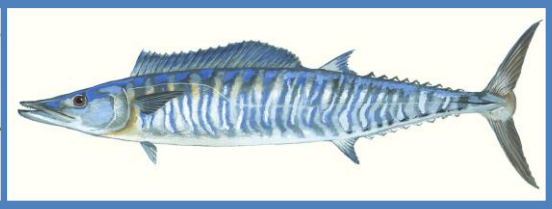

Amendment 10 to the Fishery Management Plan for the Dolphin and Wahoo Fishery of the Atlantic

(Revise annual catch limits, sector allocations, accountability measures, and management measures for dolphin and wahoo)

Decision Document

Summary

The South Atlantic Fishery Management Council (Council) is considering action to respond to new ABC recommendations from their Scientific and Statistical Committee (SSC) for dolphin and wahoo. The previous ABC recommendation for dolphin was 15,344,846 pounds whole weight (lbs ww) and was based on the third highest landings value during the 1994 to 1997 times series. The previous ABC recommendation for wahoo was 2,885,303 pounds ww and was based on the third highest landings value during the 1999-2008 times series. At their April 2020 meeting, the SSC revisited the time series used to set the catch level recommendations at the request of the Council and chose the third highest landings from 1994 to 2007 for both dolphin and wahoo to set the ABC. This resulted in ABC recommendations of 24,570,764 pounds (lbs) whole weight (ww) for dolphin and 2,885,303 lbs ww for wahoo. The Council made this request, as they were concerned overusing the third highest landings in a four-year timeseries to set the ABC for dolphin, which by default led to using the second lowest landings value.

The SSC included recreational landings from Monroe County, Florida, in their ABC recommendation. These landings were not included in past catch level recommendations in the South Atlantic for all unassessed species due to issues with determining whether such landings occurred from Gulf of Mexico or South Atlantic waters. The revised methods used to calculate recreational landings allows for better partitioning of recreational landings from Monroe County, Florida, between the Gulf of Mexico and South Atlantic regions and the vast majority of dolphin and wahoo landed in the county are from South Atlantic waters. Through actions in Amendment 10, the Council wants to incorporate best scientific information available and the SSC's catch level recommendations into management of dolphin and wahoo by revising the annual catch limits (ACL) to reflect the updated ABC.

Additionally, the Council is addressing deficiencies in the recreational Accountability Measures (AM) for dolphin and wahoo. Currently, the AMs for both dolphin and wahoo require that the species be "overfished" for the AM to go into place. Since there is no stock assessment for either species planned in the foreseeable future, it is unlikely that dolphin or wahoo would be considered overfished. As such, the Council is examining the trigger for recreational AMs as well as the AMs themselves in this amendment. The Council is also considering a change to the recreational possession limits for wahoo to reduce the likelihood of triggering the AM if recreational landings reach the revised recreational ACL.

Finally, the Council is responding to requests from the public for changes to management of dolphin and wahoo. Actions addressing these comments include allowing the possession of commercial quantities of dolphin and wahoo when trap, pot, or buoy gear are on board a vessel, removing the operator card requirements, and reducing the vessel limit for dolphin.

The actions currently in the amendment can be grouped according to the objectives that they are intended to accomplish. **Actions 1** through **4** accommodate revised recreational data and updated catch level recommendations from the SSC by implementing new ACLs while also revising sector allocations. **Actions 5** through **8** would change recreational accountability measures. The remaining actions (**Actions 9** through **12)** would implement various management revisions for the Dolphin Wahoo fishery and are largely independent of one another.

Actions in this amendment

Actions that accommodate revised recreational data and catch level recommendations

- **Action 1.** Revise the total annual catch limit for dolphin to reflect the updated acceptable biological catch level
- **Action 2.** Revise the total annual catch limit for wahoo to reflect the updated acceptable biological catch level
- **Action 3.** Revise sector allocations and sector annual catch limits for dolphin
- **Action 4.** Revise sector allocations and sector annual catch limits for wahoo

Actions that change recreational accountability measures

- **Action 5.** Revise the trigger for the post-season recreational accountability measures for dolphin

- **Action 6.** Revise the post-season recreational accountability measures for dolphin
- **Action 7.** Revise the trigger for the post-season recreational accountability measures for wahoo
- **Action 8.** Revise the post-season recreational accountability measures for wahoo

Actions that implement various management revisions in the Dolphin Wahoo fishery

- **Action 9.** Allow properly permitted commercial fishing vessels with trap, pot, or buoy gear on board that are not authorized for use in the dolphin wahoo fishery to possess commercial quantities of dolphin and wahoo
- **Action 10.** Remove the requirement of vessel operators or crew to hold an Operator Card in the Dolphin Wahoo Fishery
- **Action 11.** Reduce the recreational vessel limit for dolphin
- **Action 12**. Reduce the recreational bag limit and establish a recreational vessel limit for wahoo

Objectives for this meeting

- Review and approve edits to the purpose and need statements.
- Approve all actions.
- Consider effects analyses and review/modify draft Council rationale.
- Review and approve FMP goals and objectives.
- Review codified text and deem as necessary and appropriate
- Consider approving the amendment for formal review.

Potential amendment timing

	Process Step	Date
✓	Council directs staff to work on amendment	March 2016
✓	Scoping	August 2016
✓	Develop amendment actions and alternatives	Sept. 2016-Dec. 2020
✓	Public hearings	January 2021
✓	Council reviewed public hearing comments and revised analyses	March 2021
	Council reviews amendment and approves for formal review	**June 2021**
	Implementation	Sometime in 2022

Purpose and Need Statement

The *purpose* of Dolphin Wahoo Amendment 10 is to revise the catch levels [acceptable biological catch (ABC) and annual catch limits (ACL)], sector allocations, accountability measures, and management measures for dolphin and wahoo. Management measures address authorized gear, the operator card requirement, and recreational bag/vessel limits in the dolphin and wahoo fisheries~~, as well as allowing fillets at sea onboard for-hire vessels in the dolphin fishery~~.

The *need* for Dolphin Wahoo Amendment 10 is to base conservation and management measures on the best scientific information available and increase net benefits to the Nation, consistent with the Magnuson-Stevens Fishery Conservation and Management Act and its National Standards.

Discussion:

- The suggested IPT edits to the purpose statement reflects the Council's motion from the March 2021 meeting to remove the action from Amendment 10 that would have allowed filleting of dolphin at sea onboard for-hire vessels in the waters north of the North Carolina/Virginia state line.

Committee Action:

- APPROVE THE IPT'S SUGGESTED EDITS TO THE PURPOSE STATEMENT IN AMENDMENT 10 (HIGHLIGHTED IN YELLOW).
- PROVIDE ADDITIONAL EDITS AND APPROVE THE PURPOSE STATEMENT IN AMENDMENT 10 AS REVISED.

Proposed Actions and Alternatives

Action 1. Revise the total annual catch limit for dolphin to reflect the updated acceptable biological catch level

Alternative 1 (No Action). The total annual catch limit for dolphin is equal to the current acceptable biological catch level.

Preferred Alternative 2. The total annual catch limit for dolphin is equal to the updated acceptable biological catch level.

Alternative 3. The total annual catch limit for dolphin is equal to 95% of the updated acceptable biological catch level.

Alternative 4. The total annual catch limit for dolphin is equal to 90% of the updated acceptable biological catch level.

Discussion:

- The ACL for dolphin is dependent on the ABC, which is set based on catch level recommendations from the Council's SSC.
- In April 2020, the Council's SSC recommended a new acceptable biological catch level for dolphin using the third highest landings value from 1994-2007. These landings include Monroe County, Florida, and are largely based on recreational data from the MRIP newer FES method, which is considered more reliable and robust compared to the previously used CHTS method. Thus, this new ABC is considered BSIA.
- **Preferred Alternative 2** would set the ACL equal to the updated ABC. **Alternative 3** would implement a 5% buffer between the ACL and ABC which equates to approximately

1.23 million pounds. **Alternative 4** would implement a 10% buffer between the ACL and ABC which equates to approximately 2.46 million pounds.

Summary of Environmental Effects:

Biological Effects

- **Alternative 1 (No Action)** is not a viable alternative because it would retain the current total ACL for dolphin, which is not based on the best scientific information available (BSIA).

- **Preferred Alternative 2** would set the total ACL equal to the ABC and would result in the highest ACL of the alternatives considered. **Alternatives 3** and **4** include a buffer from the ABC, and are thus more conservative. Therefore, biological benefits to the dolphin stock would be expected to be greatest for **Alternative 4** followed by **Alternative 3**, and **Preferred Alternative 2**, as long as total landings are below the total ACL.

- Dolphin's life-history could support the increase in the ABC (and ACL) as proposed in **Preferred Alternative 2** and endorsed by the Council's SSC. Furthermore, the difference in accounting for recreational landings under the older MRIP CHTS and newer MRIP FES methods is a factor in the increase in the catch limits.

- Percent standard error (PSE) is relatively low for recreational landings (**Table 1**). Total landings for dolphin have not exceeded the new ABC, with the exception of 2015, in over 20 years (**Figure 1**).

- When compared to the most recent 5-year and 3-year average landings, none of the total ACLs proposed under **Preferred Alternative 2** through **Alternative 4** are expected to be reached. The total ACLs proposed under these alternatives would be reached before the end of the fishing year (December 31), when compared with the maximum annual landings during 2015-2019, as late as October 16 and early as September 14 (**Table 2**).

Table 1. Percent standard errors (PSEs) for recreational Atlantic dolphin landings (by weight), 2010-2019.

Year	Recreational PSEs for Dolphin
2010	15.2
2011	13.5
2012	12.1
2013	18.9
2014	15.4
2015	12.4
2016	11.2
2017	14.5
2018	14.6
2019	14.4

Source: Marine Recreational Information Program.

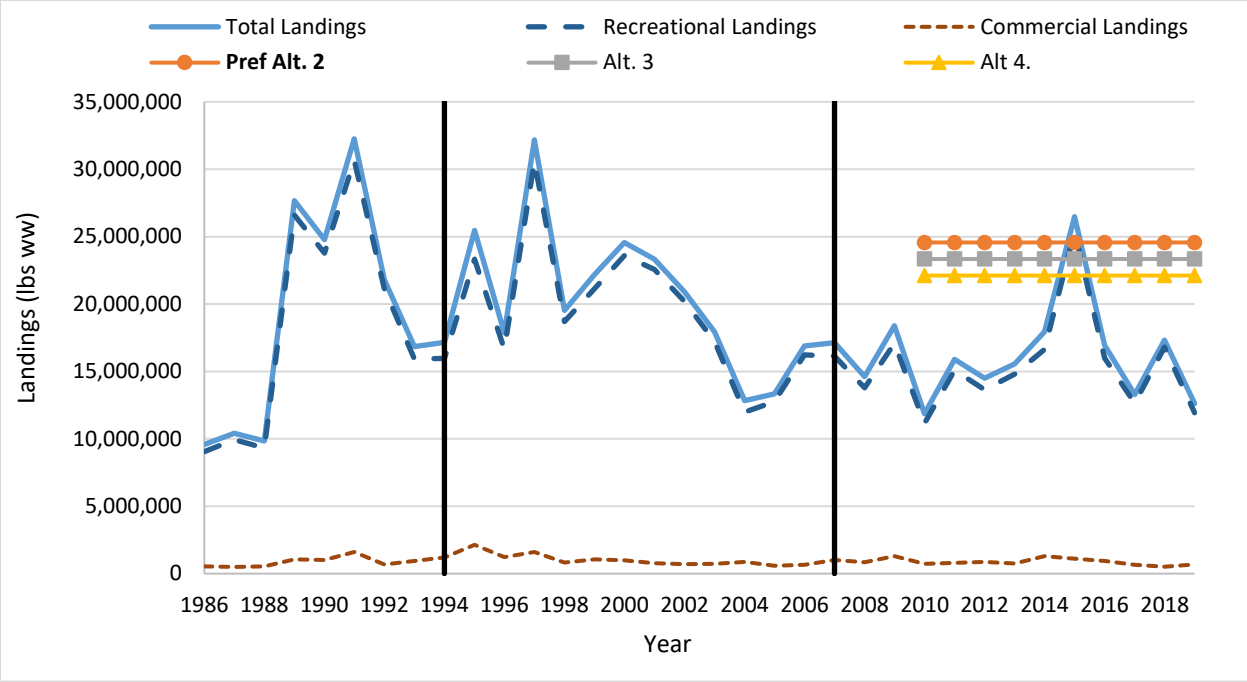

Figure 1. Atlantic dolphin landings (pounds whole weight) from 1986-2019 in comparison to **Alternatives 2 (Preferred)** through **4** in **Action 1**. The solid vertical lines indicate baseline years (1994 to 2007) selected by the SSC for setting the dolphin ABC.

Table 2. Projection of total ACL being reached under all the alternatives in **Action 1** when compared with the average landings (lbs ww) from 2015-2019 (5-year average) and 2017-2019 (3-year average), and maximum landings for a single year from 2015-2019.

Alternative	Dolphin ACL (lbs ww)	Total ACL reached based on average landings from 2015-2019	Total ACL reached based on average landings from 2017-2019	Total ACL reached based on maximum landings from 2015-2019
Alternative 1 (No Action)*	15,344,846	Not Applicable	Not Applicable	Not Applicable
Preferred Alternative 2	**24,570,764**	**No**	**No**	**Yes (16-Oct)**
Alternative 3	23,342,226	No	No	Yes (30-Sep)
Alternative 4	22,113,688	No	No	Yes (14-Sep)

***Alternative 1 (No Action)** incorporates CHTS estimates for recreational landings and does not include recreational landings from Monroe County, FL. Thus it is not applicable to the potential new ACLs which incorporate FES estimates and Monroe County, FL recreational landings.

