action 2(b). Modify the use of Gillnets in federal waters around St. Croix

Comparison of alternatives

- **Alternative 1** is the status quo alternative (no changes to gillnet regulations in the EEZ around St. Croix).
- For the EEZ around St. Croix, species reported commercially with gillnet from 2012-2021, the only Council managed species is redbtail parrotfish (confidential data), and two non-managed species, ballyhoo (6,211 pounds [lbs]) and needlefish (100 lbs)).
 - Less beneficial to the biological and ecological environment, but more beneficial the socio-economic environment than **Alternative 2 (Sub-alternative 2a)** because **Alternative 1** would continue to allow the use of gillnets for the commercial harvest of pelagic species and non-federally managed species, increasing the potential of adverse effects from use of the gear, but allowing fishermen that use gillnet for harvesting these species to continue to do so.
- **Sub-alternative 2b** would be partially compatible with USVI regulations for gillnets, facilitating enforcement. It would be more beneficial to the ecological and biological environment because it would prevent bycatch by setting a maximum mesh size for the bait nets.
- Administrative effects would be slightly higher under **Sub-alternative 2a** than **Alternative 1**.
- With respect to certain species of baitfish, **Alternative 1**, **Sub-alternative 2b** are not different, as both would continue to allow gillnets for catching those species, with no additional effects to the biological environment, socio-economic environment, or administrative environment.
- Physical effects are not expected from the use of gillnets for any of the alternatives.



Action 2(c). Modify the use of trammel nets in federal waters around St. Croix

Alternative 1. No action. Retain trammel nets as neither an authorized gear type for any fisheries in the EEZ around St. Croix, nor an otherwise prohibited gear type, except for federally managed reef fish and spiny lobster.

Alternative 2. Prohibit the use of trammel nets for all fishing in the EEZ around St. Croix.

Action 2(d). Modify the use of purse seines in federal waters around St. Croix

Alternative 1. No action. Retain purse seines as neither an authorized gear type for any fisheries in the EEZ around St. Croix, nor an otherwise prohibited gear type.

Alternative 2. Prohibit the use of purse seines for all fishing in federal waters around St. Croix.



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Action 2(c). Modify the use of trammel nets in federal waters around St. Croix

Action 2(d). Modify the use of purse seines in federal waters around St. Croix

Comparison of alternatives

Trammel nets and Purse seines:

- **Administrative actions** – gear types not listed as authorized under any fishery (managed or unmanaged). No harvest with trammel nets.
- Effects to the physical, biological/ecological, and socio-economic environments from **Alternative 2 in Action 2(c)** and **Alternative 2 in Action 2(d)** are not expected to be different from those of **Alternative 1 for each action**, because both trammel nets and purse seines are currently not authorized for use in federal waters for any fishing.
- **Alternative 2 in Actions 2(c) and 2(d)** could be slightly more beneficial to the biological/ecological environment of St. Croix because they further restrict potential future use of these gear types through a petition to the Council, thus eliminating any potential effects from bycatch of undersized organisms or large amounts, preventing overfishing, and also preventing any effects to ESA listed species such as sea turtles. This would have long-term socio-economic benefits.
- Socio-economic: Gear not used, no landings, thus loss of fishing opportunities not expected.

Action 3: Use of Trawl Gear, Gillnets, Trammel Nets, and Purse Seines in the U.S. Caribbean EEZ around St. Thomas/St. John

Action 3(a). Modify the Use of Trawl Gear in federal waters around St. Thomas/St. John

Alternative 1. No action. Retain trawl gear as an authorized gear type for the commercial harvest of non-federally managed species in federal waters around St. Thomas/St. John that is not otherwise prohibited.

Alternative 2. Prohibit the use of trawl gear for all fishing in Council seasonally closed areas/marine managed areas (MMA) year-round in federal waters around St. Thomas/St. John.

Alternative 3 (Preferred). Prohibit the use of trawl gear for all fishing in federal waters around St. Thomas/St. John.

