Discussion Document for Revising the Goals and Objectives of the Fishery Management Plan for the Dolphin Wahoo Fishery of the Atlantic

Dolphin Wahoo Committee
September 18, 2019

Introduction

The Fisheries Allocation Review Policy (NMFS Policy Directive 01-119) issued in July 2016 encourages the use of adaptive management in respect to allocation revisions, which includes "*periodic re-evaluation and updating of the management goals and objectives to ensure they are relevant to current conditions and needs.*" As part of the South Atlantic Fishery Management Council's (Council) process for creating an Allocation Review Trigger Policy, the goals and objectives of all fishery management plans (FMPs) that include sector allocations will be reviewed and updated as appropriate.

It is likely that the Council may need to discuss revisions to the Dolphin Wahoo FMP's goals and objectives over several meetings. Once approved by the Council, the revised goals and objectives will be implemented as part of the next plan amendment. This could be Amendment 10 or Amendment 12 to the Dolphin Wahoo FMP. At this meeting, the Dolphin Wahoo Committee (Committee) will be asked to review the revised goals and objectives of the Dolphin Wahoo FMP and provide recommendations on edits or additional items that should be considered.

Background

The existing goals and objectives

The goals and objectives of the Dolphin Wahoo FMP were implemented in the original plan[1] that went into place in 2004[2] and have not been revised since then. At the time that the Council was formulating the original Dolphin Wahoo FMP, there was concern over increased landings of dolphin and wahoo. The Council was also proactively attempting to address potential commercial effort shifts towards dolphin that could have occurred due to consolidation within the Highly Migratory Species (HMS) fleet. The existing goals of the Dolphin Wahoo FMP are as follows:

[1] The original Dolphin Wahoo FMP can be accessed at: https://sero.nmfs.noaa.gov/sustainable_fisheries/s_atl/dw/archives/dolphinwahoo_fmp_jan_2003.pdf

[2] The Federal Register notice implementing the original Dolphin Wahoo FMP can be found at: https://sero.nmfs.noaa.gov/sustainable_fisheries/policy_branch/rules/sa/dw/2004/fmp_fr_052704.pdf

"The overall goal of the fishery management plan for the South Atlantic, Mid-Atlantic, and New England Councils' areas of jurisdiction is to adopt a precautionary and risk-averse approach to management which in the first instance attempts to maintain the status quo. This will require that current catch levels not be exceeded and that recent conflict between sectors of the fishery (commercial longliners and recreational fishermen) be resolved. Status quo should reflect trends (average catch and effort levels) in the fishery over the last five years 1993 through 1997.

Owing to the significant importance of the dolphin/wahoo fishery to the recreational fishing community in the Atlantic, the goal of this fishery management plan is to maintain the current harvest level of dolphin and ensure that no new fisheries develop. With the potential for effort shifts in the historical longline fisheries for sharks, tunas, and swordfish, these shifts or expansions into nearshore coastal waters to target dolphin could compromise the current allocation of the dolphin resource between recreational and commercial user groups. Further, these shifts in effort in the commercial fishery, dependent upon the magnitude (knowing that some dolphin trips may land over 25,000 pounds in a single trip) could result in user conflict and localized depletion in abundance."

The existing objectives of the Dolphin Wahoo FMP are as follows:

"*1. Address localized reduction in fish abundance. The Councils remain concerned over the potential shift of effort by longline vessels to traditional recreational fishing grounds and the resulting reduction in local availability if commercial harvest intensifies.*

2. Minimize market disruption. Commercial markets (mainly local) may be disrupted if large quantities of dolphin are landed from intense commercial harvest or unregulated catch and landing by charter or other components of the recreational sector.

3. Minimize conflict and/or competition between recreational and commercial user groups. If commercial longlining effort increases, either directing on dolphin and wahoo or targeting these species as a significant bycatch, conflict and/or competition may arise if effort shifts to areas traditionally used by recreational fishermen.

4. Optimize the social and economic benefits of the dolphin and wahoo fishery. Given the significant importance of dolphin and wahoo to the recreational sector throughout the range of these species and management unit, manage the resources to achieve optimum yield on a continuing basis.

5. Reduce bycatch of the dolphin fishery. Bycatch is a problem in the pelagic longline fishery for highly migratory species. Any increase in overall effort, and more specifically shifts of effort into nearer shore, non-traditional fishing grounds by swordfish and tuna vessels, may result in increased bycatch of non-target species.

In addition, National Standard 9 requires that: "Conservation and management measures shall, to the extent practicable, (A) minimize bycatch and (B) to the extent bycatch cannot be

avoided, minimize the mortality of such bycatch." Therefore bycatch of the directed dolphin fishery must be addressed.

Appendix C (FSEIS for HMS Regulatory Amendment 1) contains data on dolphin-wahoo pelagic longline fishery analysis. The data presented on page C-66 and in Table C-4 indicate that pelagic longlines targeting dolphin do in fact result in a bycatch of HMS species.

6. Direct research to evaluate the role of dolphin and wahoo as predator and prey in the pelagic ecosystem.

7. Direct research to enhance collection of biological, habitat, social, and economic data on dolphin and wahoo stocks and fisheries."

Guidance provided for revising the existing goals and objectives

At the June 2019 meeting, the Committee reviewed the existing goals and objectives of the Dolphin Wahoo FMP and provided the following guidance:

Goals:

- Change the overall format of the goals and objectives to a table format similar to the goals and objectives of the Snapper Grouper FMP.
- In reference to "status quo" in the objectives, change to "historic fisheries", "historic levels" or a similar appropriate term.
- Maintain that the FMP is intended to be precautionary and encompass a risk averse approach.
- Investigate whether "maintaining status quo" in relation to landings has been successful.
- Add a new goal to maintain access for both the recreational and commercial sectors.
- Emphasize the social and economic importance of the recreational and commercial fisheries for dolphin and wahoo.
- Add language that is inclusive of ecosystem management.

Objectives:

- Objective 1 (localized depletion): Split into two objectives. One objective will address concerns over localized depletion and shifts in effort. The other objective will seek to maintain access to locally harvested dolphin (both recreational and commercial). For the commercial sector address the importance of access to commercially harvest dolphin and wahoo when the fish are available. For the recreational sector emphasize the importance of access to recreationally harvest an adequate quantity of dolphin and wahoo while maintaining high catch rates.
    - This should address the different OY related goals of the commercial and recreational sectors.
- Objective 3 (minimize conflict between sectors): Split into two objectives with one objective seeking to minimize conflict between sectors while maintaining access and another objective addressing longline effort.
    - Recognize changes that have occurred in the pelagic longline (PLL) fleet through HMS and ICCAT related management measures.

- Objective 5 (bycatch): Streamline language to reflect the Council's intention to minimize bycatch of dolphin and wahoo and not allow overfishing to occur
- Objective 6 (predator prey relationship): Change wording to reflect a broader ecosystem management statement and include language similar to "where practicable incorporate ecosystem management".
- Maintain Objective 2 (minimize market disruption), Objective 4 (optimize social and economic benefits), and Objective 7 (directed research) "as is."

The interdisciplinary plan team (IPT) used this guidance when revising and restructuring the draft goals and objectives that can be found towards the end of this document. In addition, the Committee directed staff to "provide commercial and recreational landings of dolphin and wahoo by gear type and by state. Include information on PLL landings of dolphin by permit type (HMS permitted vessels vs non-HMS permitted vessels)." In an effort to fulfill this request, the following information is provided.

