

# Amendment 3 to the St. Croix and St. Thomas/St. John Fishery Management Plans: New Management Measures for Dolphin and Wahoo



Sarah Stephenson, NMFS-SFD, Caribbean Branch 181<sup>st</sup> Caribbean Fishery Management Council Meeting April 2023

## Review from December 2022 Council Meeting

- Staff gave presentation on the draft amendment to all three FMPs.
  - Reviewed the list of information and data needs identified by the interdisciplinary planning team (IPT) that is developing the amendment.
  - Reviewed commercial landings data for the species by seasonality, state/federal waters, and gear use.
  - Reviewed the draft options for size limits, recreational bag limits, and commercial trip limits.
- Council recommended splitting into 2 amendments, the first one for the USVI FMPs and a second one for select pelagic species managed under the Puerto Rico FMP.



## Restructured Draft Amendment by Island, Species

- Action 1 New management measures for dolphin in St. Croix
- Action 2 New management measures for wahoo in St. Croix
- Action 3 New management measures for dolphin in St. Thomas/St. John
- Action 4 New management measures for wahoo in St. Thomas/St. John

Each action has 3 sub-parts specific to the Island/Species:

- a) Establish size limits
- b) Establish recreational bag limits
- c) Establish commercial trip limits



## **Draft Purpose and Need**

- The purpose of Amendment 3 is to establish size limits, recreational bag limits, and commercial trip limits for dolphin and wahoo under the St. Croix Fishery Management Plan and the St. Thomas/St. John Fishery Management Plan.
- The need for Amendment 3 to develop conservation and management measures for dolphin and wahoo to ensure undersized individuals adequate time to mature and reproduce and, consistent with the Magnuson-Stevens Act and its National Standards, to protect against overfishing or prevent annual catch limits from being exceeded, while achieving optimum yield.



#### Additional Council Guidance Needed

Questions from IPT members: is there specific **rationale for developing these new management measures** for dolphin and wahoo in federal waters around St. Croix and St. Thomas/St. John? **What problem(s) would they help solve**?

- a) size limits generally based on the biology of the species and are used to ensure fish have enough time to reproduce before harvest
- b) recreational bag limits generally used to prevent overharvest of recreational annual catch limits, extend the fishing season, reduce harvest levels or discards, comply with other jurisdictions and reduce enforcement issues
- c) commercial trip limits generally used to slow the rate of harvest to extend the length of the commercial season during a fishing year, or reduce the risk of the annual catch limit being exceeded



#### Additional Council Guidance Needed

Asked for stakeholder input during March 2023 USVI District Advisory Panel meetings.

# St. Thomas and St. John DAP Recommendations

- > no commercial trip limits due to the seasonal nature of the fish
- > size limits for all fishing to protect the reproductive capacity of the stock
- recreational bag limits (per species, not an aggregate) to address the lack of recreational data available and the potential overharvest from that sector (e.g., no recreational catch limits); suggested more conservative limits of 5 person/30 vessel for dolphin and 2 person/6 vessel for wahoo.

#### St. Croix DAP Recommendations

- no commercial trip limits due to the seasonal nature of the fish
- no limitations on the size fish that could be kept
- ➤ recreational bag limits; DAP will ask the STX FAC for feedback on an alternative bag limit before making recommendation to Council



## **Action and Alternatives Summary**

Action (Island/Species)	(a) Size Limits	(b) Rec. Bag Limits	(c) Com. Trip Limits
1 – STX dolphin	<ol> <li>No Action</li> <li>20" FL</li> <li>24" FL</li> </ol>	<ol> <li>No Action</li> <li>10 dolphin/person/day, not to exceed         32 dolphin/vessel/day, whichever is less</li> <li>TBD</li> </ol>	<ol> <li>No Action</li> <li>TBD*</li> <li>TBD*</li> </ol>
2 – STX wahoo	<ol> <li>No Action</li> <li>32" FL</li> <li>40" FL</li> </ol>	<ol> <li>No Action</li> <li>4 wahoo/person/day, not to exceed</li> <li>20 wahoo/vessel/day, whichever is less</li> <li>TBD</li> </ol>	<ol> <li>No Action</li> <li>TBD*</li> <li>TBD*</li> </ol>
3 – STT/STJ dolphin	<ol> <li>No action</li> <li>20" FL</li> <li>24" FL</li> </ol>	<ol> <li>No Action</li> <li>10 dolphin/person/day, not to exceed         32 dolphin/vessel/day, whichever is less</li> <li>5 dolphin/person/day, not to exceed         30 dolphin/vessel/day, whichever is less</li> </ol>	<ol> <li>No Action</li> <li>TBD*</li> <li>TBD*</li> </ol>
4 – STT/STJ wahoo	<ol> <li>No Action</li> <li>32" FL</li> <li>40" FL</li> </ol>	<ol> <li>No Action</li> <li>4 wahoo/person/day, not to exceed         20 wahoo/vessel/day, whichever is less</li> <li>2 wahoo/person/day, not to exceed         6 wahoo/vessel/day, whichever is less</li> </ol>	<ol> <li>No Action</li> <li>TBD*</li> <li>TBD*</li> <li>* Would need to decide unit (whole weight or number of fish)</li> </ol>