Rationale for decision: Prevent potential impact to sensitive habitats in the Caribbean.

CFMC Seasonally Closed Areas/Marine Managed Areas (MMAs) in STT/STJ: Hind Conservation District; Grammanik Bank.



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Action 3(a). Modify the Use of Trawl Gear in federal waters around St. Thomas/St. John

Comparison of Alternatives

Alternative 1 is the status quo and would not change any regulations applicable to the use of trawls in federal waters around St. Thomas/St. John.

Alternative 2 would prohibit all trawl gear year-round in all St. Thomas/St. John Council MMAs, while **Preferred Alternative 3** would prohibit the use of trawl gear year-round in all St. Thomas/St. John EEZ.

Because trawl gear has not historically been used in the U.S. Caribbean EEZ and is not currently used, **Alternative 2** and **Preferred Alternative 3** are both administrative actions and are not expected to have any additional physical, biological/ecological, social, and economic effects when compared to **Alternative 1**.

Alternatives 2 and 3 (Preferred) could be more beneficial to the physical and biological environment by preventing potential bycatch and/or habitat effects from any future trawling activities in all federal waters. Preferred Alt. 3 more beneficial than Alt. 2

Prohibiting the use of trawl gear applicable to all fishery components of the St. Thomas/St. John EEZ (**Preferred Alternative 3**) would prevent future use through a petition, which could occur under **Alternative 1** and **Alternative 2**, thus providing more benefits to the physical, biological/ecological environment.



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Action 3(b). Modify the use of Gillnets in federal waters around St. Thomas/St. John

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. Thomas/St. John, and as a prohibited gear type for reef fish and spiny lobster in the EEZ around 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. Thomas/St. John:

Sub-alternative 2a. For all fishing.

Sub-alternative 2b. (Preferred) For all fishing, except for the following fish species belonging to the halfbeaks (Family Hemiramphidae), gar (Family Belonidae), and flyingfish (Family Exocoetidae). A surface gillnet used in the EEZ around St. Thomas/St. John to fish for any baitfish must be tended at all times. Mesh size may not be smaller than 0.75 inches square or 1.5-inch stretch. **May not be used 20 ft from bottom.**



Action 3(b). Modify the use of Gillnets in federal waters around St. Thomas/St. John

Comparison of alternatives

- **Alternative 1** is the status quo alternative (no changes to gillnet regulations in the EEZ around St. Thomas/St. John).
- For the EEZ around St. Thomas/St. John, species reported commercially with gillnet from 2012-2021, Council managed species include some reports for red hind, coney, yellowtail snapper, blue runner (all landings are minor and confidential).
 - Less beneficial to the biological and ecological environment, but more beneficial the socio-economic environment than **Alternative 2 (Sub-alternative 2a)** because **Alternative 1** would continue to allow the use of gillnets for the commercial harvest of pelagic species and non-federally managed species, increasing the potential of adverse effects from use of the gear, but allowing fishermen that use gillnet for harvesting these species to continue to do so.
- **Sub-alternative 2b** would be partially compatible with USVI regulations for gillnets, facilitating enforcement. It would be more beneficial to the ecological and biological environment because it would prevent bycatch by setting a maximum mesh size for the bait nets.
- Administrative effects would be slightly higher under **Sub-alternative 2a** than **Alternative 1**.
- With respect to certain species of baitfish, **Alternative 1**, **Sub-alternative 2b** are not different, as both would continue to allow gillnets for catching those species, with no additional effects to the biological environment, socio-economic environment, or administrative environment.
- Physical effects are not expected from the use of gillnets for any of the alternatives.



Action 3(c). Modify the use of trammel nets in federal waters around St. Thomas/St. John

Alternative 1. No action. Retain trammel nets as neither an authorized gear type for any fisheries in the EEZ around St. Thomas/St. John, nor an otherwise prohibited gear type, except for federally managed reef fish and spiny lobster.