Total Landings

Dolphin

Commercial and recreational landings of dolphin from 1986 to 2017 can be found in **Figure 1**. Over the time series, annual commercial landings of dolphin ranged from 496,478 pounds whole weight (lbs ww) to 2,136,534 lbs ww and averaged 950,349 lbs ww. Over the same time series annual recreational landings of dolphin ranged from 7,105,106 lbs ww to 21,545,155 lbs ww and averaged 13,414,513 lbs ww. Annual figures on a percent basis can be seen in **Figure 2**. On a percent basis, the commercial sector accounted for 4% to 13% and averaged 7% of total dolphin landings. The recreational sector accounted for 87% to 96% and averaged 93% of total dolphin landings.

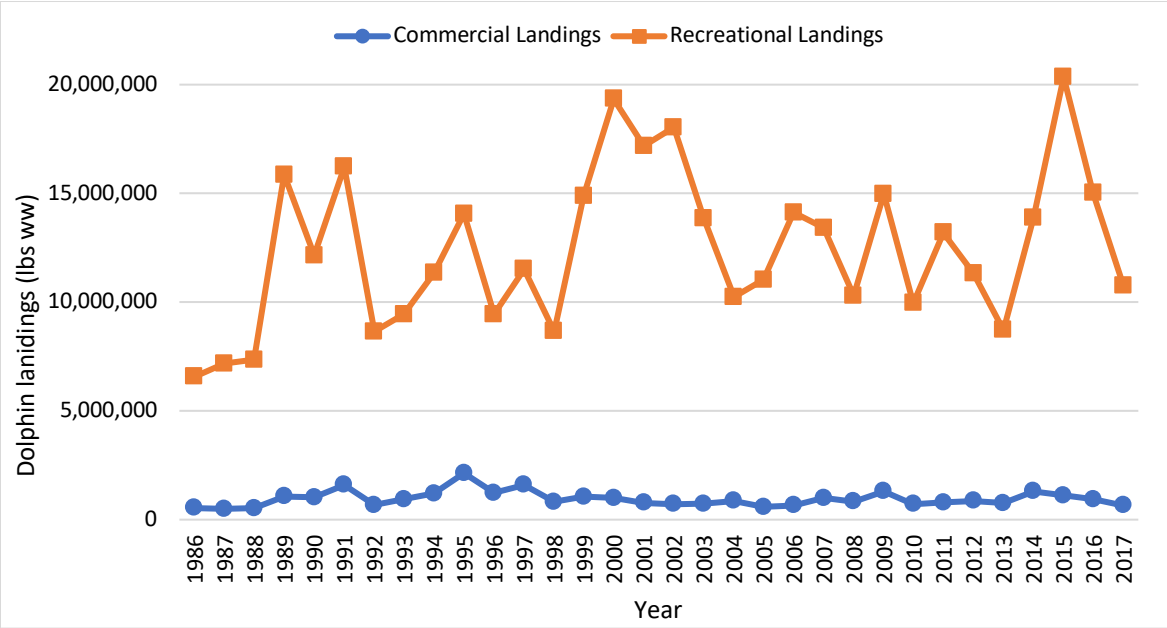

Figure 1. Landings of Atlantic dolphin by sector, 1986-2017.

Source: Commercial landings are based on data from the ACL dataset as provided by NMFS SERO. Recreational landings are based on data from the MRIP database as provided by NMFS SERO and represent FES or "revised" recreational landings.

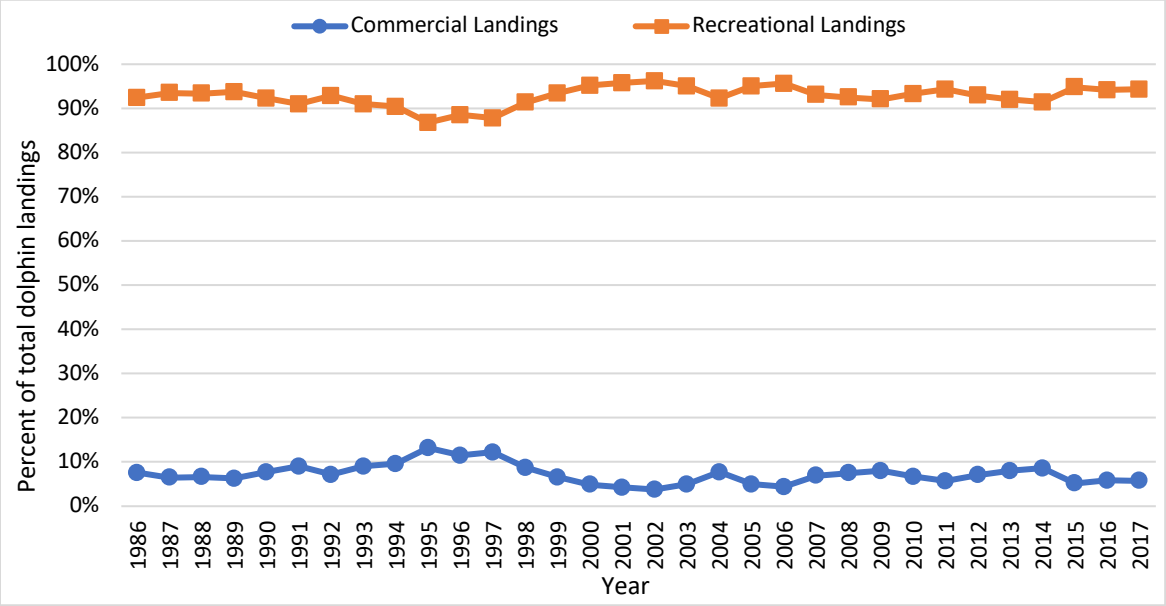

Figure 2. Percent of total landings by sector for Atlantic dolphin, 1986-2017.
Source: Commercial landings are based on data from the ACL dataset as provided by NMFS SERO. Recreational landings are based on data from MRIP database as provided by NMFS SERO and represent FES or "revised" recreational landings.

Wahoo

Commercial and recreational landings of wahoo from 1986 to 2017 can be found in **Figure 3**. Annual commercial landings of wahoo ranged from 26,713 lbs ww to 107,497 lbs ww and averaged 62,821 lbs ww. Over the same time series annual recreational landings of wahoo ranged from 519,189 lbs ww to 3,892,639 lbs ww and averaged 1,663,154 lbs ww. Annual figures on a percent basis can be seen in **Figure 4**. On a percent basis, the commercial sector accounted for 1% to 11% and averaged 5% of total wahoo landings. The recreational sector accounted for 89% to 99% and averaged 95% of total wahoo landings.

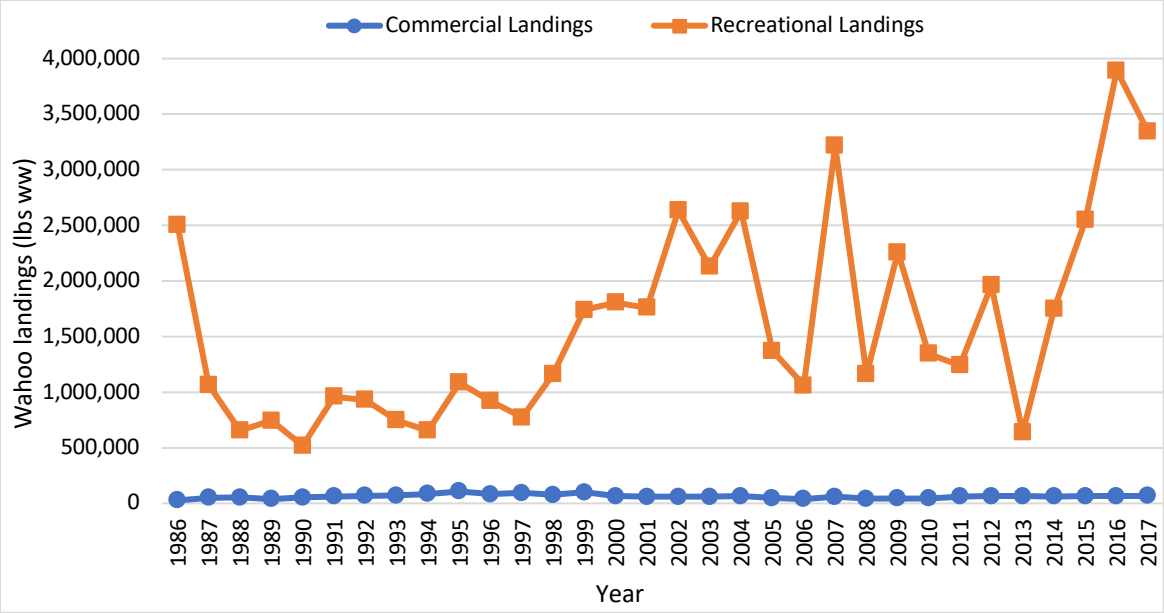

Figure 3. Landings of Atlantic wahoo by sector, 1986-2017.
Source: Commercial landings are based on data from the ACL dataset as provided by NMFS SERO. Recreational landings are based on data from MRIP database as provided by NMFS SERO and represent FES or "revised" recreational landings.