#### Size Limits for Dolphin in St. Croix (Action 1a) St. Thomas/St. John (Action 3a)

**Alternative 1** would not establish a minimum size limit for dolphin in federal waters. All sizes of dolphin caught could be kept.

**Alternative 2** would establish a 20" fork length minimum size, which corresponds to size at which approximately 50% of females are mature (i.e., capable of reproducing).

**Alternative 3** would establish a 24" fork length minimum size, which corresponds to size at which approximately 100% of females are mature.

Rationale: ensure undersized individuals time to mature and reproduce.



## Size Limits for Dolphin in St. Croix (Action 1a) St. Thomas/St. John (Action 3a)

- **Alt 2** (20" FL) and **Alt 3** (24" FL) would have more biological benefits than **Alt 1** (no size limit) because smaller dolphin would be returned to the water (= more time to mature and reproduce before entering the fishery), which provides long-term economic benefits.
- **Alts 2** and **3** could have short-term negative socio-economic effects for those fishers that fish for smaller dolphin.
- Alts 2 and 3 could have a greater level of regulatory discards associated with them, which could increase mortality rates (e.g., if hook swallowed whole).
- Both **Alt 2** and **3** would require rulemaking to implement the size limits, additional education and outreach, and could create enforcement issues if the state does not adopt compatible regulations.



## Size Limits for Wahoo in St. Croix (Action 2a) St. Thomas/St. John (Action 4a)

**Alternative 1** would not establish a minimum size limit for wahoo in federal waters. All sizes of wahoo caught could be kept.

**Alternative 2** would establish a 32" fork length minimum size, which corresponds to size at which approximately 50% of females are mature (i.e., capable of reproducing).

**Alternative 3** would establish a 40" fork length minimum size, which corresponds to size at which approximately 100% of females are mature.

Rationale: ensure undersized individuals time to mature and reproduce.



## Size Limits for Wahoo in St. Croix (Action 2a) St. Thomas/St. John (Action 4a)

- **Alt 2** (32" FL) and **Alt 3** (40" FL) would have more biological benefits than **Alt 1** (no size limit) because smaller wahoo would be returned to the water (= more time to mature and reproduce before entering the fishery), which provides long-term economic benefits.
- **Alts 2** and **3** could have short-term negative socio-economic effects for those fishers that fish for smaller wahoo.
- Alts 2 and 3 could have a greater level of regulatory discards associated with them, which could increase mortality rates (e.g., if hook swallowed whole).
- Both **Alt 2** and **3** would require rulemaking to implement the size limits, additional education and outreach, and could create enforcement issues if the state does not adopt compatible regulations.

#### Recreational Bag Limits for Dolphin in St. Croix (Action 1b) St. Thomas/St. John (Action 3b)

**Alternative 1** would not establish a recreational bag limit for dolphin in federal waters. All dolphin caught could be kept.

**Alternative 2** would establish a bag limit of 10 dolphin per person per day, not to exceed 32 dolphin per vessel per day, whichever is less.

**Alternative 3** (TBD) for example, would establish a more conservative bag limit (e.g., 5 dolphin/person/day, 30 dolphin/vessel/day, whichever is less).

Rationale: protect against overfishing the resource.



