

# Management Measures for Pelagic Species in Federal Waters off Puerto Rico, St. Thomas and St. John, and St. Croix



DRAFT

Draft Scoping/Options Paper

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# 1. Background

The Puerto Rico Fishery Management Plan (FMP), the St. Thomas and St. John FMP, and the St. Croix FMP (collectively the island-based FMPs) were approved by the Secretary of Commerce in September 2020. Select pelagic species were included for management in federal waters under the FMPs (Table 1). Pelagic species were not managed under the U.S. Caribbean-wide FMPs, and thus are new to federal management. The island-based FMPs established annual catch limits (ACL), annual catch targets, and accountability measures for the pelagic stocks and stock complexes (Appendix A), but did not establish size limits or bag and trip limits for the stocks and stock complexes.

This paper provides information to assist the Caribbean Fishery Management Council (Council) in establishing additional management measures for the pelagic species to control or reduce effort, if desired.

**Table 1.** Pelagic species managed under the island-based fishery management plans.

Puerto Rico FMP	St. Thomas/St. John FMP	St. Croix FMP
Tripletail ( <i>Lobotes surinamensis</i> ) Dolphin ( <i>Coryphaena hippurus</i> ) Pompano dolphin ( <i>Coryphaena equiselis</i> ) Little tunny ( <i>Euthynnus alletteratus</i> ) Blackfin tuna ( <i>Thunnus atlanticus</i> ) King mackerel ( <i>Scomberomorus cavalla</i> ) Cero mackerel ( <i>Scomberomorus regalis</i> ) Wahoo ( <i>Acanthocybium solandri</i> ) Great barracuda ( <i>Sphyraena barracuda</i> )	Dolphin ( <i>Coryphaena hippurus</i> ) Wahoo ( <i>Acanthocybium solandri</i> )	Dolphin ( <i>Coryphaena hippurus</i> ) Wahoo ( <i>Acanthocybium solandri</i> )

## 1.1 Guidance from the Council

At the April 2022 Council meeting, National Marine Fisheries Service staff presented options for management measures that the Council could consider developing for the pelagic species included in the island-based FMPs. Management measures described in the presentation included recreational bag limits, commercial trip limits, and size limits. The Council directed staff to prepare an options paper with size and bag/trip limits for pelagic species managed under the island-based FMPs.

At previous Council meetings, the Council's District Advisory Panels recommended the Council consider establishing size and bag limits for recreational fishing in federal waters (e.g., at the August 2019 and December 2021 regular meetings).

The objectives of the 179<sup>th</sup> Council Meeting (August 11-12, 2022) with respect to this topic are for the Council to review and provide guidance to draft a purpose and need for this action,

provide guidance to staff on the range of options to develop, as well as discuss timing for an amendment.

### **Draft Purpose and Need**

**\*Note:** The following Purpose and Need statements are a draft for the Council's consideration and may change, pending Council's guidance.

The need is to develop conservation and management measures to protect against overfishing and ensure optimum yield for pelagic species new to federal management.

The purpose of this action is to establish size limits, bag limits, and trip limits (per Council direction) for pelagic species, which are new to management under the island-based FMPs.

## 1.2 Description of the U.S. Caribbean Pelagic Fisheries

Pelagic and coastal pelagic species are targeted by commercial and recreational fishermen in both Puerto Rico and the U.S. Virgin Islands (USVI). The new island-based FMPs will manage a select number of pelagic species.

### **Puerto Rico**

In Puerto Rico, commercial fishermen primarily use hook-and-line gear, specifically handlines, to target coastal migratory species such as dolphin, wahoo, cero mackerel, and king mackerel (Agar and Shvlini 2016). About 59% of the fishermen using hook-and-line gear stated they primarily fish in Commonwealth waters (<9 nautical miles), 39% fish in both federal and Commonwealth waters, and <2% fish solely in federal waters (9-200 nautical miles) (Agar and Shvlini 2016). Between 1983 and 2002, pelagics (tuna, dorado, wahoo, marlin, sailfish and swordfish) comprised approximately 7.6% of the total commercial landings (Salas et al. 2011). Of the pelagic species reported in the most recent Fisheries of the United States Report (NMFS 2021), dolphinfish accounted for 8% of the total landings for finfish species in Puerto Rico. In Puerto Rico, there are two-dolphinfish seasons: October through March for the northern stock and March to June for the southern stock (Rodríguez-Ferrer et al. 2006).

Currently, few data are available for recreational fishing activities in Puerto Rico. The National Marine Fisheries Service (NMFS) implemented its Marine Recreational Fisheries Sampling Survey Program in Puerto Rico in 2000, but the program was suspended in 2017 and has not resumed to date. A comparison of commercial and recreational fishing in Puerto Rico from 2000-2003, found that commercial fishermen landed more dolphin by weight, but smaller sized fish (414-1100 mm fork length) than both the recreational fishermen (700 - 1100 mm FL) and tournament fishermen (800 - 1149 mm FL) (Rodríguez-Ferrer et al. 2006).