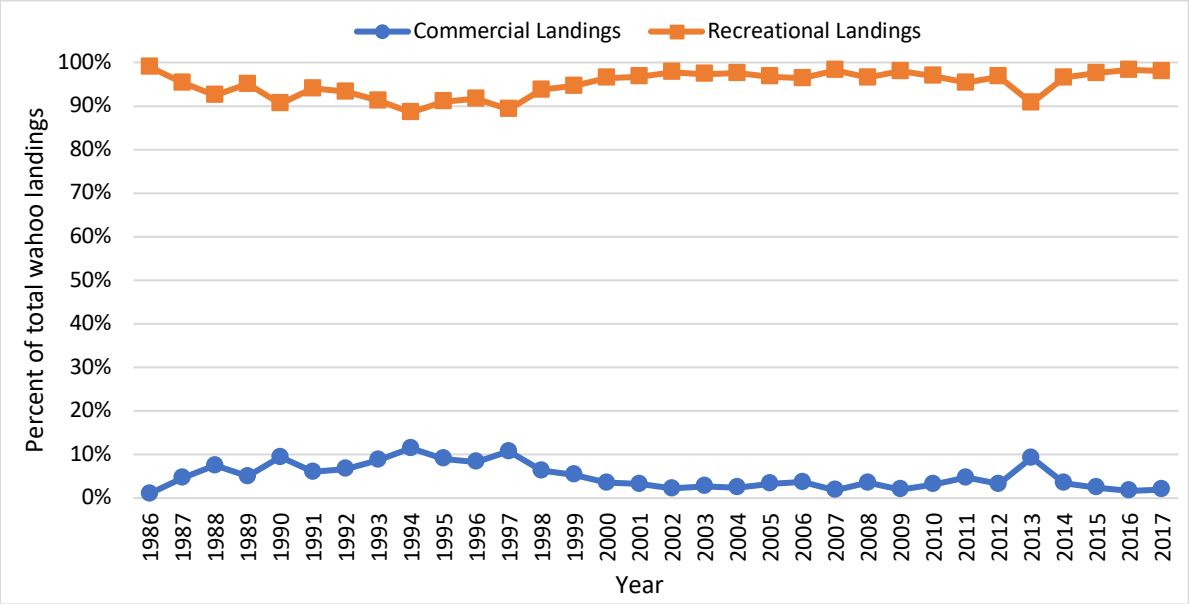

Figure 4. Percent of total landings by sector for Atlantic wahoo, 1986-2017.
Source: Commercial landings are based on data from the ACL dataset as provided by NMFS SERO. Recreational landings are based on data from MRIP database as provided by NMFS SERO and represent FES or "revised" recreational landings.

Commercial Landings

Dolphin

Gear

Commercial landings of dolphin by gear type from 1986 to 2017 can be found in **Figure 5**. From 1986 to 2017, annual commercial landings of dolphin caught with hook and line gear (handline, rod and reel, etc.) ranged from 149,775 lbs ww to 1,356,518 lbs ww and averaged 513,437 lbs ww. Over the same time series annual commercial landings of dolphin caught with longline gear ranged from 6,026 lbs ww to 831,070 lbs ww and averaged 375,692 lbs ww. Annual figures on a percent basis can be seen in **Figure 6**. On a percent basis, hook and line gear accounted for 13% to 99% of total commercial dolphin landings and averaged 54% of total commercial dolphin landings. Longline gear accounted for 1% to 66% of total commercial dolphin landings and averaged 39% of total commercial dolphin landings. Nets, spears, traps, and unclassified gear made up the remaining portion of commercial dolphin landings, remaining low through most of the time series but increasing in the latter years.

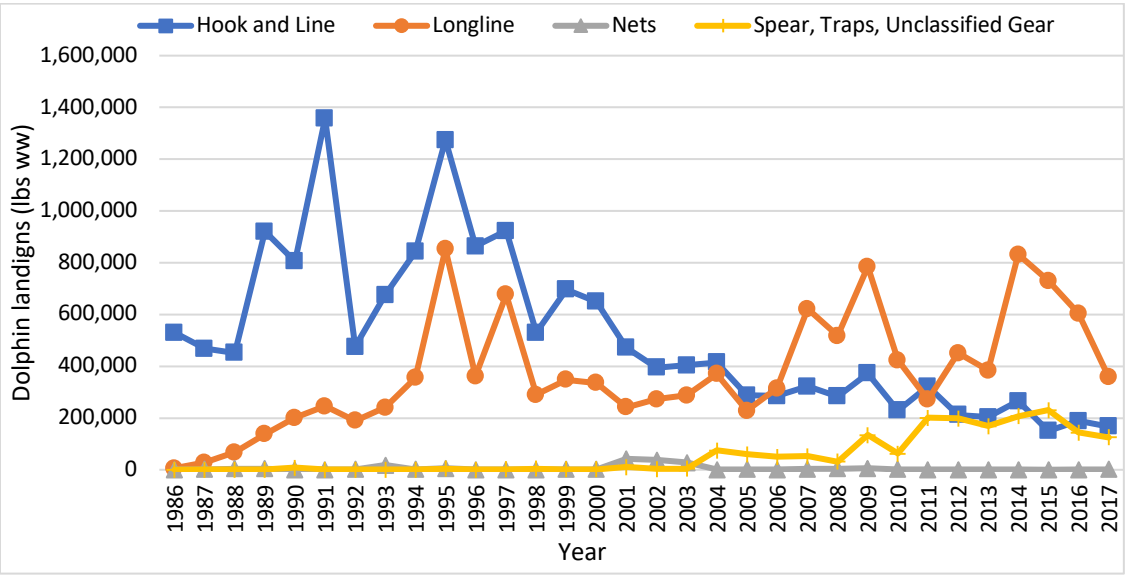

Figure 5. Commercial landings of Atlantic dolphin by gear type, 1986-2017.
Source: Commercial landings are based on data from the ACL dataset as provided by NMFS SERO.