Economic Effects

- A larger buffer between the ACL and observed landings would allow for higher potential landings, such as those observed in 2015, and reduce the likelihood of restrictive AMs being triggered that would lead to short-term negative economic effects.

- From a short-term economic perspective, **Alternative 1 (No Action)** and **Preferred Alternative 2** may have similar effects because the ACL is equal to the ABC in each

alternative but the accounting for the non-headboat recreational component of the total ACL would change under **Preferred Alternative 2**. These two alternatives have the highest potential net economic benefits, followed by **Alternative 3**, and **Alternative 4** (**Table 3**).

- The estimated potential economic benefits of **Preferred Alternative 2** through **Alternative 4** are provided in **Table 4** in aggregate. **Preferred Alternative 2** is estimated to result in an increase in potential net economic benefits of $10,716,253 for both the recreational and commercial sectors combined (2019 $). There would be positive economic effects for both sectors.

Table 3. Percent difference between the ACLs in **Action 1** compared to 5-year average landings from 2015-2019.

Alternative	Dolphin ACL (lbs ww)	Percent difference between the ACL and average annual landings from 2015-2019*
Alternative 1 (No Action)	15,344,846	59%
Preferred Alternative 2	**24,570,764**	**47%**
Alternative 3	23,342,226	39%
Alternative 4	22,113,688	31%

***Alternative 1 (No Action)** is tracked in part using CHTS estimates for charter and private recreational landings and does not include recreational landings from Monroe County, Florida and thus is not applicable to comparison to the other alternatives. **Alternatives 2 (Preferred)** through **4** would be tracked in part using FES estimates for charter and private recreational landings and would include recreational landings from Monroe County, Florida.

Table 4. Estimated change in potential net economic benefits (recreation and commercial) from **Action 1** (2019 $).

Alternative*	Difference between ACL and 2015-2019 average landings (lbs ww)	Estimated economic effects of the difference between the ACL and 2015-2019 average landings
Preferred Alternative 2	**7,241,649**	**$10,716,253**
Alternative 3	6,013,111	$8,818,629
Alternative 4	4,784,573	$6,921,006

***Alternative 1 (No Action)** is tracked in part using CHTS estimates for charter and private recreational landings while **Alternatives 2 (Preferred)** through **4** would be tracked in part using FES estimates for charter and private recreational landings. Charter and private recreational landings make up a large portion of dolphin landings. As such, the economic effects of **Alternative 1 (No Action)** cannot be compared in a quantitative manner to the other alternatives since the accounting methods used to track the CHTS and FES are vastly different and are not comparable. Thus, **Alternative 1 (No Action)** cannot be considered in this analysis.

Social Effects

- Adjustments in an ACL based on updated information are necessary to ensure continuous social benefits over time. **Alternative 1 (No Action)** would not update the dolphin ACL based on current information and would not provide the social benefits associated with accurate accounting of non-headboat recreational harvest.

- Higher ACLs may provide opportunity for commercial and recreational fishermen to expand their harvest providing social benefits associated with increased income to fishing businesses within the community and higher trip satisfaction.

- **Preferred Alternative 2** would be the most beneficial for fishermen, followed by **Alternative 3**, and **Alternative 4**. **Alternative 1 (No Action)** is likely to have similar effects as **Preferred Alternative 2** as the ACL is set equal to the ABC but the accounting of non-headboat recreational harvest would be updated under **Preferred Alternative 2**.

Advisory Panel Recommendations:

The Dolphin Wahoo AP discussed this action and approved the following motion during their October 28, 2020 meeting:

Comments:

- Some AP members expressed concern over population trends for dolphin noting that abundance is important for the recreational fishery. Dolphin tend to be relatively easy to catch when present, thus making them more susceptible to depletion and a more cautious approach is appropriate to management.

MOTION: ENDORSE ALTERNATIVE 2 AS THE PREFERRED ALTERNATIVE FOR ACTIONS 1 AND 2.
APPROVED BY AP

Summary of Public Hearing Comments:

- Some comments expressed general support for the Council's preferred alternative (**Preferred Alternative 2**).
- Consider a five percent buffer between the ABC and ACL if there is a concern over dolphin abundance (**Alternative 3**).
- Support for **Alternative 4** to address uncertainty over dolphin landings, particularly in regard to international commercial fisheries. A precautionary approach is warranted.

Draft Council Rationale:

- Revising the total ACL for dolphin to reflect the updated ABC from the SSC incorporates BSIA into the management of the fishery for dolphin.
- This ABC includes recreational landings from Monroe County, Florida, and uses MRIP's FES method, which is considered more reliable and robust compared to the CHTS survey method.
- In selecting **Preferred Alternative 2**, Council members noted that setting the ACL equal to the ABC follows the precedent that was established with the Comprehensive ACL Amendment (Amendment 2 to the Dolphin and Wahoo Fishery of the Atlantic).
- It was also noted that based on the last twenty years of total landings data, it appears to be unlikely that harvest will consistently exceed the ACL or the ABC, that commercial landings are well tracked through electronic dealer reporting requirements, that there is a commercial trip limit that goes into place once 75 percent of the commercial sector ACL is met, and that recreational landings for dolphin exhibit relatively low percent standard errors (PSE).

- This reduces the need for a step down between the ABC and ACL.

Committee Action:

- NONE REQUIRED.
- THE COMMITTEE MAY WANT TO DISCUSS THE LANGUAGE OF THE ACTION/ALTERNATIVES AND MODIFY IF NEEDED.
- REVIEW DRAFT COUNCIL RATIONALE AND MODIFY AS APPROPRIATE.

Action 2. Revise the total annual catch limit for wahoo to reflect the updated acceptable biological catch level.

Alternative 1 (No Action). The total annual catch limit for wahoo is equal to the acceptable biological catch level.

Preferred Alternative 2. The total annual catch limit for wahoo is equal to the updated acceptable biological catch level.

Alternative 3. The total annual catch limit for wahoo is equal to 95% of the updated acceptable biological catch level.

Alternative 4. The total annual catch limit for wahoo is equal to 90% of the updated acceptable biological catch level.

Discussion:

- The ACL for wahoo is dependent on the ABC, which is set based on catch level recommendations from the Council's SSC.
- In April 2020, the Council's SSC recommended a new acceptable biological catch level for wahoo using the third highest landings value from 1994-2007. These landings include Monroe County, Florida, and are largely based on recreational data from the MRIP newer FES method, which is considered more reliable and robust compared to the previously used CHTS method. Thus, this new ABC is considered BSIA.
- **Preferred Alternative 2** would set the ACL equal to the updated ABC **Alternative 3** would implement a 5% buffer between the ACL and ABC which equates to approximately 144,000 pounds. **Alternative 4** would implement a 10% buffer between the ACL and ABC which equates to approximately 289,000 pounds.

Summary of Environmental Effects:

Biological Effects

- **Alternative 1 (No Action)** is not a viable alternative because it would retain the current total ACL for wahoo, which is not based on the BSIA.

- **Preferred Alternative 2** would set the total ACL equal to the ABC and would result in the highest ACL of the alternatives considered. **Alternatives 3** and **4** include a buffer from the ABC, and are thus more conservative. Therefore, biological benefits to the wahoo stock

would be expected to be greatest for **Alternative 4** followed by **Alternative 3**, and **Preferred Alternative 2**, as long as total landings are below the total ACL.

- PSE is relatively low for recreational landings (**Table 5**). Total landings for wahoo have exceeded the new ABC a few times over the past decade, largely due to the recreational landings for wahoo (**Figure 2**).

- **Preferred Alternative 2** would increase the total ACL for wahoo. The primary source of the increase in the total ACL is attributable to the change in MRIP's recreational landings estimates.

- When compared with the most recent 3-year average landings (2017-2019), projections show that none of the total ACLs proposed under **Preferred Alternative 2** through **Alternative 4** would be reached. However, the ACL would be reached as late as December 24 or as early as November 22 (before the end of the fishing year on December 31), when compared with the most recent 5 year average (2015-2019). The ACL would be reached as late as September 23 and as early as August 29 when compared with the maximum annual landings during 2015-2019 (**Table 5**).

Table 4. Percent standard errors (PSEs) for recreational Atlantic wahoo landings (by weight), 2010-2019.

Year	Recreational PSEs for Wahoo
2010	27.2
2011	25.1
2012	13.6
2013	21.5
2014	21.8
2015	26.7
2016	28.8
2017	40.9
2018	27
2019	28.8

Source: Marine Recreational Information Program.

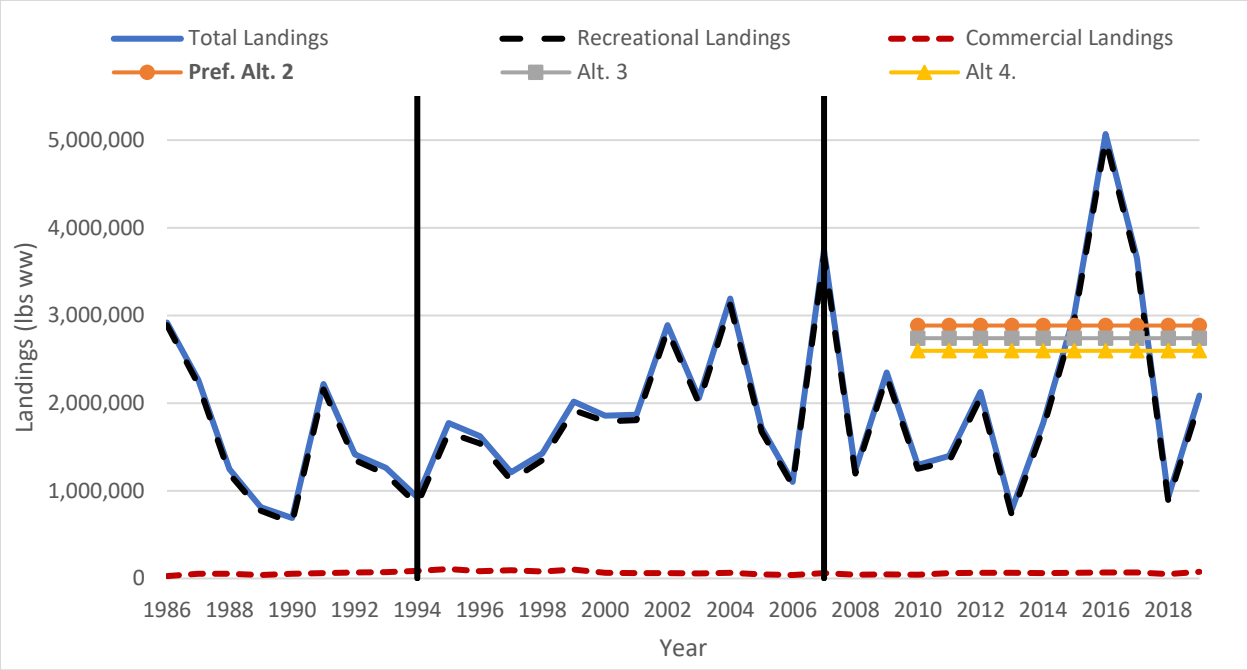

Figure 2. Atlantic wahoo landings (pounds whole weight) from 1986-2019 in comparison to **Alternatives 2 (Preferred)** through **4** in **Action 2**. The solid vertical lines indicate baseline years (1994 to 2007) selected by the SSC for setting the wahoo ABC.

Table 5. Projection of total ACL being reached under all the alternatives in **Action 2** when compared with the average landings (lbs ww) from 2015-2019 (5-year average) and 2017-2019 (3-year average), and maximum landings for a single year from 2015-2019.

Alternative	Dolphin ACL (lbs ww)	Total ACL reached based on average landings from 2015-2019	Total ACL reached based on average landings from 2017-2019	Total ACL reached based on maximum landings from 2015-2019
Alternative 1 (No Action)*	1,794,960	Not Applicable	Not Applicable	Not Applicable
Preferred Alternative 2	**2,885,303**	**Yes (24-Dec)**	**No**	**Yes (23-Sep)**
Alternative 3	2,741,038	Yes (8-Dec)	No	Yes (9-Sep)
Alternative 4	2,596,773	Yes (22-Nov)	No	Yes (29-Aug)

*__Alternative 1 (No Action)__ incorporates CHTS estimates for recreational landings and is not applicable to the potential new ACLs which incorporate FES estimates.

Economic Effects

- A larger buffer between the ACL and observed landings would allow for higher potential landings, such as those observed from 2015-2017, and reduce the likelihood of restrictive AMs being triggered that would lead to short-term negative economic effects.

- From a short-term economic perspective, **Alternative 1 (No Action)** and **Preferred Alternative 2** may have similar effects because the ACL is equal to the ABC in each alternative but the accounting for the non-headboat recreational component of the total ACL

would change under **Preferred Alternative 2**. These two alternatives have the highest potential net economic benefits, followed by **Alternative 3**, and **Alternative 4** (**Table 6**).

- The estimated economic benefits of **Preferred Alternative 2** through **Alternative 4** are provided in **Table 7** in aggregate. **Preferred Alternative 2** is estimated to result in a reduction in potential net economic benefits of $380,333 for both the recreational and commercial sectors combined. There would be negative economic effects for the recreational sector and positive economic effects for the commercial sector.

Table 6. Percent difference between the ACLs in **Action 2** compared to 5-year average landings from 2015-2019.

Alternative	Wahoo ACL (lbs ww)	Percent difference between the ACL and average annual landings from 2015-2019*
Alternative 1 (No Action)*	1,794,960	43%
Preferred Alternative 2	**2,885,303**	**-4%**
Alternative 3	2,741,038	-12%
Alternative 4	2,596,773	-20%

***Alternative 1 (No Action)** is tracked in part using CHTS estimates for charter and private recreational landings and does not include recreational landings from Monroe County, Florida. **Alternatives 2 (Preferred)** through **4** would be tracked in part using FES estimates for charter and private recreational landings and would include recreational landings from Monroe County, Florida.