In Puerto Rico, tournaments are an important part of the recreational fishing activities. Before regulations (i.e., bag limits) for dolphinfish were implemented by Puerto Rico in 2005, catches of 50 or more fish per boat per day were observed, with high numbers of immature fish and females landed. Following the 2005 bag limits regulations, the tournaments encouraged fishermen to land bigger fish, which reduced the tendency to land immature fish. Dolphinfish, great barracuda, wahoo, and tunas are the most often observed bycatch species during the tournaments. Rodríguez-Ferrer et al. (2007) evaluated data collected from fishing tournaments in Puerto Rico from 2000 to 2006, which included size information on landed dolphin (100-1525 mm), wahoo (570-1640 mm), mackerel (652-790 mm), and great barracuda (136-1420 mm).

### **U.S. Virgin Islands**

The USVI commercial fisheries in St. Thomas and St. John and in St. Croix are small scale, artisanal fisheries that primarily catch benthic, coastal pelagic, and deep-water pelagic fish as well as spiny lobster and queen conch (Kojis et al. 2017). The fisheries are operated almost exclusively from small boats and the fishermen market the daily catch themselves. The shelf

surrounding St. Croix is smaller than the shelf around St. Thomas and St. John, so deeper water is closer to shore and, therefore, pelagic fish are more accessible to the island's small boat fishery.

Dolphinfish and wahoo are harvested by about a quarter of fishermen on St. Thomas and St. John and more than half of the fishermen on St. Croix (Kojis et al. 2017). Most commercial fishermen fish year-round, but a few fish seasonally: October to November for dolphinfish, kingfish, tuna, wahoo in St. Thomas and St. John, and November to May for dolphinfish and other migratory pelagic fish in St. Croix (Kojis et al. 2017). In the USVI, dolphin landings have a primary peak in the spring and a secondary peak in the fall and wahoo landings have a single peak in fall/winter (Toller et al. 2005). In 2019, dolphinfish accounted for 6% of the total commercial landings in the USVI and wahoo for 3% (NMFS 2021).

As in Puerto Rico, information on recreational fishing in the USVI is very limited. Most data are collected from fishing tournaments or special projects (Garcia-Moliner et al. 2002). A survey of recreational fishermen found that three broad types of fishing occur in the USVI: (1) big game fishing on large vessels (>9 meters) that primarily target billfish; (2) private boat fishing conducted on smaller boats that target reef fish and offshore pelagic fish; and (3) fishing from shore (e.g., beach, pier, dock), which primarily targets reef fish (Kojis and Tobias 2016). Most recreational fishing is done using hook-and-line fishing gear types such as plastic spool (Yo-Yo reel) or rod and reel. On St. Thomas and St. John, a higher number of fishermen participated in offshore and inshore trolling (65% and 61%, respectively) than on St. Croix (55% and 42%, respectively). These methods are primarily used to catch tuna, mackerel, dolphinfish and jacks.

Dolphin, wahoo, and billfish tournaments occur during the spring and summer migrations of pelagic species. Fourteen percent of the USVI recreational fishermen surveyed participated in fishing tournaments (22% from St. Thomas and St. John and 6% from St. Croix) (Kojis and Tobias 2016). Toller et al. (2005) identified five types of sportfishing tournaments in the USVI: shore-based handline, boat-based handline, offshore coastal pelagic, offshore pelagic, and marlin. Of those tournaments, landings from 2000 to 2005 on St. Thomas were dominated by dolphin, barracuda, and wahoo (Toller et al. 2005). On St. Croix, tournament landings during the same period were dominated by dolphin and wahoo. A greater number, weight and diversity of coastal pelagics were landed in St. Thomas tournaments than in St. Croix tournaments (Toller et al. 2005). An average of 12.9 boats that participated in offshore pelagic tournaments in St. Thomas (range 5 to 27) and 11.4 boats in St. Croix (range 7 to 20). Both fishing effort and catch rates were highly variable within and among years.

In the USVI, declines in reef fish stocks prompted managers to encourage commercial fishermen to shift fishing effort towards seasonal stocks (i.e. dolphin, wahoo, and tuna) (Toller et al. 2005). If USVI reef fish stocks should continue to decline, it can be predicted that commercial effort will progressively shift towards pelagic resources. Therefore, managers must be aware of the potential for conflict between commercial and recreational fishermen over the shared resources.

## 2. Potential Actions and Management Options

### Action 1: Recreational Bag Limits

#### A. Puerto Rico

**Option 1.** No action. There are no bag limits for the recreational harvest of pelagic stocks in federal waters off Puerto Rico.