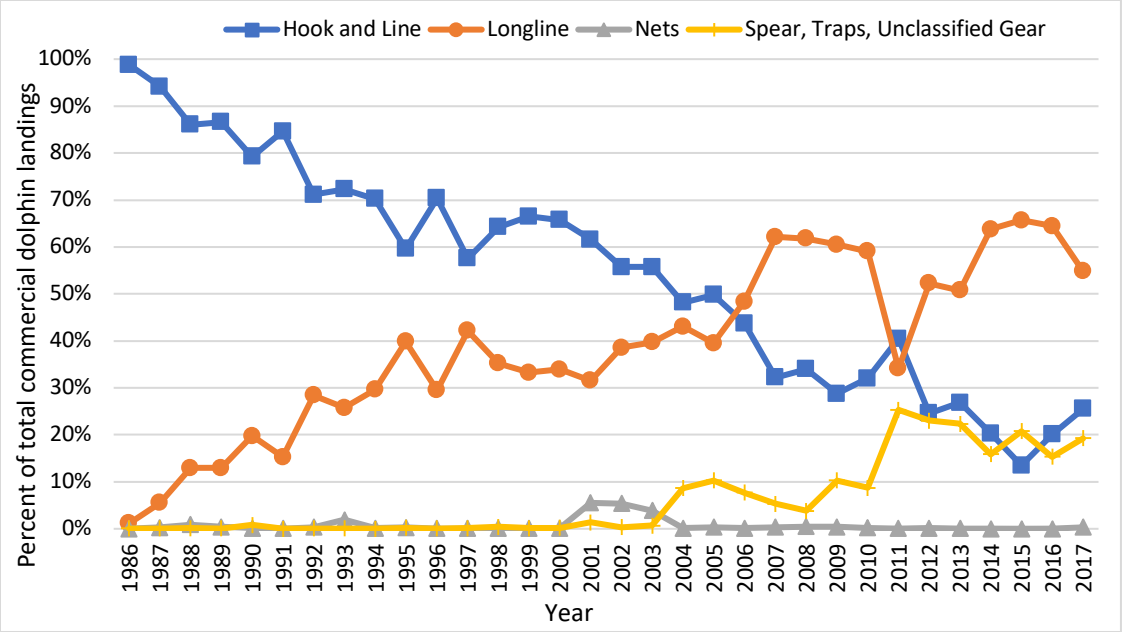

Figure 6. Percent of commercial landings of Atlantic dolphin by gear type, 1986-2017.
Source: Commercial landings are based on data from the ACL dataset as provided by NMFS SERO.

State and Region

The distribution of commercial dolphin landings by state and region from 1986 to 2017 can be found in **Figure 7** on a weight-basis and in **Figure 8** on a percent-basis. Over the time series Florida accounted for the largest portion of landings, with North Carolina and South Carolina/Georgia accounting for a larger share of the commercial landings later in the time series. While there were some years of elevated landings for the Mid-Atlantic and New England regions, in most years these regions accounted for less than 10% of total commercial dolphin landings.

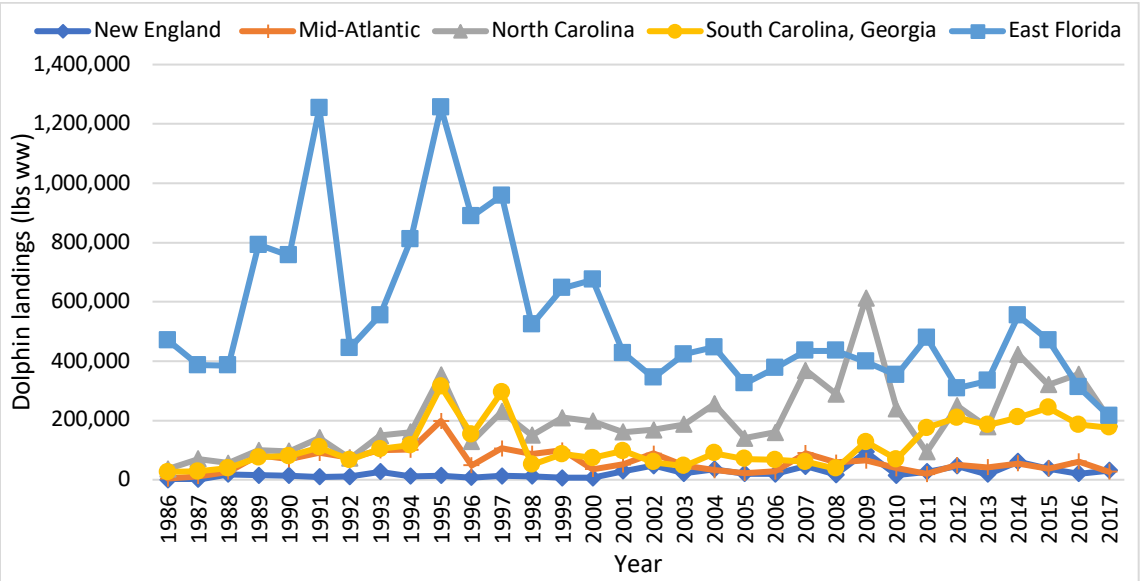

Figure 7. Commercial landings of Atlantic dolphin by state or region, 1986-2017. Landings occurring in South Carolina and Georgia were aggregated to protect confidential landings.
Source: Commercial landings are based on data from the ACL dataset as provided by NMFS SERO.

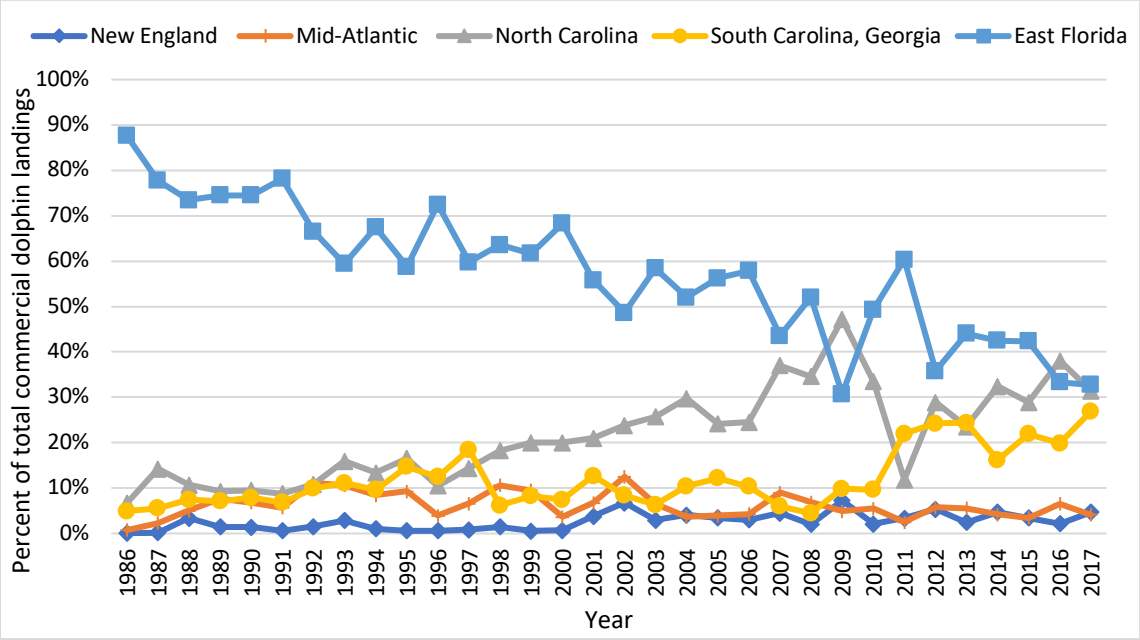

Figure 8. Percent of total commercial Atlantic dolphin landings by state or region, 1986-2017. Landings occurring in South Carolina and Georgia were aggregated to protect confidential landings.
Source: Commercial landings are based on data from the ACL dataset as provided by NMFS SERO

Longline landings by permit type

Longline landings of dolphin by permit type from 2007 to 2018 are included in **Figure 9** on a pound-basis and in **Figure 10** on a percent-basis. Over the time series, the majority (approximately 80% on average) of the longline landings of dolphin occurred onboard vessels with both a commercial dolphin wahoo permit (ADW) and a highly migratory species (HMS) permit that may be used for commercial longlining. A summary for HMS management of long line gear can be found in the 2018 Stock Assessment and Fishery Evaluation Report for Atlantic Highly Migratory Species with a link to the report found in the footnote below.[3] Additionally, while not available at the time of writing this document, the number of vessels represented in each category displayed in **Figures 9** and **10** will be included before the September 2019 Council meeting or at a later date.