Table 7. Estimated change in potential net economic benefits (recreation and commercial) from **Action 2** (2019 $).

Alternative[1]	Difference between ACL and 2015-2019 average landings (lbs ww)	Estimated economic effects of the difference between the ACL and 2015-2019 average landings
Preferred Alternative 2	**-63,119**	**-$380,333**
Alternative 3	-207,384	-$914,033
Alternative 4	-351,649	-$1,447,732

[1]**Alternative 1 (No Action)** is tracked in part using CHTS estimates for charter and private recreational landings while **Alternatives 2 (Preferred)** through **4** would be tracked in part using FES estimates for charter and private recreational landings. Charter and private recreational landings make up a large portion of wahoo landings. As such, the economic effects of **Alternative 1 (No Action)** cannot be compared in a quantitative manner to the other alternatives since the accounting methods used to track the CHTS and FES are vastly different and are not comparable. Thus, **Alternative 1 (No Action)** cannot be considered in this analysis.

Social Effects

- Under **Action 2**, **Preferred Alternative 2** through **Alternative 4**, the ACL for wahoo would be based on the most ABC recommendation and updated MRIP estimates. Adjustments in an ACL based on updated information are necessary to ensure continuous social benefits over time, **Alternative 1 (No Action)** would not update the wahoo ACL based on current information and would not provide the related social benefits.

- In general, a higher ACL would lower the chance of triggering a recreational or commercial AM and result in the lowest level of negative effects on the recreational and commercial sectors.

- **Preferred Alternative 2** would be the most beneficial for fishermen, followed by **Alternative 3**, and **Alternative 4**. **Alternative 1 (No Action)** is likely to have similar effects as **Preferred Alternative 2** as the ACL is set equal to the ABC but the accounting of non-headboat recreational harvest would be updated under **Preferred Alternative 2**.

Advisory Panel Recommendations:

The Dolphin Wahoo AP discussed this action and approved the following motion during their October 28, 2020 meeting:

Comments:

- Wahoo tend to be more difficult to target and thus may not be as susceptible to traditional fishing pressure. A less cautious approach to management may be appropriate but AP members stated that there is concern over increased fishing pressure, particularly from divers using spearfishing gear. It was noted that some divers seem to be targeting spawning aggregations and that divers were accounting for a notable number of wahoo harvested directly and through delayed mortality due to wahoo being speared but escaping when the spear pulls out of the fish.

MOTION: ENDORSE ALTERNATIVE 2 AS THE PREFERRED ALTERNATIVE FOR ACTIONS 1 AND 2.
APPROVED BY AP

Summary of Public Hearing Comments:

- Some comments expressed general support for the Council's preferred alternative **(Preferred Alternative 2)**.

Draft Council Rationale:

- Revising the total ACL for wahoo to reflect the updated ABC from the SSC incorporates BSIA into the management of the fishery for dolphin.
- This ABC includes recreational landings from Monroe County, Florida, and uses MRIP's FES method, which is considered more reliable and robust compared to the CHTS survey method.
- In selecting **Preferred Alternative 2**, Council members noted that setting the ACL equal to the ABC follows the precedent that was established with the Comprehensive ACL Amendment (Amendment 2 to the Dolphin and Wahoo Fishery of the Atlantic).
- It was also noted that commercial landings are well tracked through electronic dealer reporting requirements, that there is a commercial trip limit of 500 lbs, and that recreational landings for wahoo exhibit relatively low percent standard errors (PSE).
    - This reduces the need for a step down between the ABC and ACL.

Committee Action:

- NONE REQUIRED.
- THE COMMITTEE MAY WANT TO DISCUSS THE LANGUAGE OF THE ACTION/ALTERNATIVES AND MODIFY IF NEEDED.
- REVIEW DRAFT COUNCIL RATIONALE AND MODIFY AS APPROPRIATE.

Action 3. Revise sector allocations and sector annual catch limits for dolphin

Note: The revised total annual catch limit in Alternatives 1 (No Action) through 4 reflects Preferred Alternative 2 in Action 1 in Amendment 10 to the Fishery Management Plan for Dolphin and Wahoo of the Atlantic. The revised total annual catch limit includes recreational landings from Monroe County, Florida, and incorporates recreational data as per the Marine Recreational Information Program using the Fishery Effort Survey method, as well as updates to commercial and for-hire landings.

Alternative 1 (No Action). Retain the current recreational sector and commercial sector allocations as 90.00% and 10.00%, respectively, of the revised total annual catch limit for dolphin.

Alternative 2. Allocate 93.75% of the revised total annual catch limit for dolphin to the recreational sector. Allocate 6.25% of the revised total annual catch limit for dolphin to the commercial sector. This is based on approximately maintaining the current commercial annual catch limit and allocating the remaining revised total annual catch limit to the recreational sector.

Preferred Alternative 3. Allocate 93.00% of the revised total annual catch limit for dolphin to the recreational sector. Allocate 7.00% of the revised total annual catch limit for dolphin to the commercial sector. This is based on the Council's intent to explore alternatives for sector allocations that would not result in a decrease in the current pounds of dolphin available to either sector.

Alternative 4. Allocate 92.00% of the revised total annual catch limit for dolphin to the recreational sector. Allocate 8.00% of the revised total annual catch limit for dolphin to the commercial sector. This is based on the Council's intent to explore alternatives for sector allocations that would not result in a decrease in the current pounds of dolphin available to either sector.

Summary of Environmental Effects:

Biological Effects

- Biological effects are not expected to vary among alternatives in **Action 3**, since they do not change the total ACL specified in Action 1.

- The commercial sector for dolphin has an effective in-season AM in place to prevent the commercial ACL from being exceeded. However, without an effective AM for the

recreational sector, recreational landings could have adverse biological effects on the dolphin stock in years of elevated landings.

- **Table 8** shows the sector allocations resulting from applying the percentages in **Alternative 1 (No Action)** through **Alternative 4** to the total ACL.

- The largest difference between the current commercial ACL and the proposed commercial ACL would be under **Alternative 1 (No Action)**, followed by **Alternative 4**, **Preferred Alternative 3**, and **Alternative 2** (**Table 9**). A similar comparison for the recreational sector is not appropriate because of the differences between the old MRIP CHTS and new MRIP FES methods.

- The commercial ACL for dolphin would not be reached under **Alternative 1 (No Action)** through **Alternative 4** for all the scenarios (**Table 10**).

- The recreational ACL for dolphin would not be reached or exceeded under any of the alternatives in the average 2015-2019 or average 2017-2019 scenarios. However, the recreational ACL would be reached as early as September 29 under **Alternative 1 (No Action)** and as late as October 11 under **Alternative 2** if the maximum annual landings from a single year during 2015-2019 is considered (**Table 10**).

Table 8. Sector allocations and ACLs for Atlantic dolphin in **Action 3** based on the revised total ACL of 24,570,764 lbs ww from Preferred Alternative 2 in Action 1.

Alternative	Recreational allocation of the total ACL	Recreational sector ACL (lbs ww)	Commercial allocation of the total ACL	Commercial sector ACL (lbs ww)
Alternative 1 (No action)	90.00%	22,113,688	10.00%	2,457,076
Alternative 2	93.75%	23,035,091	6.25%	1,535,673
Preferred Alternative 3	**93.00%**	**22,850,811**	**7.00%**	**1,719,953**
Alternative 4	92.00%	22,605,103	8.00%	1,965,661

Table 9. Commercial ACLs for dolphin in **Action 3** in comparison to the current commercial ACL.

Alternative	Commercial ACL (lbs ww)	Difference from current commercial ACL (lbs ww) *
Alternative 1 (No Action)	2,457,076	922,591
Alternative 2	1,535,673	1,188
Preferred Alternative 3	**1,719,953**	**185,468**
Alternative 4	1,965,661	431,176

*Current commercial ACL= 1,534,485 lbs ww.

Table 10. Predicted date when the recreational and commercial sector ACLs for dolphin would be reached or exceeded under the maximum landings for a single year from 2015-2019. PLEASE NOTE: The recreational and commercial sector ACLs for dolphin would not be reached or exceeded under the average landings from 2015-2019 (5-year average) or average landings from 2017-2019 (3-year average).

Alternative	Recreational Sector ACL (lbs ww)	Recreational ACL reached?	Commercial Sector ACL (lbs ww)	Commercial ACL reached?
Alternative 1 (No Action)	22,113,688	Yes (29-Sep)	2,457,076	No
Alternative 2	23,035,091	Yes (11-Oct)	1,535,673	No
Preferred Alternative 3	**22,850,811**	**Yes (8-Oct)**	**1,719,953**	**No**
Alternative 4	22,605,103	Yes (5-Oct)	1,965,661	No

Note: Maximum annual landings during 2015-2019 were 25,375,981 lbs ww for the recreational sector and 1,101,476 lbs ww for the commercial sector.

Economic Effects

Recreational Sector

- **Alternative 1 (No Action)** would maintain the current 90% of the total ACL allocation to the recreational sector. **Alternatives 2** through **4** would result in a comparatively higher recreational allocations and ACLs.

- The alternatives in **Action 3** can be ranked for the recreational sector from a short-term economic perspective with **Alternative 2** having the highest potential economic benefit, followed by **Preferred Alternative 3**, **Alternative 4**, and **Alternative 1 (No Action)**.

- When compared to **Alternative 1 (No Action)**, **Alternative 2** would result in the largest estimated increase in CS of $1,468,487, followed by **Preferred Alternative 3** and **Alternative 4** with estimated increases in CS of $1,174,791 and $783,193 respectively (2019 $) (**Table 11**).

Table 11. Comparison of the estimated change in consumer surplus (CS) for dolphin recreational sector ACLs in **Action 3** (2019 $).

Alternative	Difference between ACL and 5-year average landings (lbs ww)	Estimated change in CS	Comparison to Alternative 1 (No Action)
Alternative 1 (No Action)	5,562,193	$8,864,746	$0
Alternative 2	6,483,596	$10,333,232	$1,468,487
Preferred Alternative 3	**6,299,316**	**$10,039,536**	**$1,174,791**
Alternative 4	6,053,608	$9,647,938	$783,193

Commercial Sector

- **Alternative 1 (No Action)** would maintain the current commercial allocation of 10% of the total ACL. **Alternatives 2** through **4** would result in comparatively lower commercial allocations and ACLs.

- For the commercial sector the ranking would be the opposite from a short-term economic perspective with **Alternative 1 (No Action)** having the lowest potential for negative economic effects, followed by **Alternative 4**, **Preferred Alternative 3**, and **Alternative 2**.

- When compared to **Alternative 1 (No Action)**, **Alternative 2** would result in the largest estimated reduction in PS of $1,153,121, followed by **Preferred Alternative 3** and **Alternative 4** with estimated reduction in PS of $813,074 and $542,049 respectively (2019 $)(**Table 12**).

Table 12. Comparison of the estimated change in producer surplus (PS) for dolphin commercial sector ACLs in **Action 3** (2019 $).

Alternative	Difference between ACL and 5-year average landings (lbs ww)	Estimated change in PS [1]	Comparison to Alternative 1 (No Action)
Alternative 1 (No Action)	1,679,456	$1,852,503	$0
Alternative 2	758,053	$836,161	-$1,016,342
Preferred Alternative 3	**942,333**	**$1,039,429**	**-$813,074**
Alternative 4	1,188,041	$1,310,454	-$542,049

Change in Net Economic Benefits

- In terms of estimated net benefits for the action, the same ranking would apply as stated for the recreational sector, with **Preferred Alternative 3** expected to increase net economic benefits by $361,716 (2019 $)(**Table 13**).

Table 13. Estimated change in net economic benefits from the alternatives in **Action 3** in comparison to **Alternative 1 (No Action)**(2019 $).

Alternative	Estimated change in net economic benefits for the recreational sector	Estimated change in net economic benefits for the commercial sector	Estimated total change in net economic benefits
Alternative 2	$1,468,487	-$1,016,342	$452,145
Preferred Alternative 3	**$1,174,791**	**-$813,074**	**$361,716**
Alternative 4	$783,193	-$542,049	$241,144

Social Effects

- **Alternative 1 (No Action)** would maintain the current allocation percentages and may have few social effects as both sectors would see an increase in available poundage.

- With **Alternative 2**, **Preferred Alternative 3**, and **Alternative 4**, there would be a decrease in the commercial percentage compared to **Alternative 1 (No Action)**, which could have some negative social effects if commercial fishermen have a negative perception of this change. However, the increase in poundage may result in positive social benefits associated with increased harvest.

- A reduction in allocation for one sector may be compounded by a restrictive choice of ABC or ACL (**Action 1**). Therefore, the choice of an allocation would need to be assessed with

other actions within this amendment to determine the overall social effects and whether short-term losses are offset by any long-term biological gains.

Advisory Panel Recommendations:

The Dolphin Wahoo AP discussed this action and approved the following motion during their October 28, 2020 meeting:

Recommendations:

- In **Action 3**, the AP expressed support for **Alternative 2**, noting that this alternative would not encourage increased harvest of dolphin while also maintaining adequate harvest levels for both sectors.

MOTION: CHOOSE ALTERNATIVE 2 AS PREFERRED IN ACTION 3.
APPROVED BY AP

Summary of Public Hearing Comments:

- Some comments expressed general support for the Council's preferred alternative **(Preferred Alternative 3)**.
- Support for maintaining commercial ACLs on pound basis (**Alternative 2**).
- Support for **Alternative 4** since U.S. commercial fishermen can offer a premium product for Dolphin compared to those that are imported and a reduction of 3% in allocation is not necessary at this time.