**Option 2.** Establish a recreational bag limit for [pelagic stock] in federal waters. *(For Puerto Rico, pelagic stocks include: dolphin, pompano dolphin, wahoo, king mackerel, cero mackerel, little tunny, blackfin tuna, tripletail, great barracuda).*

2a. 10 dolphin per fisher/day or 30 dolphin per vessel/day, whichever is less. *(This would be compatible with Puerto Rico DNER regulations)*

2b. 5 dolphin per fisher/day or 15 dolphin per vessel/day, whichever is less. *(Recommended by the Puerto Rico District Advisory Panel December 2021).*

2c. X [pelagic stock] per fisher/day or XX [pelagic stock] per vessel/day, whichever is less

**Option 3.** Establish an aggregate recreational bag limit for [pelagic stocks or stock complexes] in federal waters.

*(For Puerto Rico, stock complexes include: Dolphinfish [dolphin and pompano dolphin], Tuna [little tunny and blackfin tuna], and Mackerels [king mackerel and cero mackerel]).*

3a. For wahoo, king mackerel, and cero mackerel combined, 5 of each species per fisher/day or 10 total per vessel/day. *(This would be compatible with Puerto Rico DNER regulations).*

3b. For [pelagic stocks or stock complex] combined, X per person per day or XX per vessel/day.



## B. St. Thomas and St. John

**Option 1.** No action. There are no bag limits for the recreational harvest of pelagic species in federal waters off St. Thomas and St. John.

**Option 2.** Establish a recreational bag limit for [dolphin, wahoo] in federal waters.

2a. 10 dolphin per fisher/day or 60 dolphin per vessel/day, whichever is less.  
*(Recommended by the St. Thomas and St. John Fishery Advisory Committee [FAC] at the August 2019 CFMC meeting<sup>1</sup>).*

2b. 2 wahoo per fisher/day or 6 wahoo per vessel/day, whichever is less.  
*(Recommended by the St. Thomas and St. John FAC at the August 2019 CFMC meeting).*

**Option 3.** Establish an aggregate recreational bag limit for [dolphin, wahoo] in federal waters.

3a. No more than 10 dolphin or wahoo, per person, per day, not to exceed 32 per vessel per day, and not to exceed 4 wahoo per person, per day, or 20 wahoo per vessel, per day. *(This would be compatible with the U.S. Virgin Islands [USVI] proposed regulations).*

## C. St. Croix

**Option 1.** No action. There are no bag limits for the recreational harvest of pelagic species in federal waters off St. Croix.

**Option 2.** Establish a recreational bag limit for [dolphin, wahoo] in federal waters.

2a. X dolphin per fisher/day or XX dolphin per vessel/day, whichever is less.

2b. X wahoo per fisher/day or XX wahoo per vessel/day, whichever is less.

**Option 3.** Establish an aggregate recreational bag limit for [dolphin, wahoo] in federal waters.

3a. No more than 10 dolphin or wahoo, per person, per day, not to exceed 32 per vessel per day, and not to exceed 4 wahoo per person, per day, or 20 wahoo per vessel, per day. *(This would be compatible with the USVI proposed regulations).*

## Discussion

Establishing recreational bag limits for the pelagic species new to management would allow the Council to limit the amount of fish removed from the fishery. The Council could also consider revising the accountability measure (AM) provision for pelagic stocks/stock complexes to

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<sup>1</sup> St. Thomas and St. John Fishery Advisory Committee [presentation](#); CFMC August 2019.

include recreational bag limits, where AMs are established for the recreational sector, as the responsive action that the Council and NMFS take when the AM has been triggered (i.e., when landings exceed the annual catch target). For example, if the recreational landings for dolphin exceed the recreational ACT, the Council and NMFS could implement a recreational bag limit for dolphin in federal waters instead of another management action such as a shortening of the fishing season for dolphin.

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## Action 2: Commercial Trip Limits

### A. Puerto Rico

**Option 1.** No action. There are no commercial trip limits for the harvest of pelagic stocks in federal waters off Puerto Rico.

**Option 2.** Establish a commercial trip limit for [pelagic stock] in federal waters. (*For Puerto Rico, pelagic stocks include: dolphin, pompano dolphin, wahoo, king mackerel, cero mackerel, little tunny, blackfin tuna, tripletail, great barracuda*).<sup>2</sup>

*The average pounds of dolphin<sup>3</sup> landed per trip from 2003-2019 was 67.3 lb.*