Alternative 2. Prohibit the use of trammel nets for all fishing in the EEZ around St. Thomas/St. John.

Action 3(d). Modify the use of purse seines in federal waters around St. Thomas/St. John

Alternative 1. No action. Retain purse seines as neither an authorized gear type for any fisheries in the EEZ around St. Thomas/St. John, nor an otherwise prohibited gear type.

Alternative 2. Prohibit the use of purse seines for all fishing in federal waters around St. Thomas/St. John.



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Action 3(c). Modify the use of trammel nets in federal waters around St. Thomas/St. John

Action 3(d). Modify the use of purse seines in federal waters around St. Thomas/St. John

Comparison of alternatives

- Administrative actions – gear types not listed as authorized under any fishery (managed or unmanaged). No harvest with trammel nets or purse seines.
- Effects to the physical, biological/ecological, and socio-economic environments from **Alternative 2 in Action 3(c)** and **Alternative 2 in Action 3(d)** are not expected to be different from those of **Alternative 1 for each action**, because both trammel nets and purse seines are currently not authorized for use in federal waters for any fishing.
- **Alternative 2 in Actions 3(c) and 3(d)** could be slightly more beneficial to the biological/ecological environment of St. Thomas/St. John because they further restrict potential future use of these gear types through a petition to the Council, thus eliminating any potential effects from bycatch of undersized organisms or large amounts, preventing overfishing, and also preventing any effects to ESA listed species such as sea turtles. This would have long-term socio-economic benefits from healthier fisheries.
- Socio-economic: Gear not used, no landings, thus loss of fishing opportunities not expected.

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

Alternative 1. No action. Descending devices are not required to be on board a vessel fishing for or possessing species in the reef fish component of the Puerto Rico, St. Croix, and St. Thomas and 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 and St. John FMPs.

* For the purpose of this requirement, a “descending device” means an instrument to which is attached a minimum of a 16-ounce 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 (15.2-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.



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Background – Descending Devices

- August 2022 Meeting: Council discussed concerns from fishermen about reef fish that are released (i.e., regulatory and/or economic discards) but do not survive, focusing on injuries from barotrauma.
 - Barotrauma is the rapid expansion of gases in a fish as it is quickly reeled up from depth. Signs include bulging eyes, stomach protruding from the mouth, and bubbling scales.
- To improve the survivorship of released reef fish, the Council considered a measure that would encourage the use of best fishing practices to minimize impacts from capture, and thus discussed the use of descending devices as tools to reduce fishing mortality for reef fish from barotrauma.
- The Council decided that it would also work on education and outreach activities with fishing communities regarding descending devices development and use.