Draft Council Rationale:

- **Preferred Alternative 3** was selected in accordance with the Council's stated intent to revise sector allocations and ACLs to reflect the modified total ACL for dolphin and needs of the dolphin fishery.
    - In doing so, the Council wanted to recognize the needs of the recreational sector which would exhibit higher landings than previously estimated and that there would be a new accounting of recreational landings that are inclusive of the FES method.
    - At the same time the Council did not want to reduce the sector ACL on a pound basis for the commercial sector and noted that **Preferred Alternative 3** would strike a balance between the needs of both sectors and increase both sector ACLs on a pound basis.
    - Additionally, the revised commercial sector ACL would remain relatively close to the 1.5 million lbs "soft cap" that was originally put in place with the initial adoption of Dolphin and Wahoo FMP of the Atlantic.

Committee Action:

- NONE REQUIRED.
- THE COMMITTEE MAY WANT TO DISCUSS THE LANGUAGE OF THE ACTION/ALTERNATIVES AND MODIFY IF NEEDED.
- REVIEW DRAFT COUNCIL RATIONALE AND MODIFY AS APPROPRIATE.

Action 4. Revise sector allocations and sector annual catch limits for wahoo

Note: The revised total annual catch limit in Alternatives 1 (No Action) through 4 reflects Preferred Alternative 2 in Action 2 in Amendment 10 to the Fishery Management Plan for Dolphin and Wahoo of the Atlantic. The revised total annual catch limit includes recreational landings from Monroe County, Florida, and incorporates recreational data as per the Marine Recreational Information Program using the Fishery Effort Survey method, as well as updates to commercial and for-hire landings.

Alternative 1 (No Action). Retain the current recreational sector and commercial sector allocations as 96.07% and 3.93%, respectively, of the revised total annual catch limit for wahoo.

Alternative 2. Allocate 96.35% of the revised total annual catch limit for wahoo to the recreational sector. Allocate 3.65% of the revised total annual catch limit for wahoo to the commercial sector. This is based on the total catch between 1994 and 2007.

Alternative 3. Allocate 97.55% of the revised total annual catch limit for wahoo to the recreational sector. Allocate 2.45% of the revised total annual catch limit for wahoo to the commercial sector. This is based on approximately maintaining the current commercial annual catch limit and allocating the remaining revised total annual catch limit to the recreational sector.

Preferred Alternative 4. Allocate 97.00% of the revised total annual catch limit for wahoo to the recreational sector. Allocate 3.00% of the revised total annual catch limit for wahoo to the commercial sector. This is based on the Council's intent to explore alternatives for sector allocations that would not result in a decrease in the current pounds of wahoo available to either sector.

Summary of Environmental Effects:

Biological Effects

- Biological effects are not expected to vary between **Alternative 1 (No Action)** through **Preferred Alternative 4**, since they do not change the total ACL specified in **Action 2**.

- The commercial sector for wahoo has an effective in-season AM in place to prevent the commercial ACL from being exceeded. However, without an effective AM for the recreational sector, recreational landings could have adverse biological effects on the dolphin stock in years of elevated landings.

- **Table 14** shows the sector allocations resulting from applying the percentages in **Alternative 1 (No Action)** through **Alternative 4** to the total ACL.

- The largest difference between the current commercial ACL and the proposed commercial ACL would be under **Alternative 1 (No Action)**, followed by **Alternative 2**, **Preferred Alternative 4**, and **Alternative 3** (**Table 15**). A similar comparison for the recreational

sector is not appropriate because of the differences between the old MRIP CHTS and new MRIP FES methods.

- The commercial ACL for wahoo would not be reached under **Alternative 1 (No Action)** through **Alternative 4** for all the scenarios (**Table 16**).

- The recreational ACL would not be reached under any alternatives in **Action 4** under the average 2017-2019 landings scenario, but it would be reached as early as December 19 and as late as December 24, with **Preferred Alternative 4** reaching the ACL on December 22 under the average 2015-2019 landings scenario (**Table 16**).
    - Under the maximum landings during 2015-2019 scenario, the recreational ACL would be reached as early as September 17 and as late as September 21, with **Preferred Alternative 4** reaching the ACL on September 19 (**Table 16).**

Table 14. Sector allocations and ACLs for wahoo in **Action 4** based on the revised total ACL of 2,885,303 lbs ww from Preferred Alternative 2 in Action 2.

Alternative	Percent Recreational allocation	Recreational sector ACL (lbs ww)	Percent Commercial allocation	Commercial sector ACL (lbs ww)
Alternative 1 (No action)	96.07%	2,771,911	3.93%	113,392
Alternative 2	96.35%	2,779,989	3.65%	105,314
Alternative 3	97.55%	2,814,613	2.45%	70,690
Preferred Alternative 4	**97.00%**	**2,798,744**	**3.00%**	**86,559**

Table 15. Commercial ACLs for wahoo in **Action 4** in comparison to the current commercial ACL.

Alternative	Commercial ACL (lbs ww)	Difference from current commercial ACL (lbs ww) *
Alternative 1 (No Action)	113,392	42,850
Alternative 2	105,314	34,772
Alternative 3	70,690	148
Preferred Alternative 4	**86,559**	**16,017**

**Current commercial ACL= 70,542 lbs ww.

Table 16. Predicted date when the recreational and commercial sector ACLs for wahoo would be reached or exceeded under three scenarios: 1) average from 2015-2019 (5-year average), 2) average from 2017-2019 (3-year average), and 3) the maximum landings for a single year from 2015-2019.

Alternative	Wahoo ACL (lbs ww)	ACL reached? Average 2015-2019 landings	ACL reached? Average 2017-2019 landings	ACL reached? Maximum landings from 2015-2019
Commercial Sector				
Alternative 1 (No Action)	113,392	No	No	No
Alternative 2	105,314	No	No	No
Alternative 3	70,690	No	No	No
Preferred Alternative 4	**86,559**	**No**	**No**	**No**
Recreational Sector				

Alternative	Wahoo ACL (lbs ww)	ACL reached? Average 2015-2019 landings	ACL reached? Average 2017-2019 landings	ACL reached? Maximum landings from 2015-2019
Alternative 1 (No Action)	2,771,911	Yes (19-Dec)	No	Yes (17-Sep)
Alternative 2	2,779,989	Yes (20-Dec)	No	Yes (18-Sep)
Alternative 3	2,814,613	Yes (24-Dec)	No	Yes (21-Sep)
Preferred Alternative 4	**2,798,744**	**Yes (22-Dec)**	**No**	**Yes (19-Sep)**

Economic Effects

Recreational Sector

- **Alternative 1 (No Action)** would maintain the current sector allocation 96.07% of the total ACL to the recreational sector. **Alternatives 2** through **4 (Preferred)** would result in comparatively higher sector allocations and sector ACLs for the recreational sector.

- The alternatives in **Action 4** can be ranked for the recreational sector from a short-term economic perspective with **Alternative 3** having the lowest potential for negative economic effects, followed by **Preferred Alternative 4**, **Alternative 2**, and **Alternative 1 (No Action)**.

- When compared to **Alternative 1 (No Action)**, **Alternative 3** would result in the largest estimated increase in CS of $162,689, followed by **Preferred Alternative 4** and **Alternative 2** with estimated increases in CS of $102,230 and $30,776 respectively (2019 $)(**Table 17**).

Table 17. Comparison of the estimated change in consumer surplus (CS) for wahoo recreational sector ACLs in **Action 4** (2019 $).

Alternative	Difference between ACL and 5-year average landings (lbs ww)	Estimated change in CS	Comparison to Alternative 1 (No Action)
Alternative 1 (No Action)	-112,893	-$430,106	$0
Alternative 2	-104,815	-$399,330	$30,776
Alternative 3	-70,191	-$267,417	$162,689
Preferred Alternative 4	**-86,060**	**-$327,876**	**$102,230**

Commercial Sector

- **Alternative 1 (No Action)** would maintain the current sector allocation 3.93% of the total ACL to the commercial sector. **Alternatives 2** through **4 (Preferred)** would result in comparatively lower sector allocations and sector ACLs for the commercial sector.

- For the commercial sector, the ranking would be the opposite of the recreational from a short-term economic perspective with **Alternative 1 (No Action)** having the highest potential for positive economic effects, followed by **Alternative 2**, **Preferred Alternative 4**, and **Alternative 3**.

- When compared to **Alternative 1 (No Action)**, **Alternative 3** would result in the largest estimated reduction in PS of $25,064, followed by **Preferred Alternative 4** and **Alternative 2** with estimated decreases in PS of $25,064 and $7,545 respectively (2019 $)(**Table 18**).

Table 18. Comparison of the estimated change in producer surplus (PS) for wahoo commercial sector ACLs in **Action 4** (2019 $).

Alternative	Difference between ACL and 5-year average landings (lbs ww)	Estimated change in PS	Comparison to Alternative 1 (No Action)
Alternative 1 (No Action)	49,773	$46,491	$0
Alternative 2	41,695	$38,946	-$7,545
Alternative 3	7,071	$6,605	-$39,886
Preferred Alternative 4	**22,940**	**$21,427**	**-$25,064**

Change in Net Economic Benefits

- In terms of estimated net benefits for the action, the same ranking would apply as stated for the recreational sector, with **Preferred Alternative 4** expected to increase net economic benefits by $77,167 (**Table 19**).

Table 19. Estimated change in net economic benefits from the alternatives in **Action 4** in comparison to **Alternative 1 (No Action)**(2019 $).

Alternative	Estimated change in net economic benefits for the recreational sector	Estimated change in net economic benefits for the commercial sector	Estimated total change in net economic benefits
Alternative 2	$30,776	-$7,545	$23,231
Alternative 3	$162,689	-$39,886	$122,803
Preferred Alternative 4	**$102,230**	**-$25,064**	**$77,167**

Social Effects

- **Alternative 1 (No Action)** would maintain the current allocation percentages and may have few social effects as both sectors would see an increase in available poundage.

- With **Alternative 2**, **Alternative 3**, and **Preferred Alternative 4** there would be a decrease in the commercial percentage compared to **Alternative 1 (No Action),** which could have some negative social effects if commercial fishermen have a negative perception of this change. However, the increase in poundage may result in positive social benefits associated with increased harvest.

- A reduction in allocation for one sector may be compounded by a restrictive choice of ABC or ACL (**Action 2**). Therefore, the choice of an allocation would need to be assessed with other actions within this amendment to determine the overall social effects and whether short-term losses are offset by any long-term biological gains.

Advisory Panel Recommendations:

The Dolphin Wahoo AP discussed this action and approved the following motion during their October 28, 2020 meeting:

Recommendations:

- In **Action 4**, the AP expressed support for **Alternative 3**, noting that this alternative would not encourage increased harvest of wahoo while maintaining adequate harvest levels for both sectors.

MOTION: CHOOSE ALTERNATIVE 3 AS PREFERRED IN ACTION 4.
APPROVED BY AP

Summary of Public Hearing Comments:

- Some comments expressed general support for the Council's preferred alternative **(Preferred Alternative 4)**.
- Support for maintaining commercial ACLs on pound basis (**Alternative 3)**.

Draft Council Rationale:

- **Preferred Alternative 4** was selected in accordance with the Council's stated intent to revise sector allocations and ACLs to reflect the modified total ACL for wahoo and needs of the wahoo fishery.
    - In doing so, the Council wanted to recognize the needs of the recreational sector which would exhibit higher landings than previously estimate and that there would be a new accounting of recreational landings that are inclusive of the FES method.
    - At the same time the Council did not want to reduce the sector ACL on a pound basis for the commercial sector and noted that **Preferred Alternative 4** would strike a balance between the needs of both sectors and increase both sector ACLs on a pound basis.

Committee Action:

- NONE REQUIRED.
- THE COMMITTEE MAY WANT TO DISCUSS THE LANGUAGE OF THE ACTION/ALTERNATIVES AND MODIFY IF NEEDED.
- REVIEW DRAFT COUNCIL RATIONALE AND MODIFY AS APPROPRIATE.

Action 5. Revise the trigger for the post-season recreational accountability measures for dolphin

Alternative 1 (No action). If recreational landings exceed the recreational annual catch limit, then during the following fishing year, recreational landings will be monitored for persistence in increased landings. If the recreational annual catch limit is exceeded, it will be reduced by the amount of the recreational overage in the following fishing year and the recreational season will be reduced by the amount necessary to ensure that recreational landings do not exceed the

reduced annual catch limit only if the species is overfished and the total annual catch limit is exceeded. However, the recreational annual catch limit and length of the recreational season will not be reduced if the Regional Administrator determines, using the best available science, that it is not necessary.

Alternative 2. Implement post season accountability measures in the following fishing year if the recreational annual catch limits are constant and the 3-year mean (*Sub-alternative 2a or 2b*) of landings exceeds the recreational sector annual catch limit. When the recreational sector annual catch limit is changed, use a single year of landings, beginning with the most recent available year of landings, then a two-year average of landings from that single year and the subsequent year, then a three-year average of landings from those two years and the subsequent year, and thereafter a progressive running three-year average to trigger the recreational accountability measure.

Sub-alternative 2a. Use the arithmetic mean to calculate average landings.[1]

Sub-alternative 2b. Use the geometric mean to calculate average landings.[2]

Alternative 3. Implement post season accountability measures in the following fishing year if the summed total of the most recent past three years of recreational landings exceeds the sum of the past three years recreational sector annual catch limits.

Alternative 4. Implement post season accountability measures in the following fishing year if recreational landings exceed the recreational sector annual catch limit in two of the previous three fishing years or exceeds the total acceptable biological catch in any one year.

Preferred Alternative 5. Implement post season accountability measures in the following fishing year if the total (commercial and recreational combined) annual catch limit is exceeded.