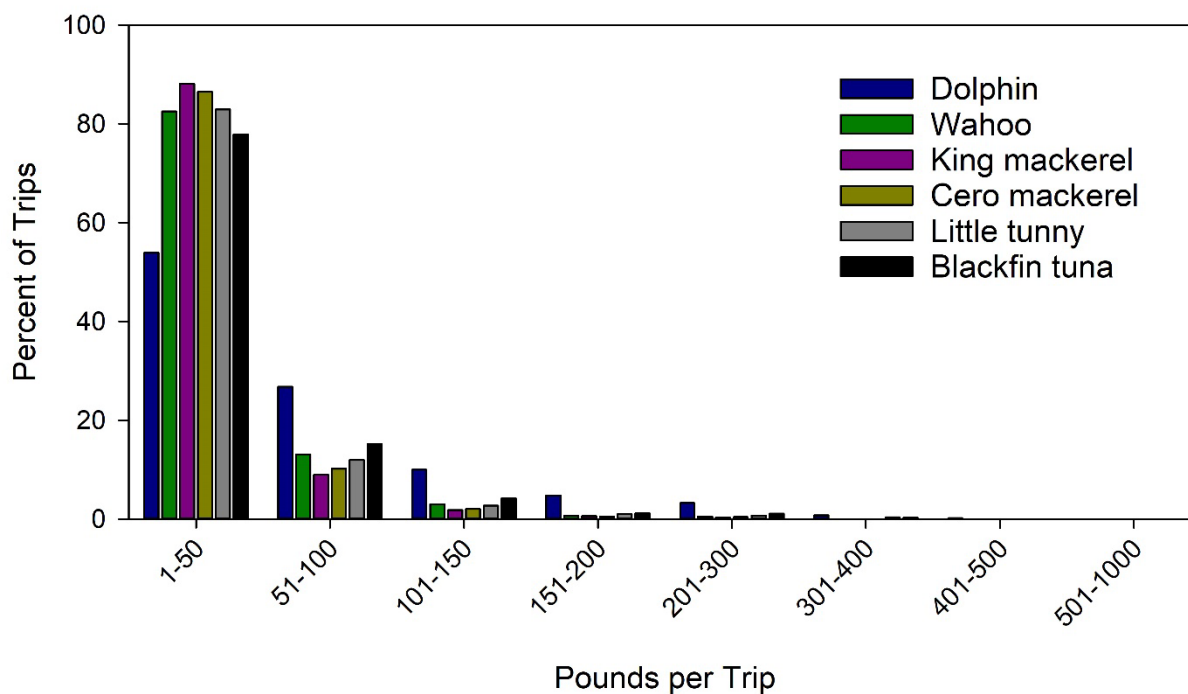
*The average pounds of wahoo landed per trip from 2003-2019 was 34.5 lb.*

*The average pounds of king mackerel landed per trip from 2003-2019 was 27.2 lb.*

*The average pounds of cero mackerel landed per trip from 2003-2019 was 28.9 lb.*

*The average pounds of little tunny per trip from 2003-2019 was 34.6 lb.*

*The average pounds of blackfin tuna landed per trip from 2003-2019 was 40.1 lb.*



**Figure 1.** Distribution of pounds (reported) of dolphin, wahoo, king mackerel, cero mackerel, little tunny and blackfin tuna landed per commercial fishing trip in Puerto Rico from 2003-2019.

<sup>2</sup> Tripletail and great barracuda were not landed each year, so those not included in preliminary analysis.

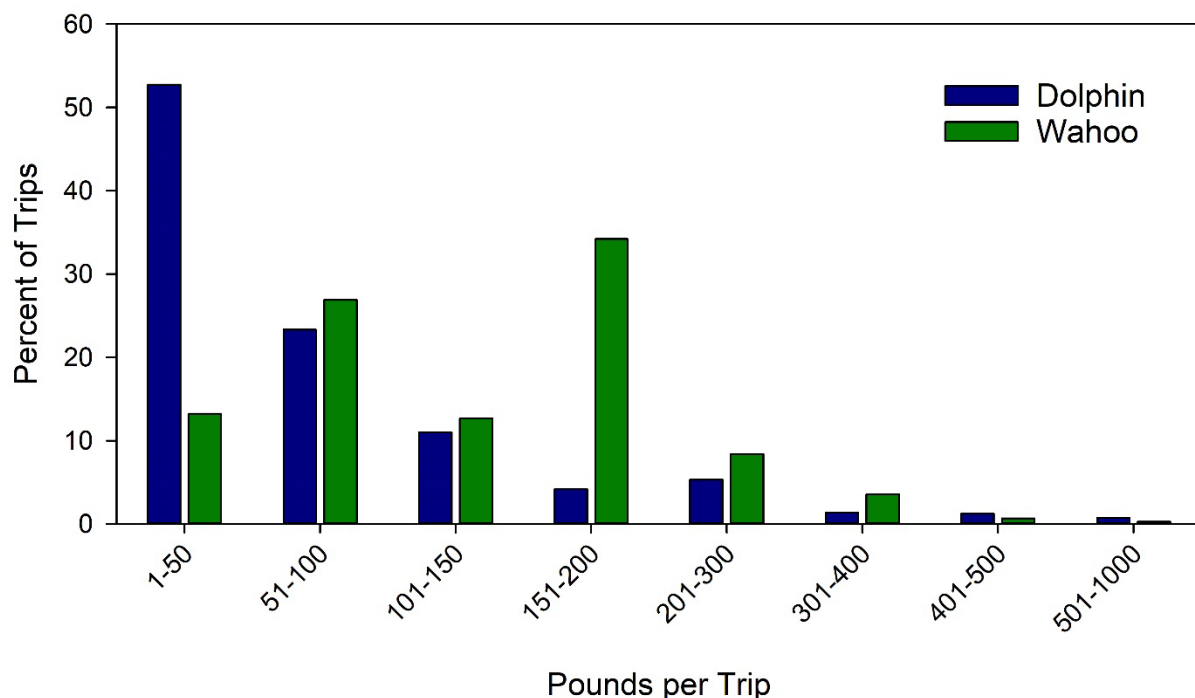
<sup>3</sup> Only two trips reported landings of pompano dolphin from 2003-2019.