## Recreational Bag Limits for Dolphin in St. Croix (Action 1b) St. Thomas/St. John (Action 3b)

- Unlimited harvest by the sector (Alt 1) could potentially deplete the local resource.
- **Alt 2** (10/32) and **Alt 3** (TBD) would have greater biological benefits than **Alt 1** (no bag limit) because they would leave more dolphin for future catch, which in turn would provide long-term economic benefits.
- **Alts 2** and **3** could have negative socio-economic effects if recreational fishers typically catch and keep high numbers (e.g., >15 per person) of dolphin per day.
- Alts 2 and 3 could increase discards (e.g., fishers throw fish back that they would usually keep) and discard mortality.
- **Alt 2** would be compatible with new USVI regulations for dolphin; **Alt 1** would not be compatible and could create enforcement issues; if **Alt 3** sets a more conservative bag limit in federal waters, expect minimal enforcement issue.
- Alts 2 and 3 would require rulemaking to implement bag limits and education and outreach for new regulations.

#### Recreational Bag Limits for Wahoo in St. Croix (Action 2b) St. Thomas/St. John (Action 4b)

**Alternative 1** would not establish a recreational bag limit for wahoo in federal waters. All wahoo caught could be kept.

**Alternative 2** would establish a bag limit of 4 wahoo per person per day, not to exceed 20 wahoo per vessel per day, whichever is less.

**Alternative 3** (TBD) for example, would establish a more conservative bag limit (e.g., 2 wahoo/person/day, 6 wahoo/vessel/day, whichever is less).

Rationale: protect against overfishing the resource.



#### Recreational Bag Limits for Wahoo in St. Croix (Action 2b) St. Thomas/St. John (Action 4b)

- Unlimited harvest by the sector (Alt 1) could potentially deplete the local resource.
- **Alt 2** (4/20) and **Alt 3** (TBD) would have greater biological benefits than **Alt 1** (no bag limit) because they would leave more wahoo for future catch, which in turn would provide long-term economic benefits.
- **Alts 2** and **3** could have short-term negative socio-economic effects if recreational fishers typically catch and keep high numbers (e.g., >15 per person) of wahoo per day.
- Alts 2 and 3 could increase discards (e.g., fishers throw fish back that they would usually keep) and discard mortality.
- **Alt 2** would be compatible with new USVI regulations for wahoo; **Alt 1** would not be compatible and could create enforcement issues; if **Alt 3** sets a more conservative bag limit in federal waters, expect minimal enforcement issue.
- Alts 2 and 3 would require rulemaking to implement bag limits and education and outreach for new regulations.

#### Commercial Trip Limits for Dolphin in St. Croix (Action 1c) St. Thomas/St. John (Action 3c)

**Alternative 1** would not establish a commercial trip limit for dolphin in federal waters. All dolphin caught could be kept.

**Alternative 2** would establish a commercial trip limit of xx pounds per trip (*limit TBD*).

**Alternative 3** would establish a commercial trip limit of xx pounds per trip (*limit TBD*).

Rationale: needed.



#### Commercial Trip Limits for Dolphin in St. Croix (Action 1c) St. Thomas/St. John (Action 3c)

- **Alt 1** would not establish a commercial trip limit for dolphin; landings would continue to be monitored to commercial ACL and accountability measure for pelagic stocks that are already in place under the FMP.
- **Alts 2** and **3** could reduce the risk of the ACL being exceeded and thus prevent overfishing in the future.
- **Alts 2** and **3** could have negative socio-economic effects if commercial fishers needed to change fishing effort (e.g., reduce catch per trip, fish more days) or if they are not able to meet market demand.
- Alts 2 and 3 could increase dolphin discards, and discard mortality.
- Alts 2 and 3 would require rulemaking to implement the trip limits.



## Commercial Trip Limits for Wahoo in St. Croix (Action 2c) St. Thomas/St. John (Action 4c)

**Alternative 1** would not establish a commercial trip limit for wahoo in federal waters. All wahoo caught could be kept.

**Alternative 2** would establish a commercial trip limit of xx pounds per trip *limit TBD*).

**Alternative 3** would establish a commercial trip limit of xx pounds per trip (*limit TBD*).

Rationale: needed.



## Commercial Trip Limits for Wahoo in St. Croix (Action 2c) St. Thomas/St. John (Action 4c)

- **Alt 1** would not establish a commercial trip limit for wahoo; landings would continue to be monitored to commercial ACL and accountability measure for pelagic stocks that are already in place under the FMP.
- **Alts 2** and **3** could reduce the risk of the ACL being exceeded and thus prevent overfishing in the future.
- **Alts 2** and **3** could have negative socio-economic effects if commercial fishers needed to change fishing effort (e.g., reduce catch per trip, fish more days) or if they are not able to meet market demand.
- Alts 2 and 3 could increase wahoo discards, and discard mortality.
- Alts 2 and 3 would require rulemaking to implement the trip limits.