Alternative 6. Implement post season accountability measures in the following fishing year if the recreational annual catch limit is exceeded.

Discussion:

- **Action 5** was included as part of the Council's guidance to split the recreational AM action for dolphin into two actions, with one focusing on the trigger for the AM and the other focusing on the AM itself (**Table 20**). Furthermore, the Council specified that it did not want to consider in season AMs for the recreational sector.
- Based on analysis of recreational dolphin landings from 2010 through 2019, the AM would have only been triggered in a single year for **Alternative 4**, **Preferred Alternative 5**, and **Alternative 6**. The AM would have not been triggered under **Alternative 1 (No Action)**, **Alternative 2**, **Sub-Alternative 2a**, **Sub-Alternative 2b**, and **Alternative 3**, assuming a steady ACL was in place the entire time (**Figure 3**, **Table 21**).

Table 20. Summary of triggers for post-season recreational accountability measures in **Action 5.**

[1] The arithmetic mean is calculated by adding the values of a set of numbers and then dividing the sum by the number of values in the set.

[2] The geometric mean is calculated by multiplying the values of a set of numbers and then taking the n^{th} root of the product, where n is equal to the number of values in the set.

Alternative	Trigger(s) for the post-season recreational AM
Alterative 1 (No Action)	The total and sector ACL is exceeded and dolphin deemed overfished.
Alternative 2, Sub-alt. 2a	The 3-year arithmetic mean of recreational landings exceeds the sector ACL.
Alternative 2, Sub-alt. 2b	The 3-year geometric mean of recreational landings exceeds the sector ACL.
Alternative 3	The 3-year summed total of recreational landings exceeds the 3-year summed total of the sector ACL.
Alternative 4	Recreational landings exceed the sector ACL two times in a 3-year period or the total ABC is exceeded in any single year.
Preferred Alternative 5	**Recreational and commercial landings exceed the total ACL.**
Alternative 6	Recreational landings exceed the sector ACL.

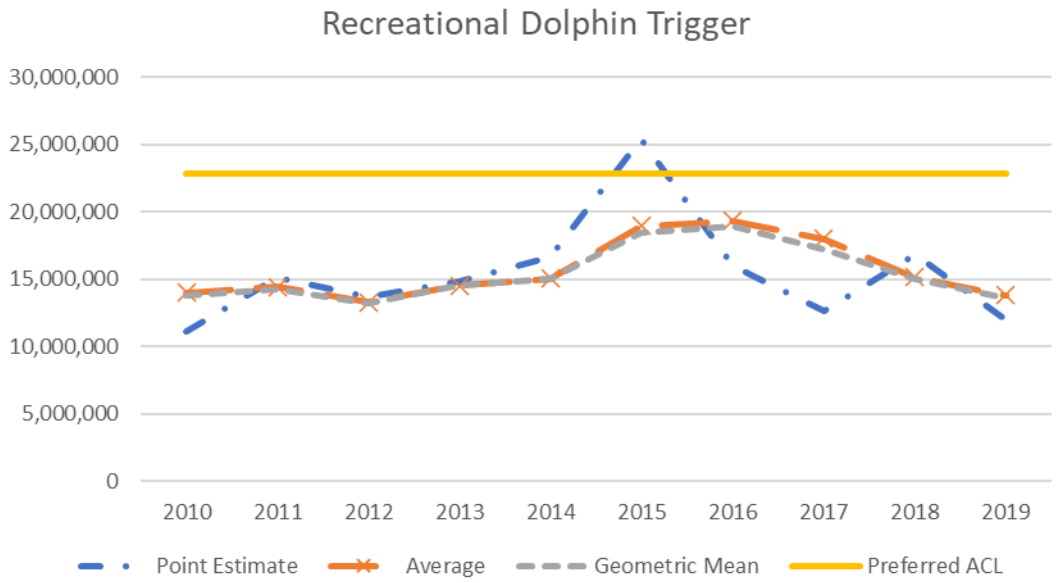

Figure 3. The recreational dolphin annual accountability measure trigger values for a point estimate, three-year average (defined as arithmetic mean), three-year geometric mean, and Preferred Alternative 3 in Action 3.

Table 21. Projection of whether the triggers for post-season recreational accountability measures in **Action 5** would be met based on analysis of recreational dolphin landings from 2010-2019**.**

Alternative	Post-season recreational AM triggered?
Alternative 1 (No Action)	No
Sub-alternative 2b	No
Sub-alternative 2a	No
Alternative 3	No
Alternative 4	Yes (2015)
Preferred Alternative 5	**Yes (2015)**
Alternative 6	Yes (2015)

Summary of Environmental Effects:

Biological Effects

- **Alternative 1 (No Action)** is not a viable alternative because the current recreational AM would never be triggered as there is no peer-reviewed (for example, SEDAR) stock assessment for dolphin and therefore, unlikely to determine its stock status. Biological benefits would be expected to be greater under **Alternative 2** (and its sub-alternatives) through **Alternative 6** which would allow the recreational AM to be triggered.

- Biological benefits would be expected to be greater for the alternative that provides the most timely and realistic to trigger for a post-season AM. Corrective measures would only occur the following year or years after the recreational ACL is exceeded.
    - Positive biological effects would be greater under **Alternative 6**, followed by **Preferred Alternative 5**, **Alternative 4**, **Alternative 3**, and **Alternative 2** (and its sub-alternatives).

Economic Effects

- The trigger for a recreational AM does not directly affect the actions taken under the AM but does affect whether corrective measures are put in place. Thus, the economic effects of the trigger for the AM are indirect rather than direct.

- In terms of for-gone potential short-term negative economic effects to the recreational sector, **Alternative 1 (No Action)** would have the lowest potential negative economic effects, followed by **Sub-Alternative 2a**, **Sub-Alternative 2b**, **Alternative 3**, **Preferred Alternative 5**, **Alternative 4**, and **Alternative 6**.

Social Effects

- The AM trigger itself should not have any negative social effects but could impose negative effects indirectly if the trigger initiates management action that is unnecessary at the time or delays management action when it is necessary.

- More conservative triggers (such as **Preferred Alternative 5** and **Alternative 6)** could impose negative short-term social effects if AMs are triggered due to volatile landings in a single year. Alternatively, if management action is necessary, conservative triggers many ensure that harvest remains sustainable safeguarding long-term social benefits.

Administrative Effects

- **Alternative 1 (No Action)** would be the least administratively burdensome compared to **Alternatives 2** through **6**, but it is not a viable alternative. Administrative effects would be greater under **Alternative 2** (and its sub-alternatives), followed by **Alternative 3**, **Alternative 4**, **Preferred Alternative 5**, and **Alternative 6**.

Advisory Panel Recommendations:

The Dolphin Wahoo AP discussed this action and provided the following recommendation during their October 28, 2020 meeting:

- Regarding **Action 5**, the AP did not choose a single alternative but noted that multi-year triggers that take into account variability in landings are preferred.

SSC Recommendations:

- The SSC discussed the use of geometric mean as a trigger for recreational AMs during their Spring 2021 meeting. The final meeting report is not available at this time but will be made available prior to the June 2021 Council meeting.

Summary of Public Hearing Comments:

- Some comments expressed general support for the Council's preferred alternative (**Preferred Alternative 5**).

Draft Council Rationale:

- In discussing the triggers for the recreational AM, the Council selected **Preferred Alternative 5**. Council members noted that:
    - This alternative allows the recreational sector to slightly exceed its sector ACL without triggering the AM as long as the commercial sector is under harvesting its sector ACL.
    - The trigger would help ensure sustainable harvest by preventing the total ACL from being exceeded on a consistent basis.
    - Implements an adequate AM trigger and addresses the deficiency with the current AM trigger that requires dolphin to be deemed overfished for the AM to go into place.

Committee Action:

- NONE REQUIRED.
- THE COMMITTEE MAY WANT TO DISCUSS THE LANGUAGE OF THE ACTION/ALTERNATIVES AND MODIFY IF NEEDED.
- REVIEW DRAFT COUNCIL RATIONALE AND MODIFY AS APPROPRIATE.

Action 6. Revise the post-season recreational accountability measures for dolphin

Alternative 1 (No action). If recreational landings exceed the recreational annual catch limit, then during the following fishing year, recreational landings will be monitored for persistence in increased landings. If the recreational annual catch limit is exceeded, it will be reduced by the amount of the recreational overage in the following fishing year and the recreational season will be reduced by the amount necessary to ensure that recreational landings do not exceed the reduced annual catch limit only if the species is overfished and the total annual catch limit is exceeded. However, the recreational annual catch limit and length of the recreational season will not be reduced if the Regional Administrator determines, using the best available science, that it is not necessary.

Preferred Alternative 2. Reduce the length of the following recreational fishing season by the amount necessary to prevent the annual catch limit from being exceeded in the following year. However, the length of the recreational season will not be reduced if the Regional Administrator determines, using the best available science, that it is not necessary.

Alternative 3. Reduce the bag limit in the following recreational fishing season by the amount necessary to prevent the annual catch limit from being exceeded in the following year. However, the bag limit will not be reduced if the Regional Administrator determines, using the best available science, that it is not necessary.

Alternative 4. Reduce the vessel limit in the following recreational fishing season by the amount necessary to prevent the annual catch limit from being exceeded in the following year. However, the vessel limit will not be reduced if the Regional Administrator determines, using the best available science, that it is not necessary.

Alternative 5. In the following fishing year monitor landings, and if by September 1 of each year landings are projected to meet the sector ACL that fishing year, reduce the bag limit to prevent the annual catch limit from being exceeded (*Sub-alternatives 5a through 5e*). If reductions in the bag limit are projected to be insufficient to constrain harvest to the ACL, then also reduce the vessel limit to prevent the annual catch limit from being exceeded (*Sub-alternatives 5f through 5i*). If reductions in the bag limit and vessel limit are not implemented or are projected to be insufficient to constrain harvest to the ACL, then also reduce the length of the recreational fishing season to prevent the annual catch limit from being exceeded.[3] However, the vessel limit, bag limit, and/or recreational fishing season will not be reduced if the Regional Administrator determines, using the best available science, that it is not necessary.

Bag Limit Sub-Alternatives:

Sub-alternative 5a. Reduce the bag limit by the amount necessary but not below 2 fish per person per day.

Sub-alternative 5b. Reduce the bag limit by the amount necessary but not below 3 fish per person per day.

Sub-alternative 5c. Reduce the bag limit by the amount necessary but not below 4 fish per person per day.

Sub-alternative 5d. Reduce the bag limit by the amount necessary but not below 5 fish per vessel per day.

Sub-alternative 5e. Do not reduce the bag limit.

Vessel Limit Sub-Alternatives:

Sub-alternative 5f. Reduce the vessel limit by the amount necessary but not below 10 fish per vessel per day.

Sub-alternative 5g. Reduce the vessel limit by the amount necessary but not below 20 fish per vessel per day.

[3] The intent of this alternative is that NMFS would implement the reduction in bag limit, vessel limit, and/or season length through a single in-season action, but implementation via separate regulations would not be precluded.

Sub-alternative 5h. Reduce the vessel limit by the amount necessary but not below 30 fish per vessel per day.
Sub-alternative 5i. Do not reduce the vessel limit.

Discussion:

- A summary of the alternatives considered in **Action 6** is provided in **Table 22**.

Table 22. Summary of post-season recreational accountability measures in **Action 6.**

Alternative	Post-season recreational AM
Alterative 1 (No Action)	Reduce the sector ACL by the ACL overage and reduce the fishing season accordingly to ensure that the reduced sector ACL is not exceeded.
Preferred Alternative 2	**Reduce the fishing season to prevent the sector ACL from being exceeded.**
Alternative 3	Reduce the bag limit to prevent the sector ACL from being exceeded.
Alternative 4	Reduce the vessel limit to prevent sector ACL from being exceeded.
Alternative 5	Monitor landings and if projected to reach sector ACL, potentially implement an in-season bag limit reduction, in-season vessel limit reduction, and if still necessary reduce the fishing season in-season to prevent the sector ACL from being exceeded. If landings are projected to reach the sector ACL after September 1 of each a reduced fishing season would be implemented.

Summary of Environmental Effects:

Biological Effects

- **Alternative 1 (No Action)** is not a viable alternative because the current recreational AM would never be triggered as there is no peer-reviewed stock assessment for dolphin and therefore, unlikely to determine its stock status. **Preferred Alternative 2** through **Alternative 5** would be expected to have greater positive biological effects compared with **Alternative 1 (No Action)** by reducing the fishing effort for dolphin in the event the recreational ACL is exceeded.

- Since no in-season AMs are being considered, it is imperative that a functional and effective post-season AM is selected to prevent possible adverse biological effects if the recreational ACL were exceeded.

- Under **Preferred Alternative 2**, the length of the following recreational fishing season would be reduced. This would be the most effective way to ensure the recreational ACL is not exceeded.

- **Alternative 3** would reduce the bag limit in the following recreational fishing season, but as shown in **Figure 4,** 90-98% of private recreational and charter vessel trips (MRIP) and 99-100% of headboat trips retained 1-5 fish per person.
    - **Figure 4** does indicate a minor percentage of trips over the bag limit (approximately 3%). However, this does not necessarily represent illegal harvest, but rather is an artifact of analyzing MRIP data, which records the number of

anglers on a trip but does not record captain or crew on a trip. Captain and crew may retain a bag limit of dolphin, provided the vessel limit of 60-dolphin is not exceeded. Of the 3% of trips that exceeded the bag limit the majority of those trips (92%) came from charter mode. As such, a limited number of trips may appear to have exceed the bag limit when analyzed for the number of anglers present but in reality the captain and crew may not have been accounted for in the intercept data.