**Option 3.** Establish a commercial trip limit for [pelagic stock complex] in federal waters. *(For Puerto Rico, stock complexes include: Dolphinfish [dolphin and pompano dolphin], Tuna [little tunny and blackfin tuna], and Mackerels [king mackerel and cero mackerel]).*

## B. St. Thomas and St. John

**Option 1.** No action. There are no commercial trip limits for the harvest of pelagic stocks in federal waters off St. Thomas and St. John.

**Option 2.** Establish a commercial trip limit for [dolphin, wahoo] in federal waters.  
*The average pounds of dolphin landed per trip from 2012-2020 was 80.6 lb.*  
*The average pounds of wahoo landed per trip from 2012-2020 was 79.5 lb.*



**Figure 2.** Distribution of pounds of dolphin (black bars) and wahoo (gray bars) landed per commercial fishing trip in St. Thomas and St. John from 2012-2020.

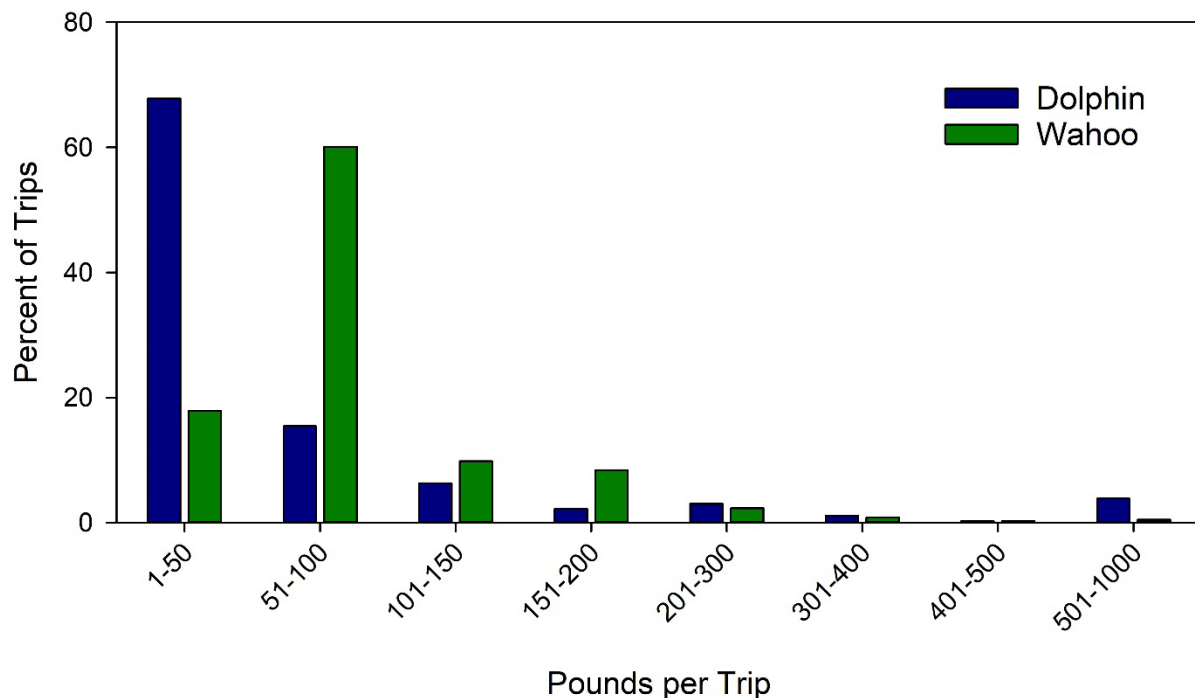
## C. St. Croix

**Option 1.** No action. There are no commercial trip limits for the harvest of pelagic stocks in federal waters off St. Croix.

**Option 2.** Establish a commercial trip limit for [dolphin, wahoo] in federal waters.

*The average pounds of dolphin landed per trip from 2012-2020 was 136.7 lb.*

*The average pounds of wahoo landed per trip from 2012-2020 was 89.9 lb.*



**Figure 3.** Distribution of pounds of dolphin (black bars) and wahoo (gray bars) landed per commercial fishing trip in St. Croix from 2012-2020.