## **Action Items and Next Steps**

April 2023

- Council further refines/edits the current proposed management actions and provides rationale, where applicable
- Council selects preferred alternatives, where possible

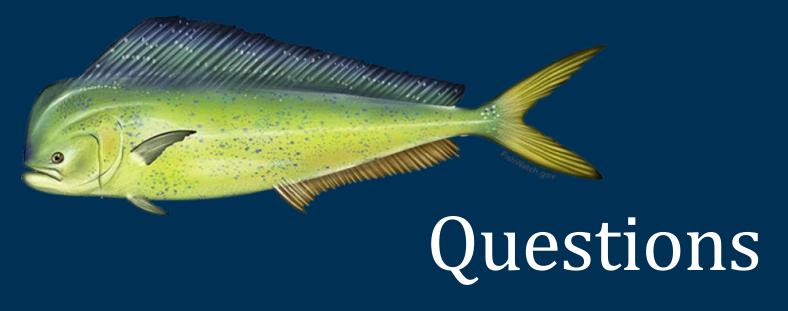
May-July 2023

- IPT updates the actions, alternatives, and Purpose and Need statements and prepares full amendment
- Staff prepares draft codified text (regulations) for Council review

August 2023

- Council reviews final draft amendment and draft codified text
- Council selects preferred alternatives
- If possible, Council approves amendment for submission to Secretary of Commerce (allowing staff to make editorial edits)









# Review Management Measures for Pelagic Species under the St. Croix and St. Thomas/St. John Fishery Management Plans

- All finfish, including Pelagics, must be maintained with head and fins intact<sup>1</sup>
- Currently no gear restrictions for Pelagics<sup>2</sup>;
- Currently no size limits, commercial trip limits, recreational bag limits, or seasonal closures<sup>3</sup> for Pelagics
- Management reference points Sustainable Yield Level (Overfishing Limit proxy), Acceptable Biological Catch, Annual Catch Limits (=Optimum Yield), Annual Catch Targets
- Accountability Measures The Council established the ACT as 90% of the ACL to serve as the AM trigger. If landings<sup>4</sup> exceed the ACT, the Council in consultation with the SEFSC would assess whether corrective action is needed.
- Described Essential Fish Habitat for Pelagics

<sup>&</sup>lt;sup>4</sup> following implementation of the FMPs, the landings compared to the ACLs and ACTs would start with the most recent single year and then progress up to a 3-year average



<sup>&</sup>lt;sup>1</sup> exceptions for bait and consumption at sea

<sup>&</sup>lt;sup>2</sup> under the Trawl and Net Gear Amendment, any gear restrictions selected would apply to the Pelagic species managed in the FMPs

<sup>&</sup>lt;sup>3</sup> exceptions for seasonal closures that prohibit <u>all fishing</u> in the USVI: STT/STJ - Grammanik Bank Feb 1-Apr 30 and Hind Bank MCD year round; STX – Lang Bank Dec 1 – last day of Feb and Mutton Snapper Spawning Aggregation area Mar 1 – June 30

## Management Reference Points for Pelagics

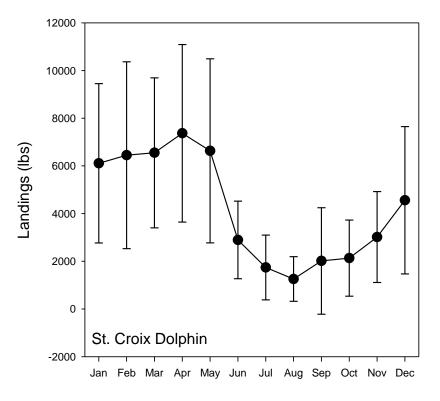
SYL (OFL proxy), ABC, ACL (=OY), ACT listed are in pounds whole weight.