- **Alternative 4** would reduce the vessel limit in the following fishing season. Analysis of the alternatives under Action 11 show reduction in recreational landings for the private recreational vessels and charter vessels (MRIP) were as high as 12.70% for the entire Atlantic region for a 30-fish vessel limit but nearly zero for east Florida, and South Carolina, through east Florida combined.

- **Alternative 5** would monitor recreational landings in the following year, and if recreational landings are projected to meet the recreational ACL, the bag limit would be reduced (**Sub-alternative 5a-5d**) and/or the vessel limit would be reduced (**Sub-alternative 5f-5i**). If still necessary, the length of the recreational season would be reduced.
    - Bag and vessel limit reductions may not be enough to reduce the recreational fishing effort when the recreational ACL has already been exceeded. By the time the recreational season is shortened, two consecutive years of exceeding the recreational ACL may have occurred.

- Positive biological effects would be greatest under **Preferred Alternative 2**, followed by **Alternatives 4**, **3**, and **Alternative 5**.

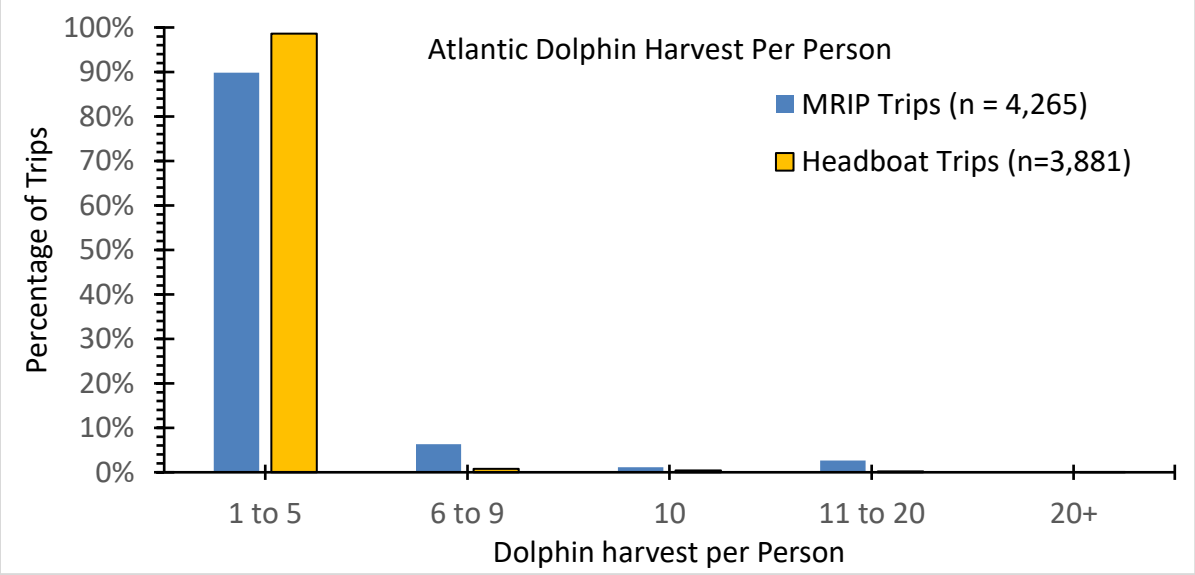

Figure 4. Percentage of trips for dolphin harvested per person. The data are from 2015 through 2019, and data from both MRIP (private rec./charter vessels) and Headboat are provided.

Economic Effects

- In years when a recreational AM is not triggered, there are no economic effects. Since the recreational ACL for dolphin is not anticipated to be reached based on the most recent five-year average recreational landings, there are no anticipated realized economic effects from any of the alternatives in **Action 6**.

- In terms of potential short-term negative economic effects to the recreational sector, **Alternative 5** would have the lowest potential negative economic effects, followed by **Alternative 4**, **Alternative 3**, **Preferred Alternative 2**, and **Alternative 1 (No Action)**.

Social Effects

- Overall, longer seasons result in increased fishing opportunities for the recreational sector and increased revenue opportunities for the for-hire sector. Reducing the season length (**Preferred Alternative 2**, and **Alternative 5**) is anticipated to result in direct negative social effects associated with loss of access to the resource.
    - **Alternative 5** includes close monitoring of the fishery and may have social benefits if management is able to respond in a timely manner to keep the fishing season open for as long as possible, maintaining access for participants.
    - The timing and importance of different species can vary considerably by state. The social effects would depend on the likelihood of harvest being open during times of the year when it is easy to access and/or profitable to target dolphin.

- The social effects of reducing the bag limit (**Alternative 3**) or the vessel limit (**Alternative 4**) depend upon how fishermen are affected by either higher bag/vessel limits and shorter seasons, or lower bag limits and longer seasons. Reducing the bag limit and/or vessel limit may have beneficial social effects if the season is extended.

Administrative Effects

- **Alternative 1 (No Action)** would be the least administratively burdensome compared to **Preferred Alternative 2** through **Alternative 5**, but it is not a viable alternative.

- Administrative burdens such as data monitoring, rulemaking, outreach, and enforcement would be similar for **Preferred Alternative 2**, **Alternatives 3**, and **4**.

- Administrative effects would be most burdensome under **Alternative 5** because it is relatively complicated and would result in additional time and costs to implement.

Advisory Panel Recommendations:

The Dolphin Wahoo AP discussed this action and provided the following recommendation during their October 28, 2020 meeting:

- In **Action 6**, a vessel limit reduction would be slightly preferable compared to the other alternatives being considered, especially compared to a closed season. If vessel limits are reduced, try to maintain limits that are viable for the for-hire component of the fishery.

The Law Enforcement AP discussed this action and provided the following recommendation during their February 1, 2020 meeting:

- In-season adjustments are generally less desirable than regulation changes that are set towards the beginning of a fishing season from an enforcement standpoint.
- In-season measures are enforceable, but there is a lag time to educate fishermen. Communication is important to get notice of a regulatory change to stakeholders in a timely manner, including law enforcement personnel.

Summary of Public Hearing Comments:

- Support for **Alternative 5** with a reduced vessel limit.

Draft Council Rationale:

- Council members noted that there appears to be a low likelihood of the AM being triggered, as the ACL is based on the ABC which is set at a relatively high level of landings that is not often observed in the fishery.
- Specifying an AM that would shorten the recreational fishing season is less administratively burdensome and relatively simple to implement and communicate should any sort of change in the season be necessary.
- Additionally, there is a stipulation within **Preferred Alternative 2** that the season would not be reduced if the Regional Administrator determines, using the best available science, that it is not necessary.
    - This specification would allow for the monitoring of landings for the following season to evaluate whether the elevated landings from the previous year are continuing to persist in the fishery, which would inform decisions on whether a late season harvest closure would need to occur.

Committee Action:

- NONE REQUIRED.
- THE COMMITTEE MAY WANT TO DISCUSS THE LANGUAGE OF THE ACTION/ALTERNATIVES AND MODIFY IF NEEDED.
- REVIEW DRAFT COUNCIL RATIONALE AND MODIFY AS APPROPRIATE.

Action 7. Revise the trigger for the post-season recreational accountability measures for wahoo

Alternative 1 (No action). If recreational landings exceed the recreational annual catch limit, then during the following fishing year recreational landings will be monitored for persistence in increased landings. If the recreational annual catch limit is exceeded, it will be reduced by the amount of the recreational overage in the following fishing only if the species is overfished and the total annual catch limit is exceeded. However, the recreational annual catch limit will not be reduced if the Regional Administrator determines, using the best available science, that it is not necessary.

Preferred Alternative 2. Implement post season accountability measures in the following fishing year if the recreational annual catch limits are constant and the 3-year mean (*Sub-alternative 2a or 2b*) of landings exceeds the recreational sector annual catch limit. When the recreational sector annual catch limit is changed, use a single year of landings, beginning with the most recent available year of landings, then a two-year average of landings from that single year and the subsequent year, then a three-year average of landings from those two years and the subsequent year, and thereafter a progressive running three-year average to trigger the recreational accountability measure.

Sub-alternative 2a. Use the arithmetic mean to calculate average landings.[4]

Preferred Sub-alternative 2b. Use the geometric mean to calculate average landings.[5]

Alternative 3. Implement post season accountability measures in the following fishing year if the summed total of the most recent past three years of recreational landings exceeds the sum of the past three years recreational sector annual catch limits.

Alternative 4. Implement post season accountability measures in the following fishing year if recreational landings exceed the recreational sector annual catch limit in two of the previous three fishing years or exceeds the total acceptable biological catch in any one year.

Alternative 5. Implement post season accountability measures in the following fishing year if the total (commercial and recreational combined) annual catch limit is exceeded.

Alternative 6. Implement post season accountability measures in the following fishing year if the recreational annual catch limit is exceeded.

Discussion:

- **Action 7** was included as part of the Council's guidance to split the recreational AM action for wahoo into two actions, with one focusing on the trigger for the AM and the other focusing on the AM itself (**Table 23**). Furthermore, the Council specified that it did not want to consider in season AMs for the recreational sector.
- Based on analysis of recreational wahoo landings from 2010 through 2019, the AM would have been triggered in three years under **Sub-Alternative 2a, Alternative 3**, **Alternative 4, Alternative 5**, and **Alternative 6**. The AM would have been triggered in two years under **Sub-Alterative 2b** and would not been triggered under **Alternative 1 (No Action)** assuming a steady ACL was in place the entire time (**Figure 5**, **Table 24**).

Table 23. Summary of triggers for post-season recreational accountability measures in **Action 7.**

Alternative	Trigger(s) for the post-season recreational AM
Alterative 1 (No Action)	The total and sector ACL is exceeded and dolphin deemed overfished.

[4] The arithmetic mean is calculated by adding the values of a set of numbers and then dividing the sum by the number of values in the set.

[5] The geometric mean is calculated by multiplying the values of a set of numbers and then taking the n^{th} root of the product, where n is equal to the number of values in the set.

Sub-alternative 2a	The 3-year arithmetic mean of recreational landings exceeds the sector ACL.
Preferred Sub-alternative 2b	**The 3-year geometric mean of recreational landings exceeds the sector ACL.**
Alternative 3	The 3-year summed total of recreational landings exceeds the 3-year summed total of the sector ACL.
Alternative 4	Recreational landings exceed the sector ACL two times in a 3-year period or the total ABC is exceeded in any single year.
Alternative 5	Recreational and commercial landings exceed the total ACL.
Alternative 6	Recreational landings exceed the sector ACL.

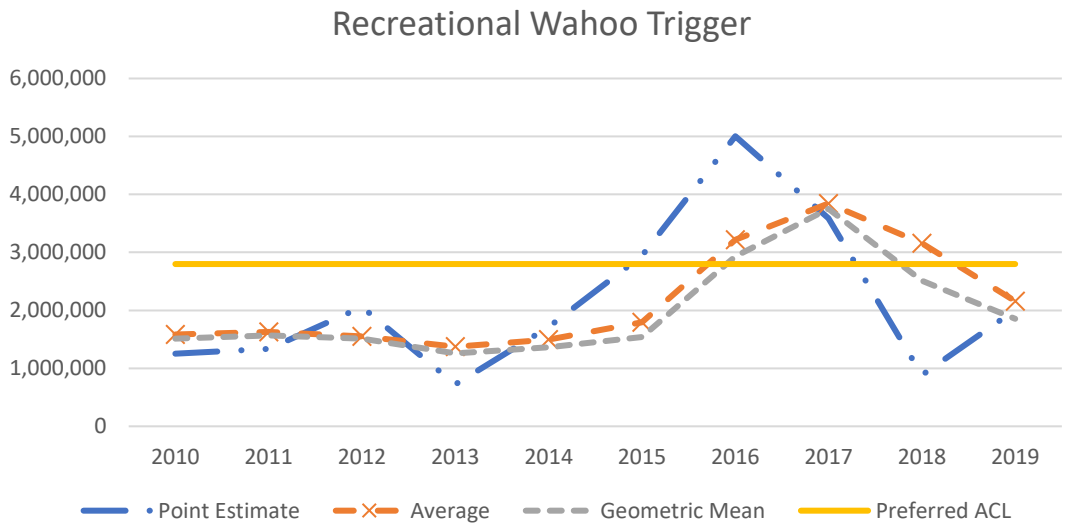

Figure 5. The recreational wahoo annual accountability measure trigger values for a point estimate, three-year average (defined as arithmetic mean), three-year geometric mean, and Preferred Alternative 4 in Action 4.

Table 24. Projection of whether post-season recreational accountability measures in **Action 7** based on analysis of recreational wahoo landings from 2010-2019 (inclusive of FES estimates)**.**

Alternative	Post-season recreational AM triggered?
Alternative 1 (No Action)	No
Sub-alternative 2a	Yes (2017, 2018, 2019)
Preferred Sub-alternative 2b	**Yes (2017, 2018)**
Alternative 3	Yes (2016, 2017, 2018)
Alternative 4	Yes (2015, 2016, 2017)
Alternative 5	Yes (2015, 2016, 2017)
Alternative 6	Yes (2015, 2016, 2017)

Summary of Environmental Effects:

Biological Effects

- **Alternative 1 (No Action)** is not a viable alternative because the current recreational AM would never be triggered as there is no peer-reviewed (for example, SEDAR) stock

assessment for wahoo and therefore, unlikely to determine its stock status. Biological benefits would be expected to be greater under **Preferred Alternative 2** (and its sub-alternatives) through **Alternative 6** which would allow the recreational AM to be triggered.

- Biological benefits would be expected to be greater for the alternative that provides the most timely and realistic trigger for a post-season AM. Corrective measures would only occur the following year or years after the recreational ACL is exceeded.
    - Positive biological effects would be greater under **Alternative 6**, followed by **Alternative 5**, **Alternative 4**, **Alternative 3**, and **Preferred Alternative 2 (Sub-alternative 2a** and **Preferred Sub-alternative 2b)**.