### Discussion

Establishing commercial trip limits for the pelagic species new to management would allow the Council to limit the amount of fish removed from the fishery. The Council could also consider revising the AM provision for pelagic stocks/stock complexes to include commercial trip limits as the responsive action that the Council and NMFS take when the AM has been triggered (i.e., when landings exceed the annual catch target). For example, if the landings for dolphin exceed the ACT, the Council and NMFS could implement a commercial trip limit for dolphin in federal waters instead of another management action such as a shortening of the fishing season for dolphin.

## Action 3: Size Limits

### A. Puerto Rico

**Option 1.** No action. There are no size limits for the commercial or recreational harvest of pelagic stocks in federal waters off Puerto Rico.

**Option 2.** Establish a commercial and recreational size limit for [pelagic stock] in federal waters. (*For Puerto Rico, pelagic stocks include: dolphin, pompano dolphin, wahoo, king mackerel, cero mackerel, little tunny, blackfin tuna, tripletail, great barracuda*).

2a. Based on life history parameters (e.g., size at maturity).

*For dolphin, size at 50% maturity is 18" fork length (FL) for females.*<sup>4</sup>

*For wahoo, size at 50% maturity is 36" FL for females.*<sup>5</sup>

*For king mackerel, size at 50% maturity is 23" FL for females.*<sup>6</sup>

*For cero mackerel, size at 50% maturity is 16" FL for females.*

2b. To be compatible with state regulations.<sup>7</sup>

*For king mackerel, a 20" FL minimum.*

*For cero mackerel, a 16" FL minimum.*

2c. Based on other fishery information (e.g., size reported in trip intercept program data or expert opinion).

### B. St. Thomas and St. John

**Option 1.** No action. There are no size limits for the commercial or recreational harvest of pelagic stocks in federal waters off St. Thomas and St. John.

**Option 2.** Establish a commercial and recreational size limit for [dolphin, wahoo] in federal waters.

2a. Based on life history parameters (e.g., size at maturity).

*For dolphin, size at 50% maturity is 18" fork length (FL) for females.*<sup>8</sup>

*For wahoo, size at 50% maturity is 36" FL for females.*<sup>9</sup>

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<sup>4</sup> Schwenke and Buckel 2008. <https://spo.nmfs.noaa.gov/sites/default/files/pdf-content/2008/1061/schwenke.pdf>

<sup>5</sup> Maki Jenkins and McBride 2009. <https://www.publish.csiro.au/mf/pdf/MF08211>

<sup>6</sup> Figuerola-Fernández et al. 2007. <https://core.ac.uk/download/pdf/19540474.pdf>

<sup>7</sup> [Puerto Rico Fishing Regulations](#) 2010 (#7949), Department of Natural and Environmental Resources

<sup>8</sup> Schwenke and Buckel 2008. <https://spo.nmfs.noaa.gov/sites/default/files/pdf-content/2008/1061/schwenke.pdf>

<sup>9</sup> Maki Jenkins and McBride 2009. <https://www.publish.csiro.au/mf/pdf/MF08211>

2b. Based on other fishery information (e.g., size reported in trip intercept program data or expert opinion).

*For dolphin, a 24" FL minimum (Recommended by the St. Thomas and St. John Fishery Advisory Committee at the August 2019 CFMC meeting<sup>10</sup>).*

*For wahoo, a 36" FL minimum (Recommended by the St. Thomas and St. John Fishery Advisory Committee at the August 2019 CFMC meeting).*

## C. St. Croix

**Option 1.** No action. There are no size limits for the commercial or recreational harvest of pelagic stocks in federal waters off St. Croix.

**Option 2.** Establish a commercial and recreational size limit for [dolphin, wahoo] in federal waters.

2a. Based on life history parameters (e.g., size at maturity).

*For dolphin, size at 50% maturity is 18" fork length (FL) for females.<sup>11</sup>*

*For wahoo, size at 50% maturity is 36" FL for females.<sup>12</sup>*

2b. Based on other fishery information (e.g., size reported in trip intercept program data or expert opinion).

## Discussion

Establishing size limits for the pelagic species new to management would allow the Council to restrict the landing of fish below a certain size, reducing the amount of fish harvested before they have a chance to reproduce. The Council could also consider revising the AM provision for pelagic stocks/stock complexes to include size limits as the responsive action that the Council and NMFS take when the AM has been triggered (i.e., when landings exceed the annual catch target). For example, if the landings for dolphin exceed the ACT, the Council and NMFS could implement a size limit for dolphin in federal waters instead of another management action such as a shortening of the fishing season for dolphin.

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<sup>10</sup> St. Thomas and St. John Fishery Advisory Committee [presentation](#); CFMC August 2019.