STT/STJ FMP	SYL	ABC	ACL	ACT
Dolphin	20,585	10,293	9,778	8,800
Wahoo	14,482	7,241	6,879	6,191

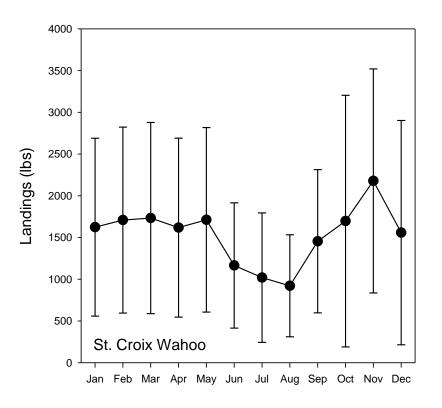
STX FMP	SYL	ABC	ACL	ACT
Dolphin	182,386	91,193	86,633	77,970
Wahoo	57,390	28,695	27,260	24,534



# Dolphin and Wahoo average commercial landings per month: St. Croix 2000-2021



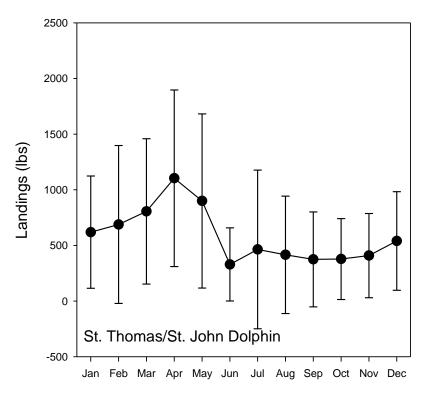
For dolphin, the highest landings are in April



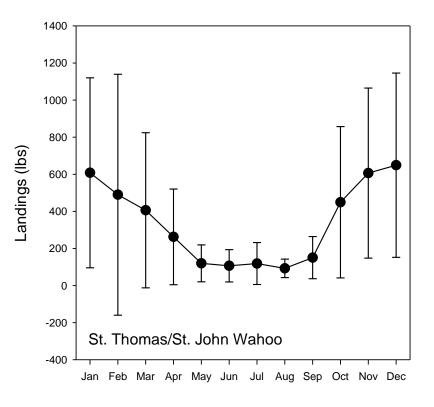
For wahoo, the highest landings are in November



# Dolphin and Wahoo average commercial landings per month: St. Thomas and St. John 2000-2021



For dolphin, the highest landings are in April



For wahoo, the highest landings are in November through January



# PART 622 - FISHERIES OF THE CARIBBEAN

- <u>Hook-and-line gear</u> means automatic reel, bandit gear, buoy gear, handline, longline, and rod and reel.
- Longline means a line that is deployed horizontally to which gangions and hooks are attached. A longline may be a bottom longline, i.e., designed for use on the bottom, or a pelagic longline, i.e., designed for use off the bottom. The longline hauler may be manually, electrically, or hydraulically operated.
- <u>Bottom longline</u> means a longline that is deployed, or in combination with gear aboard the vessel, e.g., weights or anchors, is capable of being deployed to maintain contact with the ocean bottom.
- <u>Pelagic longline</u> means a longline that is suspended by floats in the water column and that is not fixed to or in contact with the ocean bottom.

#### PART 635 - ATLANTIC HMS

- Longline means fishing gear that is set horizontally, either anchored, floating, or attached to a vessel, and that consists of a mainline or groundline with three or more leaders (gangions) and hooks, whether retrieved by hand or mechanical means.
- <u>Bottom longline</u> means a longline that is deployed with enough weights and/or anchors to maintain contact with the ocean bottom. For the purposes of this part, a vessel is considered to have bottom longline gear on board when a power-operated longline hauler, a mainline, weights and/or anchors capable of maintaining contact between the mainline and the ocean bottom, and leaders (gangions) with hooks are on board....
- <u>Pelagic longline</u> means a longline that is suspended by floats in the water column and that is not fixed to or in contact with the ocean bottom....
- Green-stick gear means an actively trolled mainline attached to a
  vessel and elevated or suspended above the surface of the water
  with no more than 10 hooks or gangions attached to the mainline.
  The suspended line, attached gangions and/or hooks, and catch
  may be retrieved collectively by hand or mechanical means.
  Green-stick does not constitute a pelagic longline or a bottom
  longline as defined in this section.

# PART 622 - FISHERIES OF THE CARIBBEAN

Buoy gear means fishing gear that fishes vertically in the water column that consists of a single drop line suspended from a float, from which no more than 10 hooks can be connected between the buoy and the terminal end, and the terminal end contains a weight that is no more than 10 lb (4.5 kg). The drop line can be rope (hemp, manila, cotton or other natural fibers; nylon, polypropylene, spectra or other synthetic material) or monofilament, but must not be cable or wire. The gear is free-floating and not connected to other gear or the vessel. The drop line must be no greater than 2 times the depth of the water being fished. All hooks must be attached to the drop line no more than 30 ft (9.1 m) from the weighted terminal end. These hooks may be attached directly to the drop line; attached as snoods (defined as an offshoot line that is directly spliced, tied or otherwise connected to the drop line), where each snood has a single terminal hook; or as gangions (defined as an offshoot line connected to the drop line with some type of detachable clip), where each gangion has a single terminal hook.