Economic Effects

- The trigger for a recreational AM does not directly affect the actions taken under the AM but does affect whether corrective measures are put in place. Thus, the economic effects of the trigger for the AM are indirect rather than direct.

- In terms of potential short-term negative economic effects to the recreational sector, **Alternative 1 (No Action)** would have the lowest potential negative economic effects, followed by **Preferred Sub-alternative 2b, Sub-alternative 2a**, **Alternative 3**, **Alternative 5**, **Alternative 4**, and **Alternative 6**.

Social Effects

- The AM trigger itself should not have any negative social effects but could impose negative effects indirectly if the trigger initiates management action that is unnecessary at the time or delays management action when it is necessary.

- Less conservative triggers (such as **Sub-alternative 2a** and **Preferred Sub-alternative 2b)** could be beneficial if landings in one or more years were artificially high or low due to anomalies in harvesting behavior or stock status. Alternatively, less conservative triggers may indirectly result in negative long-term social effects if they delay necessary management action.

Administrative Effects

- **Alternative 1 (No Action)** would be the least burdensome compared to **Preferred Alternative 2** through **Alternative 6**, but it is not a viable alternative. Administrative burdens would be greater under **Preferred Alternative 2** (including **Sub-alternative 2a** and **Preferred Sub-alternative 2b**), followed by **Alternative 3**, **Alternative 4**, **Alternative 5**, and **Alternative 6**.
    - Under **Preferred Alternative 2** and **Preferred Sub-Alternative 2b** the recreational ACL would have to be constant for three years and, if in any year the recreational ACL is changed, the moving multi-year geometric mean of landings would start over.
    - **Alternatives 3** through **6** are less complicated and administrative burden would be the least for the simplest trigger option under **Alternative 6**.

Advisory Panel Recommendations:

The Dolphin Wahoo AP discussed this action and provided the following recommendation during their October 28, 2020 meeting:

- Regarding **Action 7**, the AP did not choose a single alternative but noted that multi-year triggers that take into account variability in landings are preferred.

SSC Recommendations:

- The SSC discussed the use of geometric mean as a trigger for recreational AMs during their Spring 2021 meeting. The final meeting report is not available at this time but will be made available prior to the June 2021 Council meeting.

Summary of Public Hearing Comments:

- Some comments expressed general support for the Council's preferred alternative (**Preferred Alternative 2**, **Sub-alternative 2b**).

Draft Council Rationale:

- **Preferred Alternative 2, Sub-alternative 2b** would potentially prevent the recreational AM from being triggered due to exceeding the ACL in a single year but would be triggered if the ACL was exceeded on a consistent basis.
- It was noted that using a three-year geometric mean helps to smooth volatile landings data and potentially avoid implementing restrictive AMs unnecessarily if there was an anomaly in the landings estimates that was not accurately reflecting an actual increase in the harvest of wahoo.
- In discussion of this alternative, it was noted that a geometric mean is less sensitive to being affected by abnormally large spikes in landings estimates than the arithmetic mean or using a single year point estimate. Given the extreme variability of wahoo landings, particularly in recent years, use of the three-year geometric mean was determined to be appropriate for setting the AM trigger.

Committee Action:

- NONE REQUIRED.
- THE COMMITTEE MAY WANT TO DISCUSS THE LANGUAGE OF THE ACTION/ALTERNATIVES AND MODIFY IF NEEDED.
- REVIEW DRAFT COUNCIL RATIONALE AND MODIFY AS APPROPRIATE.

Action 8. Revise the post-season recreational accountability measures for wahoo

Alternative 1 (No action). If recreational landings exceed the recreational annual catch limit, then during the following fishing year recreational landings will be monitored for persistence in increased landings. If the recreational annual catch limit is exceeded, it will be reduced by the amount of the recreational overage in the following fishing year only if the species is overfished

and the total annual catch limit is exceeded. However, the recreational annual catch limit will not be reduced if the Regional Administrator determines, using the best available science, that it is not necessary.

Preferred Alternative 2. Reduce the length of the following recreational fishing season by the amount necessary to prevent the annual catch limit from being exceeded in the following year. However, the length of the recreational season will not be reduced if the Regional Administrator determines, using the best available science, that it is not necessary.

Alternative 3. Reduce the bag limit in the following recreational fishing season by the amount necessary to prevent the annual catch limit from being exceeded in the following year. However, the bag limit will not be reduced if the Regional Administrator determines, using the best available science, that it is not necessary.

Alternative 4. Implement a vessel limit in the following recreational fishing season that would prevent the annual catch limit from being exceeded in the following year. However, the vessel limit will not be implemented if the Regional Administrator determines, using the best available science, that it is not necessary.

Discussion:

- A summary of the alternatives considered in Action 8 is provided in **Table 25**.

Table 25. Summary of post-season recreational accountability measures in **Action 8.**

Alternative	Post-season recreational AM
Alterative 1 (No Action)	Reduce the sector ACL by the ACL overage.
Preferred Alternative 2	**Reduce the fishing season to prevent the sector ACL from being exceeded.**
Alternative 3	Reduce the bag limit to prevent the sector ACL from being exceeded.
Alternative 4	Implement a vessel limit to prevent the sector ACL from being exceeded.

Summary of Environmental Effects:

Biological Effects

- **Alternative 1 (No Action)** is not a viable alternative because the current recreational AM would never be triggered as there is no stock assessment for wahoo. **Preferred Alternative 2** through **Alternative 4** would be expected to have positive biological effects compared with **Alternative 1 (No Action)** by reducing the fishing effort for wahoo in the event that the recreational ACL is exceeded.

- Since no in-season AMs are being considered, it is imperative that a functional and effective post-season AM is selected to prevent possible adverse biological effects if the recreational ACL were exceeded.

- Under **Preferred Alternative 2**, the length of the following recreational fishing season would be reduced. This would be the most effective way to ensure the recreational ACL is not exceeded.
    - The recreational ACL for wahoo would be reached as early as December 19 and as late as December 24 under the average 2015-2019 landings scenario, and on different dates in September under the maximum landings during 2015-2019 scenario.

Economic Effects

- In years when a recreational AM is not triggered, there are no economic effects. Since the recreational ACL for wahoo is anticipated to be reached based on the most recent five-year average recreational landings, there are potential realized economic effects from the alternatives in **Action 8**.

- In terms of potential short-term negative economic effects to the recreational sector, **Alternative 1 (No Action)** would have the lowest potential negative economic effects, followed by **Alternative 4**, **Alternative 3**, and **Preferred Alternative 2**.

Social Effects

- Overall, longer seasons result in increased fishing opportunities for the recreational sector and increased revenue opportunities for the for-hire sector. Reducing the season length (**Preferred Alternative 2**) is anticipated to result in direct negative social effects associated with loss of access to the resource.

- The social effects of reducing the bag limit (**Alternative 3**) or the vessel limit (**Alternative 4**) depend upon how fishermen are affected by either higher bag/vessel limits and shorter seasons, or lower bag limits and longer seasons. Reducing the bag limit and/or vessel limit may have beneficial social effects as the season may be extended.

Administrative Effects

- **Alternative 1 (No Action)** would be the least administratively burdensome compared to **Preferred Alternative 2** through **Alternative 4**, but it is not a viable alternative.

- Administrative burdens such as data monitoring, rulemaking, outreach, and enforcement would be similar for **Preferred Alternative 2**, **Alternative 3**, and **Alternative 4**.

Advisory Panel Recommendations:

The Dolphin Wahoo AP discussed this action and provided the following recommendation during their October 28, 2020 meeting:

- In **Action 8** (specifying recreational AMs), a vessel limit reduction would be slightly preferable compared to the other alternatives being considered, especially compared to a closed season. If vessel limits are reduced, try to maintain limits that are viable for the for-hire component of the fishery.
    - It was noted that 8 fish per vessel is recommended as a minimum limit for wahoo in an AM.

The Law Enforcement AP discussed this action and provided the following recommendation during their February 1, 2020 meeting:

- In-season adjustments are generally less desirable than regulation changes that are set towards the beginning of a fishing season from an enforcement standpoint.
- In-season measures are enforceable, but there is a lag time to educate fishermen. Communication is important to get notice of a regulatory change to stakeholders in a timely manner, including law enforcement personnel.

Summary of Public Hearing Comments:

- For the Wahoo recreational AM, consider a reduced vessel limit rather than a harvest closure (**Action 8**, **Alternative 4**).
- Also comments in favor of **Alternative 1 (No Action)** and **Preferred Alternative 2**.

Draft Council Rationale:

- Council members noted that specifying an AM that would shorten the recreational fishing season is less administratively burdensome and relatively simple to implement and communicate should any sort of change in the season be necessary.
- Additionally, there is a stipulation within **Preferred Alternative 2** that the season would not be reduced if the Regional Administrator determines, using the best available science, that it is not necessary.
    - This specification would allow for the monitoring of landings for the following season to evaluate whether the elevated landings from the previous year are continuing to persist in the fishery, which would inform decisions on whether a late season harvest closure would need to occur.
- In choosing this alternative, Council members also noted the relatively equitable nature and equally distributed effects of a shortening of the recreational season, as wahoo are often targeted in caught late in the year in many areas of the Mid and South Atlantic region.

Committee Action:

- NONE REQUIRED.
- THE COMMITTEE MAY WANT TO DISCUSS THE LANGUAGE OF THE ACTION/ALTERNATIVES AND MODIFY IF NEEDED.
- REVIEW DRAFT COUNCIL RATIONALE AND MODIFY AS APPROPRIATE.

Action 9. Allow properly permitted commercial fishing vessels with trap, pot, or buoy gear on board that are not authorized for use in the dolphin wahoo fishery to possess commercial quantities of dolphin and wahoo

Alternative 1 (No Action). The following are the only authorized commercial gear types in the fisheries for dolphin and wahoo in the Atlantic Exclusive Economic Zone: automatic reel, bandit gear, handline, pelagic longline, rod and reel, and spearfishing gear (including powerheads). A person aboard a vessel in the Atlantic Exclusive Economic Zone that has on board gear types

(including trap, pot, or buoy gear) other than authorized gear types may not possess a dolphin or wahoo. The current commercial trip limit for wahoo is 500 pounds. The current trip limit for dolphin is 4,000 pounds once 75 percent of the commercial sector annual catch limit is reached. Prior to reaching 75 percent of the commercial sector annual catch limit, there is no commercial trip limit for dolphin.

Preferred Alternative 2. A vessel in the Atlantic Exclusive Economic Zone that possesses both an Atlantic Dolphin/Wahoo Commercial Permit and valid federal commercial permits required to fish trap, pot, or buoy gear or is in compliance with permit requirements specified for the spiny lobster fishery in 50 C.F.R. §622.400 is authorized to retain dolphin caught by rod and reel while in possession of such gears. A vessel in the Atlantic Exclusive Economic Zone that has on board other gear types that are not authorized in the fishery for dolphin may not possess a dolphin. Dolphin retained by such a vessel shall not exceed:

Sub-alternative 2a. 250 pounds gutted weight

Preferred Sub-alternative 2b. 500 pounds gutted weight

Sub-alternative 2c. 750 pounds gutted weight

Sub-alternative 2d. 1,000 pounds gutted weight

Preferred Alternative 3. A vessel in the Atlantic Exclusive Economic Zone that possesses both an Atlantic Dolphin/Wahoo Commercial Permit and valid federal commercial permits required to fish trap, pot, or buoy gear or is in compliance with permit requirements specified for the spiny lobster fishery in 50 C.F.R. §622.400 is authorized to retain wahoo caught by rod and reel while in possession of such gear types. A vessel in the Atlantic Exclusive Economic Zone that has on board other gear types that are not authorized in the fisheries for wahoo may not possess a wahoo. The wahoo commercial trip limit will be 500 pounds.

Discussion:

- The Atlantic Offshore Lobstermen's Association initially requested that the South Atlantic Council modify regulations to allow the historical practice of harvesting dolphin while in the possession of lobster pots to continue.
- There currently is an incidental limit in place of 200 pounds of dolphin and wahoo, combined weight, for vessels that do not have a dolphin wahoo commercial permit but do have another federal commercial permit and catch the species north of the 39 degrees north latitude (50 CFR §622.278 Commercial Trip Limits). This incidental limit would remain in place unless otherwise specified and these vessels would not be exempt from any of the gear provisions.
- Most commercial trips landings dolphin or wahoo non-longline gear often record less than 500 lbs of either species on a trip (**Figures 6** and **7**).