[3] The 2018 Stock Assessment and Fishery Evaluation Report for Atlantic Highly Migratory Species can be accessed by clicking here. Summary information on HMS management of long line gear can be found from pages 65 through 70 of the report.

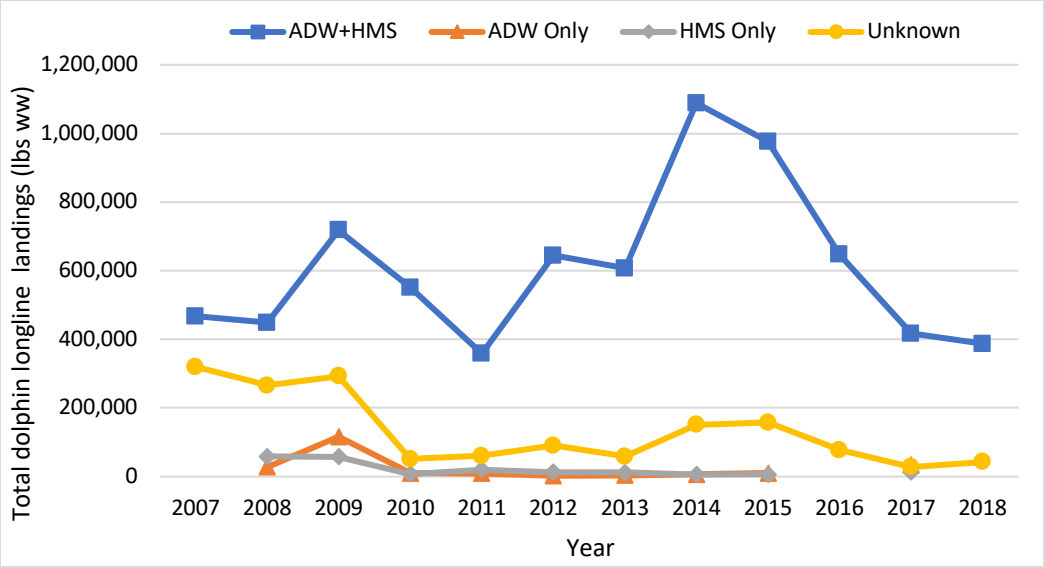

Figure 9. Atlantic dolphin by weight (lbs ww) landed with long line gear for vessels holding both an ADW and one or more of the HMS permits, holding an ADW permit only, holding one or more of the HMS longline permits only, and unknown what permits are held, by year.
Source: Based on data provided in the Southeast Fisheries Science Center Memorandum to the South Atlantic Fishery Management Council on June 6, 2019.

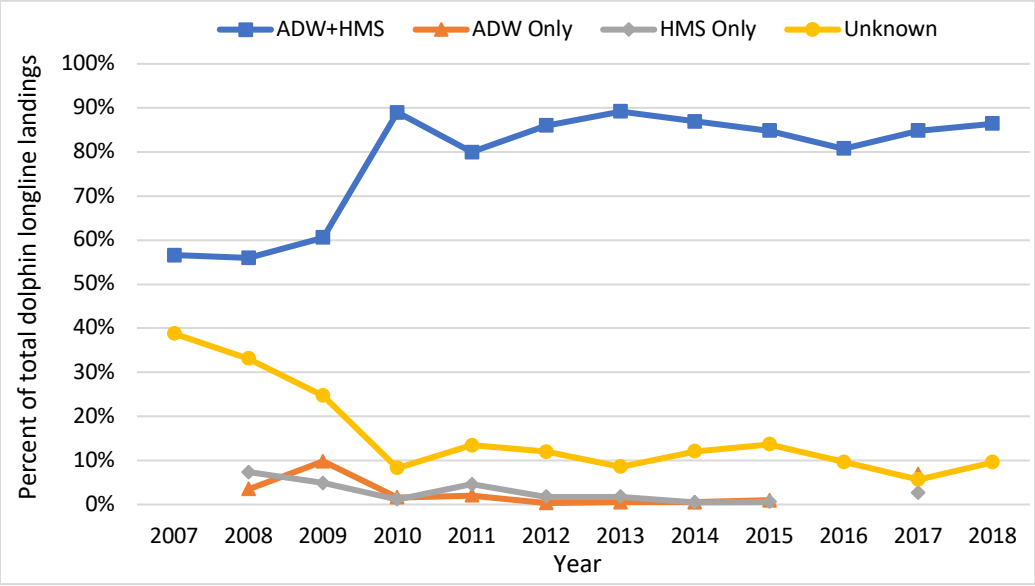

Figure 10. Atlantic dolphin landed with long line gear by percent of total longline landings for vessels holding both an ADW and one of the HMS permits, holding an ADW permit only, holding a HMS longline permit only, and unknown what permits are held, by year.
Source: Based on data provided in the Southeast Fisheries Science Center Memorandum to the South Atlantic Fishery Management Council on June 6, 2019.

Wahoo

Gear

Commercial landings of wahoo by gear type from 1986 to 2017 can be found in **Figure 11** on a weight basis and in **Figure 12** on a percent basis. From 1986 to 2017, annual commercial landings of wahoo caught with hook and line gear ranged from 22,933 lbs ww to 81,215 lbs ww and averaged 46,784 lbs ww. Over the same time series annual commercial landings of wahoo caught with longline gear ranged from 925 lbs ww to 22,387 lbs ww and averaged 12,833 lbs ww. On a percent basis, hook and line gear accounted for 50% to 97% of total commercial wahoo landings and averaged 74% of total commercial wahoo landings. Longline gear accounted for 4% to 41% of total commercial wahoo landings and averaged 21% of total commercial wahoo landings. Spears, traps, and unclassified gear made up the remaining portion of commercial wahoo landings, remaining low through most of the time series but increasing in the latter years.

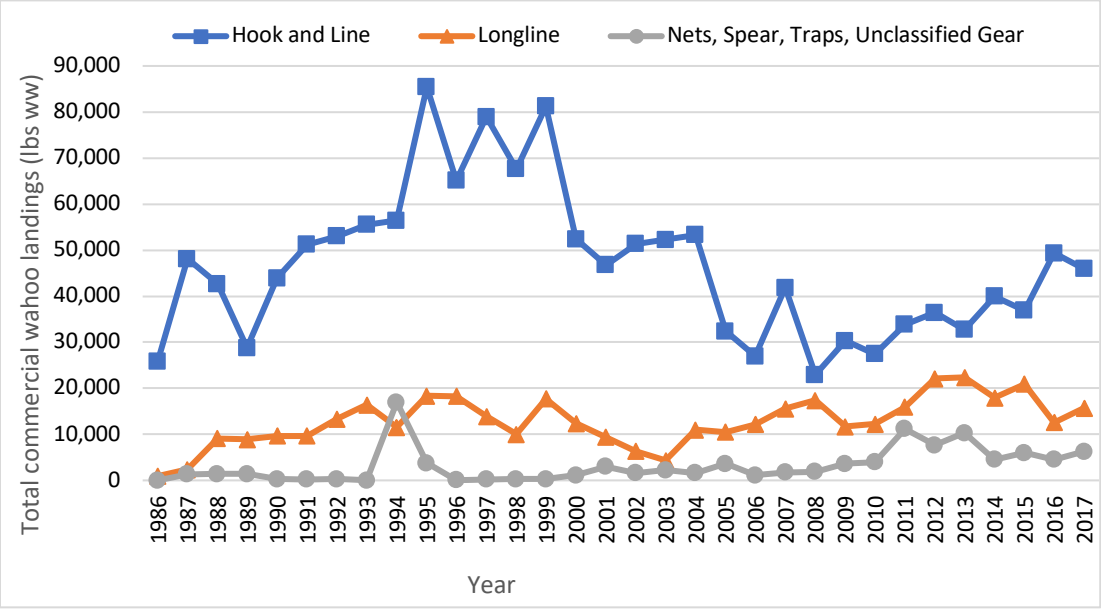

Figure 11. Commercial landings of Atlantic wahoo by gear type, 1986-2017.
Source: Commercial landings are based on data from the ACL dataset as provided by NMFS SERO.