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

Comparison of alternatives

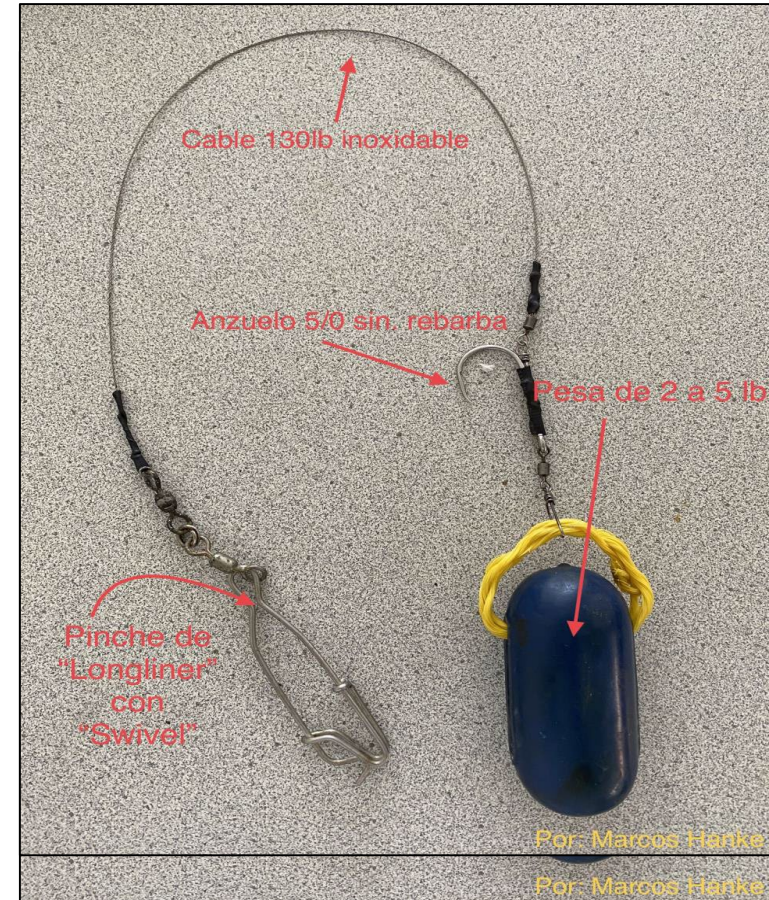
- **Alternative 2** would be more beneficial to the biological and ecological environment of reef fish than **Alternative 1**, as it would require a descending device to be rigged and ready for use, which could decrease fishing mortality of Council-managed reef fish from barotrauma.
- In the short-term, socio-economic effects from **Alternative 2** are expected to be larger than from **Alternative 1** due to the cost and effort for fishers to obtain and keep onboard a descending device.
- Administrative effects from **Alternative 2** would also be higher than **Alternative 1** because of the regulations to effect the requirement and the additional efforts to enforce these regulations for all reef fish fishermen (commercial and recreational), in federal waters of the three management areas, and to conduct outreach and education activities.



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

Popular Types of Descending Devices

- The *Seaqualizer*
- Inverted Hook or Shelton Fish Descender
- Weighted basket
- Others



Source: M. Hanke, fishermen, presentation at 178th Caribbean Council Meeting

See practical “how-to” video on rigging and using descending devices from NC Division of Marine Fisheries’: <https://youtu.be/xul9Sd8nzNw> (Source: SAFMC)

Also See Florida Fish and Wildlife Commission for an educational video on how to make an effective homemade descending device <https://www.youtube.com/watch?v=Y0o9lxCxEAM>



Action Items and Next Steps

April
2023

- Council finalize selection of preferred alternatives
- Council tasks IPT to finalize amendment

May-July
2023

- IPT finalizes amendment (pending sections and analyses)
- Staff prepares draft codified text (regulations) for Council review at next meeting

August
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)



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Action Items and Next Steps

Action 1: PR* - Trawl, Gillnets, Trammel Nets, Purse Seines	Action 2: STX - Trawl, Gillnets, Trammel Nets, Purse Seines	Action 3: STT/STJ - Trawl, Gillnets, Trammel Nets, Purse Seines	Action 4: PR, STX, STT/STJ - Descending Devices
Action 1(a): Trawl <i>(Pref)</i>	2(a): Trawl <i>(Pref)</i>	3(a): Trawl <i>(Pref)</i>	<i>(Pref) all islands</i>
Action 1(b): Gillnets	2(b): Gillnets <i>(Pref)</i>	3(b): Gillnets <i>(Pref)</i>	
Action 1(c): Trammel	2(c): Trammel	3(c): Trammel	
Action 1(d): Purse seines	2(d): Purse seines	3(d): Purse seines	

(Pref) = Preferred alts. chosen in Dec 2022

** Puerto Rico had no DNER rep. at CFMC Dec 2022 Meeting, thus hold selection of preferred alts until further discussion*



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Additional Slides



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Appendix A. List of Managed Reef Fish and Pelagic Stocks Included in each of the Island-based FMPs