<sup>11</sup> Schwenke and Buckel 2008. <https://spo.nmfs.noaa.gov/sites/default/files/pdf-content/2008/1061/schwenke.pdf>

<sup>12</sup> Maki Jenkins and McBride 2009. <https://www.publish.csiro.au/mf/pdf/MF08211>

## References

- Agar, J.J. and M. Shivilani. 2016. Socio-economic study of the hook and line fishery in the Commonwealth of Puerto Rico (2014). NOAA Technical Memorandum NMFS-SEFSC-700. 34 p. doi:10.7289/V5/TM-SEFSC-700
- Kojis B.L. and W.J. Tobias. 2016. Survey of boat-based recreational fishers in the US Virgin Islands. Proceedings of the 13th International Coral Reef Symposium, Honolulu: 170-183. Available at: <http://coralreefs.org/wp-content/uploads/2019/01/Session-21-Kojis-Tobias.pdf>
- National Marine Fisheries Service (2021) Fisheries of the United States. 2019. U.S. Department of Commerce, NOAA Current Fishery Statistics No. 2019 Available at: <https://www.fisheries.noaa.gov/resource/document/fisheries-united-states-2019>
- Rodríguez-Ferrer, G., Y. Rodríguez-Ferrer, D. Matos-Caraballo, and C. Lilyestrom. 2006. Comparison of Dolphinfin (*Coryphaena hippurus*) Commercial and Recreational Fisheries in Puerto Rico during 2000-2003. 57th Gulf and Caribbean Fisheries Institute. Available at: [https://aquadocs.org/bitstream/handle/1834/29780/gcfi\\_57-23.pdf?sequence=1&isAllowed=y](https://aquadocs.org/bitstream/handle/1834/29780/gcfi_57-23.pdf?sequence=1&isAllowed=y)
- Rodríguez-Ferrer, G., Y. Rodríguez-Ferrer, and C. Lilyestrom. 2007. Evaluation of Statistical Data from Fishing Tournaments in Puerto Rico Collected from 2000 - 2006. Proceedings of the 60th Gulf and Caribbean Fisheries Institute. Punta Cana, Dominican Republic. Available at: <https://nsgl.gso.uri.edu/flsgp/flsgpw07001/data/papers/058.pdf>
- Salas, S., R. Chuenpagdee, A. Charles, and J.C. Seijo. 2011. Coastal Fisheries of Latin America and the Caribbean. FAO Fisheries and Aquaculture Technical Paper. No. 544. 1-13, 285-315 pp. Available at: <https://caribbeanfmc.com/pdfs/Coastal%20fisheries%20Latin%20America%20-%20Caribbean.pdf>
- Toller, W., C. O'Sullivan, and R. Gomez. 2005. U.S. Virgin Islands Recreational Fishery Assessment Project: Survey of Fishing Tournaments in the U.S. Virgin Islands, October 1, 2000 to September 30, 2005. 54 pg.



## Appendix A. Federal Management of Pelagic Species in the Southeast Region

In 1983, the Council developed a Draft Fishery Management Plan for coastal migratory pelagic species (CCMP FMP) and an associated environmental impact statement (CFMC 1983). The species considered under the CCMP FMP included cero mackerel, king mackerel, great barracuda, dolphin, wahoo, almaco jack, bar jack, greater amberjack, horse-eye jack, yellow jack, blue runner, and rainbow runner. The Draft FMP was submitted in April 1983 at the 46th Council meeting but was withdrawn in December 1983 (48th CFMC meeting). As such, the CCMP FMP was never formalized.

In February 2001, under the guidance of NMFS and NOAA General Counsel, the Caribbean Fishery Management Council, Gulf of Mexico Fishery Management Council (GMFMC), and South Atlantic Fishery Management Council (SAFMC) met in a joint session and approved a Dolphin Wahoo FMP for submission to the Secretary of Commerce for formal review. However, prior to submission and prompted by litigation, it was determined that the joint FMP did not meet mandates of the Sustainable Fisheries Act relative to Essential Fish Habitat. The Councils, NMFS and NOAA General Counsel worked to revise the FMP, but were advised by NOAA General Counsel that the litigation would require the Gulf of Mexico and Caribbean Councils to incorporate bycatch measures in the FMP rather than deferring implementation through the proposed framework procedures. In July 2002, the South Atlantic Council requested the Secretary of Commerce approve their withdrawal from a joint Dolphin and Wahoo FMP with the Caribbean and Gulf of Mexico Councils and approve the Dolphin and Wahoo FMP of the Atlantic ([SAFMC 2003](#)).

Of the pelagic species new to federal management in the U.S. Caribbean under the island-based FMPs (Table 1), dolphin, pompano dolphin, and wahoo are managed by the South Atlantic Fishery Management Council under the Dolphin and Wahoo FMP ([SAFMC 2003](#)), and king mackerel is managed jointly by the Gulf of Mexico Fishery Management Council and South Atlantic Fishery Management Council under the Coastal Migratory Pelagic FMP ([GMFMC and SAFMC 1985](#)). A summary of the rationale for certain management measures for these species, including size limits, recreational bag limits, and commercial trip limits, are described below and current regulations for the species are listed in Table A.1.