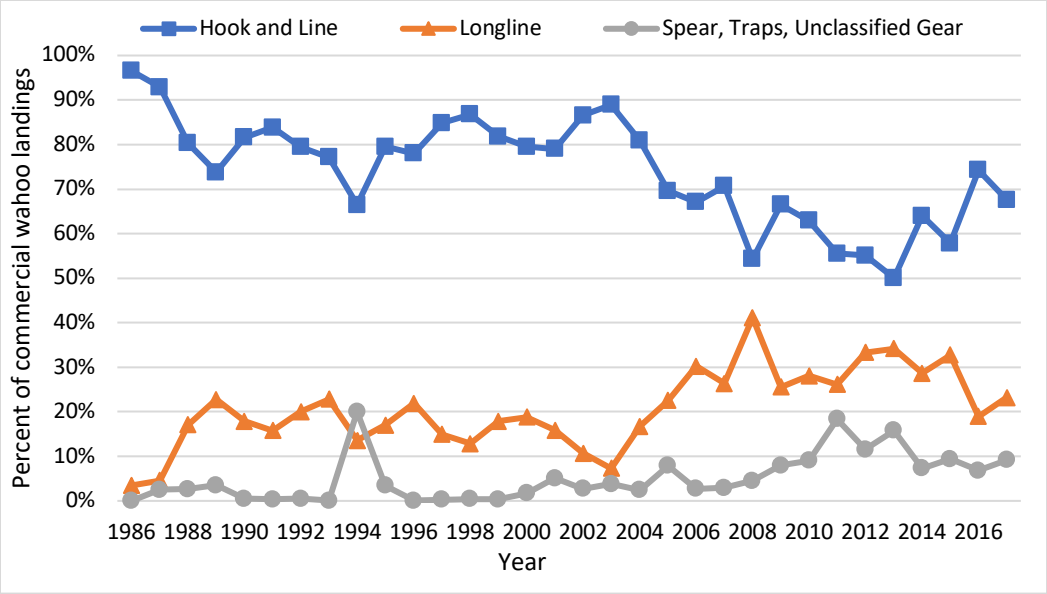

Figure 12. Percent of total Atlantic wahoo commercial landings by gear type, 1986-2017.
Source: Commercial landings are based on data from the ACL dataset as provided by NMFS SERO.

State

The distribution of commercial wahoo landings by state and region from 1986 to 2017 can be found in **Figure 13** on a weight-basis and in **Figure 14** on a percent-basis. Over most time series Florida accounted for the largest portion of landings followed by North Carolina and South Carolina/Georgia. While there were some years of elevated landings for the Mid-Atlantic and New England regions, in most years these regions accounted for less than 10% of total commercial wahoo landings.

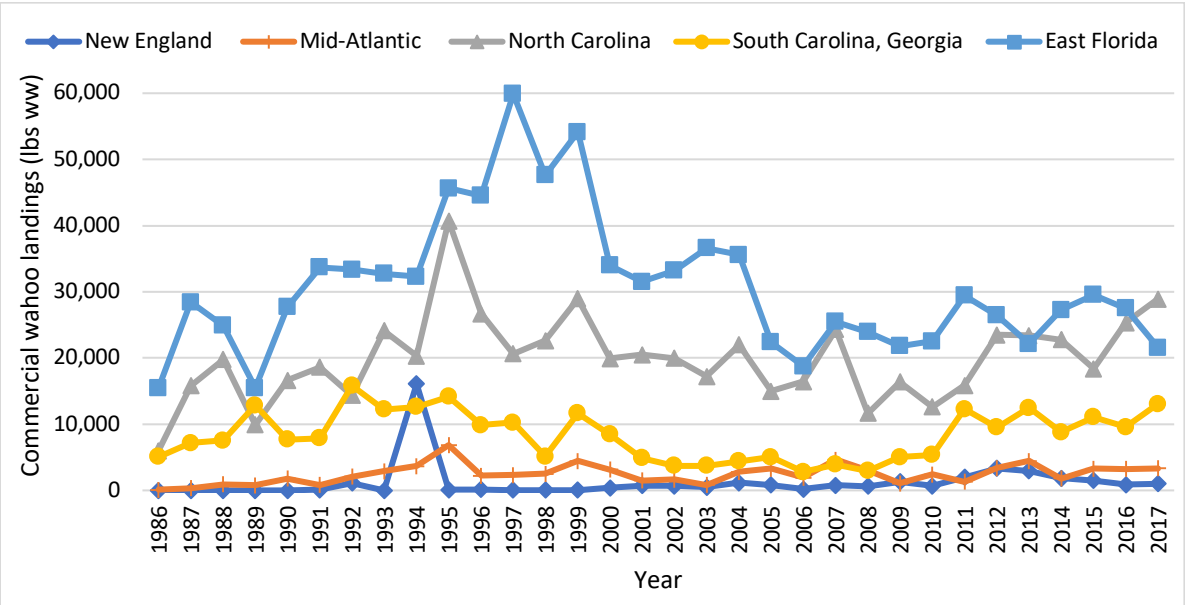

Figure 13. Commercial landings of Atlantic wahoo by state or region, 1986-2017. Landings occurring in South Carolina and Georgia were aggregated to protect confidential landings.
Source: Commercial landings are based on data from the ACL dataset as provided by NMFS SERO.

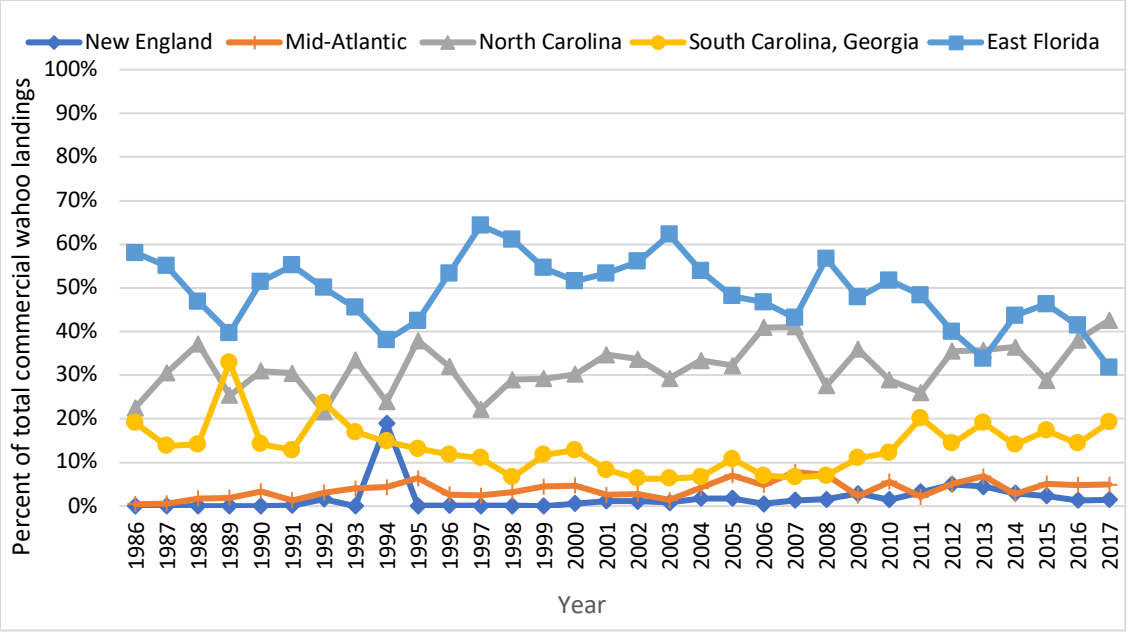

Figure 14. Percent of total commercial Atlantic wahoo landings by state or region, 1986-2017. Landings occurring in South Carolina and Georgia were aggregated to protect confidential landings.
Source: Commercial landings are based on data from the ACL dataset as provided by NMFS SERO.