Puerto Rico Reef Fish

- **Snappers:** black, blackfin, silk, vermillion, wenchman, cardinal, queen, lane, mutton, dog, schoolmaster, yellowtail, cubera*
- **Groupers:** Nassau, goliath, coney, graysby, black, red, tiger, yellowfin, yellowmouth*, yellowedge, misty, red hind, rock hind
- **Parrotfishes:** blue, midnight, rainbow, queen, princess, redband, stoplight, redband, striped
- **Surgeonfishes:** blue tang, ocean surgeonfish, doctorfish
- **Triggerfishes:** ocean, queen, gray*
- **Wrasses:** hogfish, puddingwife, Spanish hogfish
- **Angelfishes:** queen, grey, French
- **Grunts:** white grunt
- **Jacks:** crevalle jack*, African pompano*, rainbow runner*

* New to management

Puerto Rico Pelagics

* *All new to management*

- **Tripletail:** tripletail
- **Dolphinfish:** dolphin, pompano dolphin
- **Mackerels and Tunas (Scombridae):** little tunny, blackfin tuna, king mackerel, cero mackerel, wahoo
- **Barracudas:** great barracuda



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Appendix A. List of Managed Reef Fish and Pelagic Stocks Included in each of the Island-based FMPs

St. Croix Reef Fish

- **Snappers:** black, blackfin, silk, vermilion, queen, lane, gray, mutton, schoolmaster, yellowtail
- **Groupers:** Nassau, goliath, graysby, coney, red hind, rock hind, black, red, tiger, yellowfin, misty
- **Parrotfishes:** blue, midnight, rainbow, queen, princess, redtail, stoplight, redband, striped, redfin
- **Surgeonfishes:** blue tang, ocean surgeonfish, doctorfish
- **Triggerfishes:** queen
- **Angelfishes:** queen, grey, French
- **Grunts:** white grunt, bluestriped
- **Squirrelfish:** longspine squirrelfish

St. Croix Pelagics

**All new to management*

- **Dolphinfish:** dolphin
- **Mackerels and Tunas (Scombridae):** wahoo



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Appendix A. List of Managed Reef Fish and Pelagic Stocks Included in each of the Island-based FMPs

St. Thomas and St. John Reef Fish

- **Snappers:** black, blackfin, silk, vermilion, queen, lane, mutton, yellowtail
- **Groupers:** Nassau, goliath, coney, red hind, black, red, tiger, yellowfin, yellowmouth*, yellowedge, misty
- **Parrotfishes:** blue, midnight, rainbow, queen, princess, redtail, stoplight, redband, striped, redfin
- **Surgeonfishes:** blue tang, ocean surgeonfish, doctorfish
- **Triggerfishes:** queen
- **Wrasses:** hogfish
- **Angelfishes:** queen, grey, French
- **Grunts:** white grunt, bluestriped, margate
- **Jacks:** Blue runner
- **Porgies:** jolthead, saucereye, sheepshead, sea bream

** New to management*

St. Thomas and St. John Pelagics

**All new to management*

- **Dolphinfish:** dolphin
- **Mackerels and Tunas (Scombridae):** wahoo



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Trawls (Background)

(1) In the U.S. Caribbean, the complex mosaic of coral on the insular shelf leaves little space available for trawling that would not have direct impacts on coral, thus potential for damaging coral habitat including deep-water corals, as well as sponge habitat and deep-water sponges present in the area (Discussion at CFMC Meeting, Dec 2021);

(2) trawls could entangle protected species present in the U.S. Caribbean EEZ such as sea turtles; and

(3) Direct impact the use of trawls in the U.S. Caribbean EEZ has the potential to negatively affect certain habitats designated as essential fish habitat (EFH) and habitat areas of particular concern for managed species under the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act).

There are also economic considerations related to the use of certain trawling gear types (e.g., damage or loss of gear) as well as implications for the bycatch of managed and unmanaged species in the U.S. Caribbean EEZ.

Interest in potential implications (if any) that continuing to allow trawling for non-FMP species as an authorized gear type in the EEZ (including in Council MMAs) may have on the whether the existing Council MMAs qualify as conservation areas under Executive Order (E.O.) 14008.