#### PART 635 - ATLANTIC HMS

Buoy gear means a fishing gear consisting of one or more floatation devices supporting a single mainline to which no more than two hooks or gangions are attached.



## Amendment 1 to the Island-based FMPs: Modification of Buoy Gear

- Modify the authorized gear types to prohibit the use of buoy gear by the recreational sector in federal waters.
- Modify the regulatory definition of buoy gear to increase the maximum number of hooks from 10 to 25 in federal waters for fisheries where buoy gear is authorized.
  - St. Croix and St. Thomas/St. John Reef Fish (managed species), commercial fishery
  - St. Croix and St. Thomas/St. John Pelagic (managed species), commercial fishery
  - St. Croix and St. Thomas/St. John Pelagic (non-managed species), commercial fishery
  - St. Croix and St. Thomas/St. John (non-managed species), commercial fishery
  - St. Croix and St. Thomas/St. John (non-managed species), recreational fishery



# Percent Commercial Landings by Gear: St. Thomas/St. John and St. Croix for 2000-2021

St. Thomas and St. John			
Gear Type	Dolphin	Wahoo	
BY HAND	-	0.07	
CASTNET	0.03	<b>-</b>	
COMBINED GEARS	0.40	0.82	
DIVING	0.04	0.49	
FISH TRAP	0.38	0.30	
HANDLINE	7.38	2.76	
HOOK AND LINE WITH POWER WINCH	1.50	5.09	
HOOK AND LINE-UNKNOWN TYPE	7.51	5.97	
LINE FISHING	48.55	59.66	
LOBSTER TRAP	0.00	<u>-</u>	
LONGLINE	0.00	0.02	
ROD AND REEL	29.58	23.66	
SEINE NET	2.47	-	
TRAMMEL NET	0.01	<b>-</b>	
TRAP-UNKNOWN TYPE	0.05	<u>-</u>	
TRAPS	1.68	0.20	
TROLLED HOOK AND LINE	0.40	0.70	
UNKNOWN	0.01	0.27	

St. Croix		
Gear Type	Dolphin	Wahoo
BOTTOM FISHING HOOK AND LINE	-	0.03
BUOY (YO-YO)	0.00	-
CASTNET	0.06	0.12
COMBINED GEARS	0.14	0.12
DIVING	0.11	0.02
DIVING WITH NETS	0.03	0.00
DRIFT LONGLINE	0.01	0.04
GILLNET	0.02	0.02
HANDLINE	34.50	49.17
HOOK AND LINE WITH POWER WINCH	0.13	0.73
HOOK AND LINE-UNKNOWN TYPE	0.47	0.54
LINE FISHING	62.78	46.44
LONGLINE	0.64	0.54
ROD AND REEL	0.60	1.78
SEINE NET	0.16	0.19
SPEARFISHING WITH SCUBA	0.02	0.06
TRAPS	0.15	0.04
UNKNOWN	0.18	0.16



# Open Access Commercial Permits: Commercial Caribbean Small Boat Permits

<b>Home Port State</b>	# Permits
Pennsylvania	1
North Carolina	1
South Carolina	3
Florida	28
Puerto Rico	18
Texas	1
U.S. Virgin Islands	2

Source: All Southeast Regional Office Vessel Permits (updated 03/06/23)

#### **Commercial Caribbean Small Boat Permits**

Commercial vessels less than or equal to 45' in length that want to fish for and sell Bigeye, Albacore, Yellowfin, and Skipjack (BAYS) tunas, and swordfish caught in Puerto Rico and the U.S. Virgin Islands must have this permit. No other Commercial Atlantic Shark, Swordfish, or Tuna permit can be applied for along with this permit.

#### **Pelagic Longline Fishery**

Longliners target bluefin and BAYS tunas and swordfish. Dolphinfish and wahoo are caught as bycatch in the longline fisheries. (See Table 5.22 in the 2021 Stock Assessment and Fishery Evaluation Report for Atlantic Highly Migratory Species).