Recreational Landings

Dolphin

The distribution of recreational dolphin landings by state and region from 1986 to 2017 can be found in **Figure 15** on a weight-basis and in **Figure 16** on a percent-basis. Over most of the time series Florida accounted for the largest portion of landings followed by North Carolina and the Mid-Atlantic Region. Of particular note is the recent rise in recreational dolphin landings in the Mid-Atlantic Region. This trend has largely been driven by landings of dolphin in Virginia, New Jersey, and New York, with these three states accounting for approximately one million to three million pounds of dolphin annually in combination over the past three years. Overall, recreational landings were recorded in every coastal state from Florida through Massachusetts.

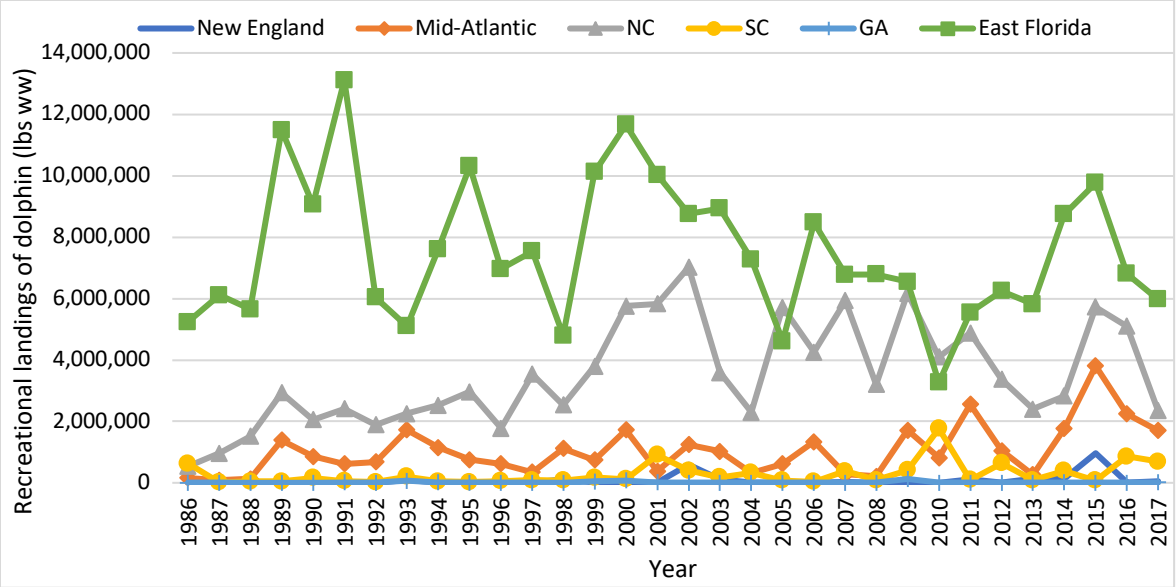

Figure 15. Recreational landings of Atlantic dolphin by state or region, 1986-2017. Headboat landings occurring in Georgia were aggregated with those from Florida to protect confidential landings. Source: Recreational landings are based on data from the ACL dataset as provided by NMFS SERO and represent FES estimates from MRIP and southeast headboat landings.

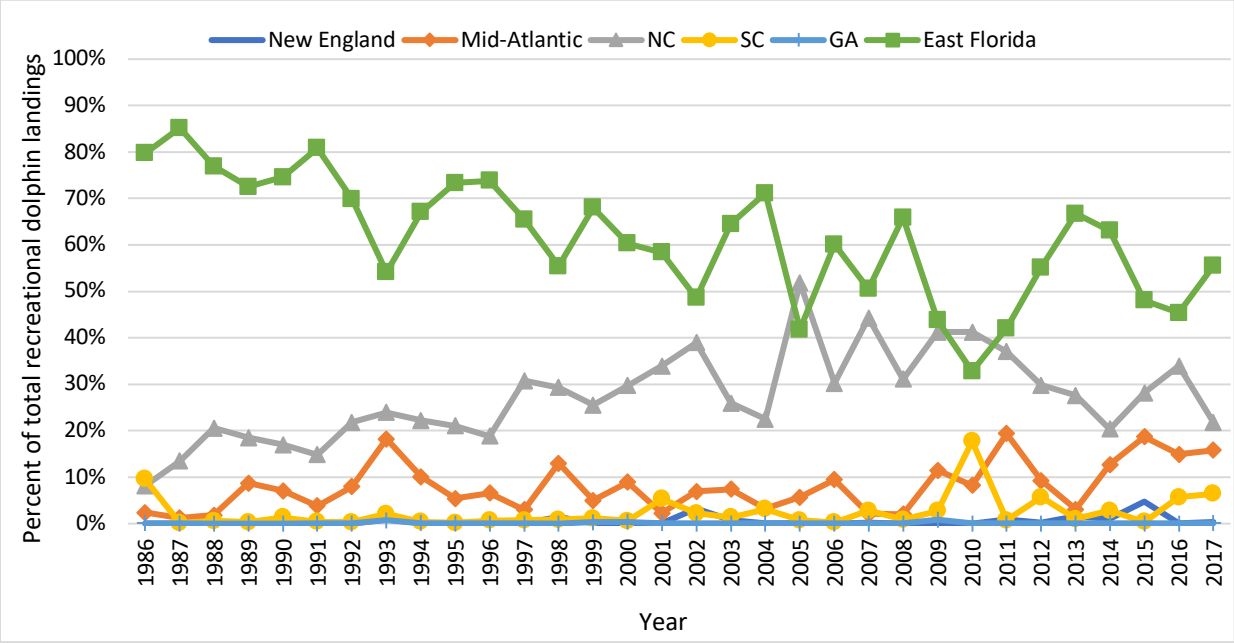

Figure 16. Percent of total recreational Atlantic dolphin landings by state or region, 1986-2017. Headboat landings occurring in Georgia were aggregated with those from Florida to protect confidential landings. Source: Recreational landings are based on data from the ACL dataset as provided by NMFS SERO and represent FES estimates from MRIP and southeast headboat landings.

Wahoo

The distribution of recreational wahoo landings by state and region from 1986 to 2017 can be found in **Figure 17** on a weight-basis and in **Figure 18** on a percent-basis. Over most of the time

series Florida and North Carolina accounted for the largest portion of landings followed by South Carolina and the Mid-Atlantic Region. Of particular note is the rise in recreational wahoo landings in the Mid-Atlantic Region. This trend has largely been driven by landings of wahoo in Maryland, New Jersey, and New York, with these three states accounting for upwards of 1.4 million pounds of wahoo annually in recent years. Overall, recreational landings were recorded in every coastal state from Florida through Rhode Island, with the exception of Connecticut.