The **size limits** considered for **dolphin** were based on life history information coupled with size distribution of dolphinfish in both the commercial (by gear type) and recreational (by fishing mode) landings data from the South Atlantic region ([SAFMC 2003](#)). A size limit was established in hopes of preventing the catch of smaller fish, discouraging waste by overharvest and discards, and imparting a conservation ethic to both sectors of the fishery. One complicating factor noted was the presence of pompano dolphin in the catch, which seldom grow larger than 16 inches.

A **recreational bag limit** for **dolphin** was established to reduce the practice of harvesting large quantities or entire schools of small, immature dolphin ([SAFMC 2003](#)).

Unrestricted bag limits could result in localized depletion. The Council concluded that the recreational bag limit would cap the fishery without excessively reducing the catch. The Council realized that some level of release mortality could occur, but thought that there would be a greater tendency to stop fishing when the bag limit is attained.

A **commercial trip limit** for **dolphin** was established to regulate and cap commercial harvest of dolphin, insure highly efficient gear are not employed in the fishery, and prevent a rapid increase in commercial landings which could shift allocation from the recreational sector to the commercial sector ([SAFMC 2016a](#)). Not implementing trip limits could result in additional effort and gear being introduced into the fishery, unrestrained commercial harvest, and the potential for overfishing ().

A **size limit** was not established for **wahoo**, which would allow for harvest of fish prior to spawning. However, the majority of testimony at public hearings indicated there would be a problem with releasing wahoo safely and the associated hooking/gaffing mortality would likely outweigh the intended benefit.

A **commercial trip limit** for **wahoo** was established to cap the fishery and prevent expansion ([SAFMC 2003](#)). It was noted that not establishing a commercial trip limit would leave the fishery unrestrained and a significant increase in harvest could occur if fishermen targeted wahoo with some type of highly efficient gear.

A **recreational bag limit** for **wahoo** was established to reduce the potential for excessive harvest and impart a conservation ethic to fishermen ([SAFMC 2003](#)). Public testimony and landings data suggested that catching more than two wahoo per recreational trip was uncommon. Not establishing a bag limit could result in overfishing if there is no cap on total allowable catch and effort were to expand.

A **recreational bag limit** for **king mackerel** was established to limit future catch to a predefined level ([GMFMC and SAFMC 1985](#)).

A **size limit** for **king mackerel** was established to facilitate enforcement of the same size limit for Spanish mackerel ([GMFMC and SAFMC 1990](#)). It was noted that undersized Spanish mackerel are taken in a directed fishery and since the species may be confused for the other due to their similar appearance, having the same size limit for both species would benefit the Spanish mackerel stocks. It was also noted that release mortality for small fish of both species is believed to be low.

**Table A.1.** Summary of management measures for pelagic species in federal waters managed by the South Atlantic (SA) and Gulf of Mexico (GoM) Fishery Management Councils.

<b>Mgmt. Measure</b>	<b>Commercial</b>	<b>Recreational</b>
Size limit	<b>Dolphin</b> - 20" minimum FL off FL, GA, and SC. No size restrictions in NC. <b>Wahoo</b> – none <b>King mackerel SA</b> – 24" FL <b>King mackerel GoM</b> – 24" FL	<b>Dolphin</b> - 20" minimum FL off the east coast of FL, GA, and SC; No size restrictions north of the SC/NC border through Maine. <b>Wahoo</b> – none <b>King mackerel SA</b> – 24" FL <b>King mackerel GoM</b> – 24" FL
Trip limit (commercial) and Bag limit (recreational)	<b>Dolphin</b> - None if the vessel has a federal commercial permit for dolphin or wahoo. <i>(Once 75% of the Atlantic dolphin ACL is reached, the trip limit is 4,000 lb (1,814 kg), round weight).</i> For commercially permitted vessels fishing north of 39°N. that do not have a federal commercial vessel dolphin or wahoo permit, the trip limit is 200 lb combined. <b>Wahoo</b> - 500 lb (head and tail intact) <i>(If a notice is filed to close commercial harvest, then sale prohibited and bag limit [2] applies)</i> <b>King mackerel SA</b> – see <a href="#">50 CFR 622.385(a)(1)</a> for limits per zone <b>King mackerel GoM</b> – see <a href="#">50 CFR 622.385(a)(2)</a> for limits per zone	<b>Dolphin</b> - Bag limit of 10 dolphin and 2 wahoo per person/day, with a limit of 54 dolphin per boat/day (headboats are excluded from the boat limit)*. <b>Wahoo</b> - 2 per person/day <b>King mackerel SA</b> – 3 per person (GA:NY) and 2 per person (FL) <b>King mackerel GoM</b> – 3 per person

\* The vessel bag limit for dolphin was revised from 60 to 54 per day for charter and private vessels under Amendment 10 to the Fishery Management Plan for the Dolphin and Wahoo Fishery of the Atlantic ([87 FR 19011](#); effective date May 2, 2022).