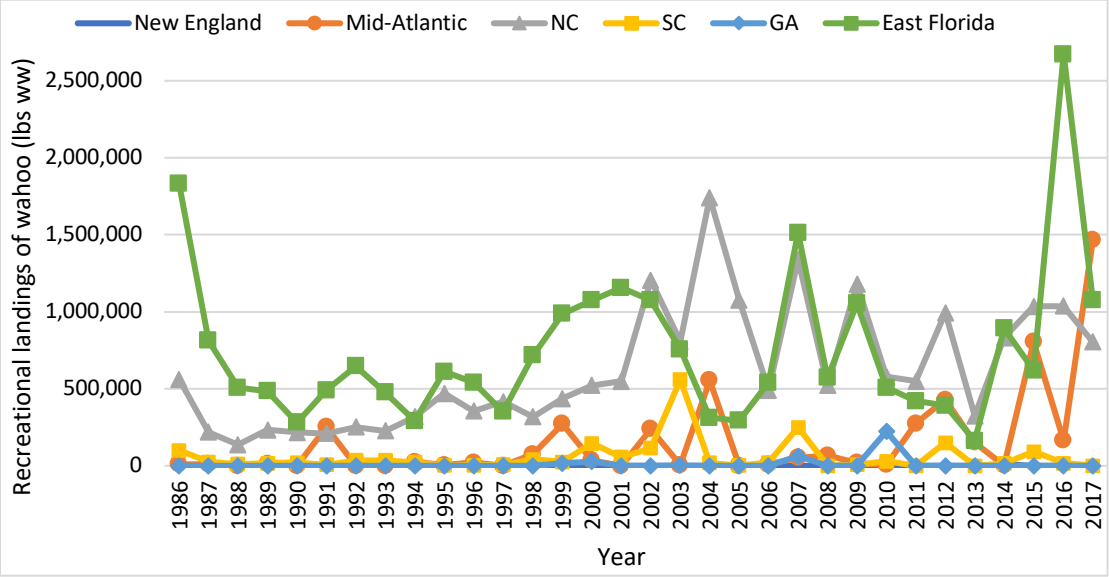

Figure 17. Recreational landings of Atlantic wahoo by state or region, 1986-2017. Headboat landings occurring in Georgia were aggregated with those from Florida to protect confidential landings. Source: Recreational landings are based on data from the ACL dataset as provided by NMFS SERO and represent FES estimates from MRIP and southeast headboat landings.

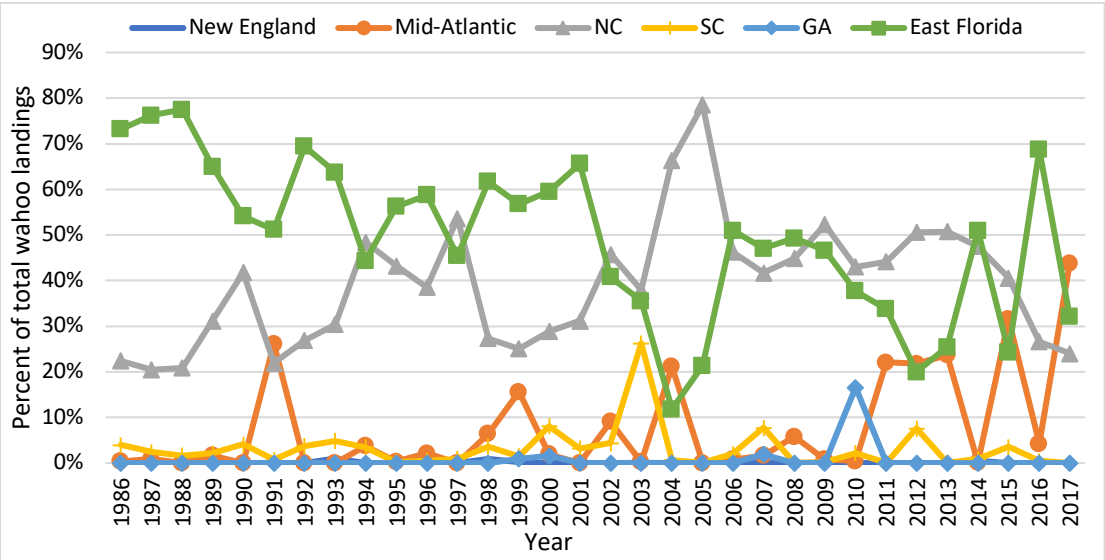

Figure 18. Percent of total recreational Atlantic wahoo landings by state or region, 1986-2017. Headboat landings occurring in Georgia were aggregated with those from Florida to protect confidential landings. Source: Recreational landings are based on data from the ACL dataset as provided by NMFS SERO and represent FES estimates from MRIP and southeast headboat landings.

Draft Revised Dolphin Wahoo FMP Goals and Objectives

The Council is in the process of updating the Dolphin Wahoo FMP goals and objectives to reflect the current vision for management of the fisheries for dolphin and wahoo and provided initial recommendations for updating goals and objectives at the June 2019 meeting. The updated version of the goals and objectives reflecting those recommendations are provided below.

Goal 1 (Precautionary Approach): Support a precautionary and risk-averse approach to management which maintains historic catch levels while preventing overfishing.	
Objective 1	Maintain catch levels that do not exceed catch level recommendations for dolphin or wahoo and do not directly change the balance of landings in comparison to the historic fishery to the extent that conflict is created between the recreational and commercial sectors.
Objective 2	Minimize unutilized bycatch of dolphin or wahoo through development of management measures that seek to reduce bycatch that are not sold or kept for personal use.
Goal 2 (Access): Maintain access to the dolphin and wahoo resource for both the recreational and commercial sectors.	
Objective 1	For the recreational sector, adopt management measures that emphasize the importance of continued access to dolphin and wahoo when the fish are regionally available, while maintaining sufficiently high abundance that supports elevated catch rates.
Objective 2	For the commercial sector, adopt management measures that address the importance of continued access to dolphin and wahoo when the fish are regionally available.
Objective 3	Address potential localized reduction in fish abundance as a result of the possible shift of effort by longline vessels to traditional recreational fishing grounds and the resulting potential reduction in local availability of dolphin and wahoo.
Goal 3 (Minimize Competition Between User Groups): Minimize competition between recreational and commercial user groups.	
Objective 1	Ensure effort and catch levels of dolphin and wahoo do not expand beyond traditional fishing grounds to the point where competition becomes problematic between sectors. If commercial longlining effort and catch of dolphin and wahoo increases, competition may arise if effort shifts to fishing grounds traditionally used by recreational fishermen.
Objective 2	Develop communication approaches that provide streamlined and timely information to increase awareness and engage stakeholders.
Goal 4 (Economic and Social Importance): Recognize and preserve the economic and social importance of the fisheries for dolphin and wahoo.	
Objective 1	Manage the dolphin and wahoo resources to achieve optimum yield on a continuing basis in order to maximize the economic and social net benefits of the fishery.

Objective 2	Minimize market disruption. Commercial markets (mainly local) may be disrupted if large quantities of dolphin are landed from intense commercial harvest or unregulated catch and landing by charter or other components of the recreational sector.
Objective 3	Improve knowledge about the social and economic elements of the dolphin and wahoo fishery.
Objective 4	Improve awareness and understanding of how social and economic issues are linked to dolphin and wahoo fishery management measures.
Goal 5 (Ecosystem Based Management and Research Priorities):	
Objective 1	Support improved and expanded monitoring and reporting programs for the dolphin and wahoo fishery. Promote collection of quality data to support management plans and programs considered by the Council.
Objective 2	Promote research aimed at developing ecosystem based management of dolphin and wahoo.
Objective 3	Support measures that incorporate ecosystem considerations for the management of dolphin and wahoo where practicable.
Objective 4	Direct research to enhance collection of biological and habitat data on dolphin and wahoo stocks and fisheries.

Discussion Questions for the Committee:

- Does the Committee have any suggested changes or edits to the revised goals and objectives?
- Are there topics that should be covered in the goals and objectives, but are currently left out?

Committee Action:

- PROVIDE GUIDANCE ON MODIFICATIONS TO THE REVISED GOALS AND OBJECTIVES OF THE DOLPHIN WAHOO FMP.