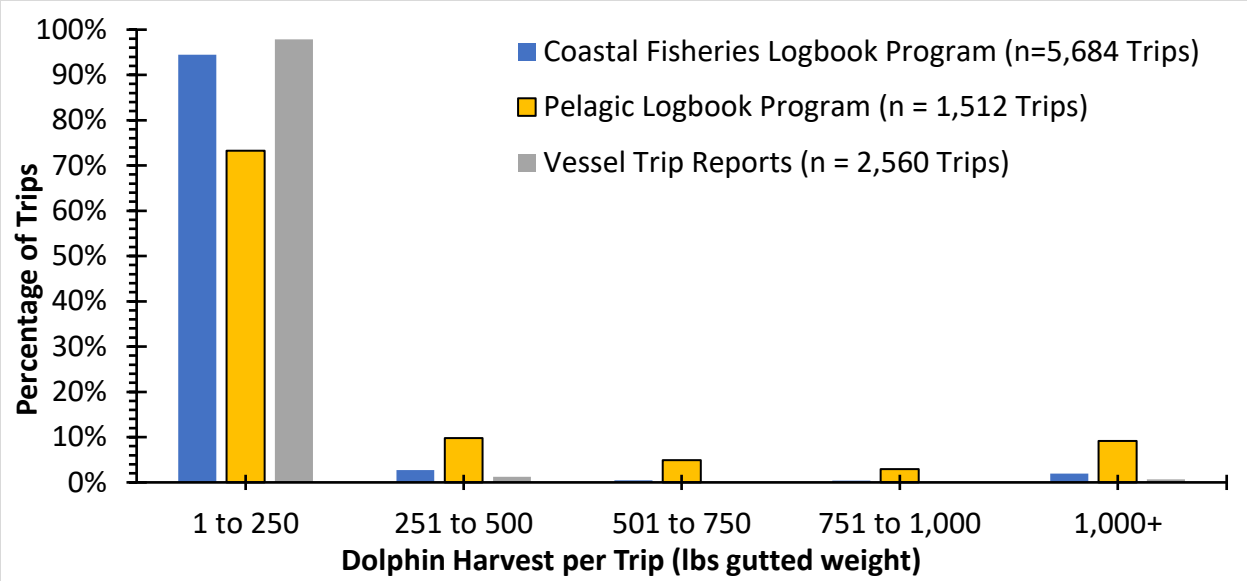

Figure 6. Distribution of Atlantic trips that commercially harvested dolphin from 2015 through 2019.

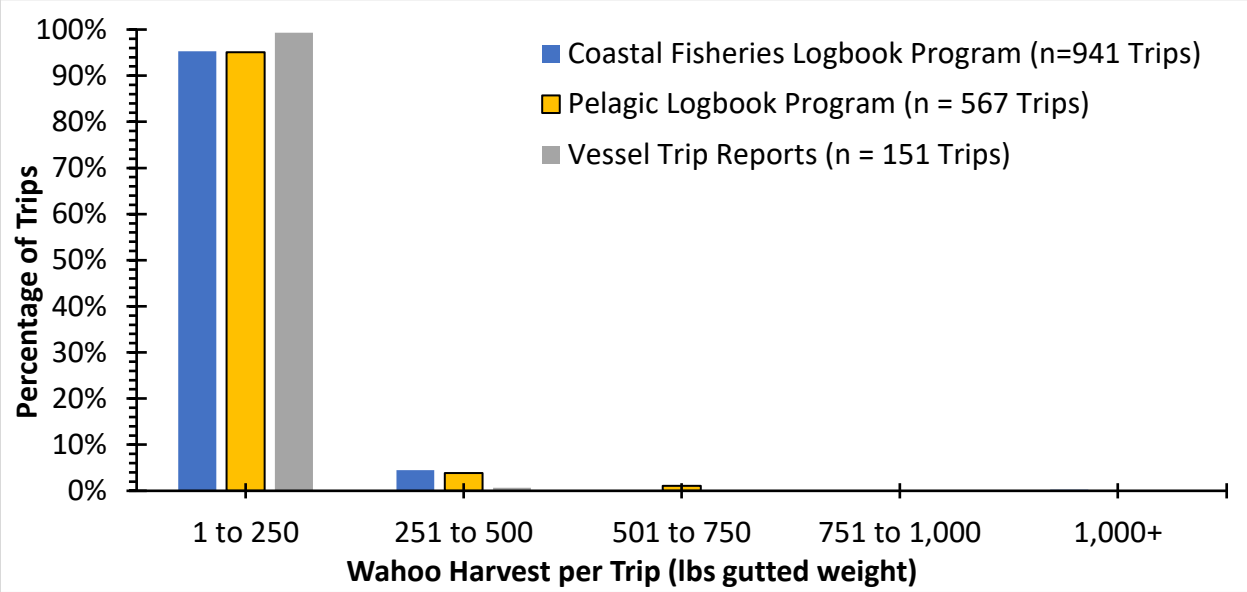

Figure 7. Distribution of Atlantic trips that commercially harvested wahoo from 2015 through 2019.

Summary of Environmental Effects:

Biological Effects

- Under **Alternative 1 (No Action)**, 38 vessels harvested an average of 78 lb ww of dolphin and three vessels harvested an average of 59 lbs ww of wahoo during 2015-2019. **Preferred Alternative 2** (including sub-alternatives **2a** through **2d**) and **Preferred Alternative 3** would increase these landings for dolphin and wahoo, respectively.

- Given that the commercial sector ACLs for dolphin and wahoo are being increased in Actions 3 and 4 and the current AM will continue to have an in-season closure of the

commercial sector if the commercial ACL is reached or projected to be reached, biological effects for dolphin and wahoo would not be expected to vary between the alternatives.

Economic Effects

- **Alternative 1 (No Action)** would continue to disallow landings of dolphin or wahoo on trips with trap, pot, or buoy gear on board. This alternative would result in decreased economic benefits for affected commercial vessels through foregone landings of dolphin or wahoo and thus revenue when trap, pot, or buoy gear was on board the vessel.

- **Preferred Alternatives 2** and **3** would result in net economic benefits by allowing long-term potential elevated revenue on some commercial trips where trap, pot, and buoy gear are on board and dolphin or wahoo landed by rod and reel gear are retained.
    - Higher trip limits would allow for elevated economic benefits, therefore **Sub-alternative 2d** would have the potential for the highest potential economic benefits followed by **Sub-alternative 2c**, **2b (Preferred)**, and **2a**.

- Based on previous landings, it is assumed that the economic benefits for **Preferred Alternative 2** would be comparatively higher than **Preferred Alternative 3.** Economic benefits for commercial vessels would be highest under **Sub-alternative 2d**, followed by **Sub-alternative 2c**, **Preferred Sub-alternative 2b**, **Sub-alternative 2a**, **Preferred Alternative 3**, and **Alternative 1 (No Action)**.

Social Effects

- Allowing harvest of dolphin (**Preferred Alternative 2**) and wahoo (**Preferred Alternative 3**) by vessels with the necessary Atlantic Dolphin/Wahoo Commercial Permit and valid commercial permits required to harvest via fish trap, pot, or buoy gear is anticipated to result in direct positive social effects to fishermen and communities.

- Under **Alternative 1 (No Action)** fishermen with non-authorized gear on board their vessels may not possess dolphin or wahoo despite encountering these species while tending their gear. Allowing harvest via rod and reel would increase their access to the fishery and is anticipated to result in direct social benefits to commercial fishing business in the form of increased revenue and indirect social benefits to fishing communities in the form of increased fish available to the market or for personal consumption.

Advisory Panel Recommendations:

The Dolphin Wahoo AP discussed this action and passed the following motion during their October 28, 2020 meeting:

<u>Recommendation:</u>

- In **Action 9** (possession of dolphin and wahoo when specified unauthorized gears are onboard), consider trip limits of no more than 500 pounds for dolphin. Limits above that tend to go beyond total landings of dolphin on typical rod and reel commercial trips.

MOTION: ALLOW VESSELS WITH POT, TRAP, OR BUOY GEAR ON BOARD TO POSSESS DOLPHIN OR WAHOO AS LONG AS THEY ARE A PERMITTED VESSEL AND FISH ARE CAUGHT BY ROD AND REEL.
APPROVED BY AP

Summary of Public Hearing Comments:

- Support for allowing 500-pound dolphin trip limit (**Preferred Sub-alternative 2b**) and also including wahoo (**Preferred Alternative 3**).
- Could promote competition and conflict in Mid-Atlantic and New England regions between recreational and commercial vessels fishing pot buoys for dolphin in same area. These buoys operate as fish aggregating devices (FADs). Support for a 250-pound dolphin trip limit (**Sub-alternative 2a)** to mitigate these concerns.

Draft Council Rationale:

- In **Action 9**, the Council was responding to a request from the Atlantic Offshore Lobstermen's Association that the South Atlantic Council modify regulations to allow the historical practice of harvesting dolphin while in the possession of lobster pots to continue.
    - The Council wanted to positively respond to this request but also take a slightly broader approach to allow vessels fishing generally with trap, pot, or buoy gear (including spiny lobster traps) to possess dolphin or wahoo as long as the fish were landed by rod and reel.
        - The specification of gears to only encompass trap, pot, or buoy gear and that dolphin or wahoo must be landed by rod and reel was intended to continue to disallow new gears from direct use in the fishery.
- In doing so, the Council determined that allowing the retention of constrained amounts of dolphin and wahoo harvested onboard vessels with pot, trap, or buoy gear onboard would have positive economic effects while also limiting the potential for a unforeseen major increase in commercial landings, which could put pressure on the sector ACL and trigger the AM.

Committee Action:

- NONE REQUIRED.
- THE COMMITTEE MAY WANT TO DISCUSS THE LANGUAGE OF THE ACTION/ALTERNATIVES AND MODIFY IF NEEDED.
- REVIEW DRAFT COUNCIL RATIONALE AND MODIFY AS APPROPRIATE.

Action 10. Remove the requirement of vessel operators or crew to hold an Operator Card in the Dolphin Wahoo Fishery

Alternative 1 (No Action). An Atlantic Charter/Headboat for Dolphin/Wahoo Permit or an Atlantic Dolphin/Wahoo Commercial Permit is not valid unless the vessel operator or a crewmember holds a valid Operator Card issued by either the Southeast Regional Office or by the Greater Atlantic Regional Fisheries Office.

Preferred Alternative 2. Neither a vessel operator nor any crewmember is required to have an Operator Card for an Atlantic Charter/Headboat for Dolphin/Wahoo Permit to be valid.

Preferred Alternative 3. Neither a vessel operator nor any crewmember is required to have an Operator Card for an Atlantic Dolphin/Wahoo Commercial Permit to be valid.

Summary of Environmental Effects:

Biological Effects

- No biological effects on dolphin and wahoo would be expected under **Preferred Alternatives 2** and **3**, when compared with **Alternative 1 (No Action)**, because this action does not impact the harvest levels for dolphin or wahoo.

Economic Effects

- **Alternative 1 (No Action)** would maintain the operator card requirement for for-hire and commercial participants in the dolphin and wahoo fishery. This requirement results in direct costs to fishery participants through application fees and associated preparation costs incurred including obtaining two passport photos, postage, and time spent preparing and sending the application materials once every three years.

- Removing the operator card requirement would result in direct economic benefits to captain and crew members that operate for-hire (**Preferred Alternative 2**) and commercial (**Preferred Alternative 3**) vessels permitted to fish in the dolphin and wahoo fishery through forgone costs.

- The estimated annual cumulative economic benefits of removing the operator card requirement would be $214,264 under **Preferred Alternative 2**, $247,130 under **Preferred Alternative 3**, and $369,515 under **Preferred Alternatives 2** and **3** combined (2019 $) (**Table 26**).

Table 26. Estimated cumulative economic benefits of **Action 10** (2019$).

Alternative	Number of vessels affected	Estimated cumulative benefits
Alternative 1 (No Action)	0	$0
Preferred Alternative 2	**2,360**	**$214,264**
Preferred Alternative 3	**2,722**	**$247,130**
Preferred Alternatives 2 and 3	**4,070**	**$369,515**

Source: NMFS SERO SF Access Permits Database.

Social Effects

- Public testimony from dolphin and wahoo fishermen has indicated that operator cards are rarely checked by law enforcement and are burdensome to renew annually. Additionally, law enforcement officials have indicated that operator cards are no longer regularly used to aid in enforcement efforts or gathering data and distributed information.

- **Preferred Alternative 2** would remove the burden of obtaining and renewing an operator card for the holders of the Atlantic Charter/Headboat for Dolphin/Wahoo Permit and **Preferred Alternative 3** would remove the burden from Atlantic Dolphin/Wahoo Commercial Permit holders resulting in minor social benefits.

- Additionally, consistency in regulations between dolphin/wahoo permits and other federal permits that do not require an operator card would be expected to reduce confusion among fishermen and aid in compliance.

Administrative Effects

- Administrative effects and burdens related to data collection/monitoring, permitting, law enforcement, etc. would be lower under **Preferred Alternatives 2** and **3** compared with **Alternative 1 (No Action)**. Currently, under **Alternative 1 (No Action)**, regulations under 50 C. F. R. §622.270 require:
  "(c) *Operator permits.* (1) An operator of a vessel that has or is required to have a charter vessel/headboat or commercial permit for Atlantic dolphin and wahoo issued under this section is required to have an operator permit.
  (2) A person required to have an operator permit under paragraph (c)(1) of this section must carry on board such permit and one other form of personal identification that includes a picture (driver's license, passport, etc.).
  (3) An owner of a vessel that is required to have a permitted operator under paragraph (c)(1) of this section must ensure that at least one person with a valid operator permit is aboard while the vessel is at sea or offloading.
  (4) An owner of a vessel that is required to have a permitted operator under paragraph (c)(1) of this section and the operator of such vessel are responsible for ensuring that a person whose operator permit is suspended, revoked, or modified pursuant to subpart D of 15 CFR part 904 is not aboard that vessel."

- The intent of including operator cards in the Dolphin and Wahoo FMP was to improve enforcement and aid in data collection. It was also intended to decrease costs to vessel owners from fisheries violations and make vessel captains more accountable for damaging habitat or violating regulations intended to protect the long-term viability of the stock.
  - At the March 2016 Council meeting, NMFS Office of Law Enforcement gave a presentation on operator cards, and stated that, the operator cards are not used for gathering data, distributing information, or enforcement to a large extent.

- **Preferred Alternatives 2** and **3** would reduce the current administrative burden/cost on NMFS and free up staff resources to be used for other purposes.

Advisory Panel Recommendations:

The Dolphin Wahoo AP discussed this action and approved the following motion during their April 21, 2017 meeting:

MOTION: SUPPORT ALTERNATIVE 2 AND 3 IN ACTION 8.
9 IN FAVOR; 0 OPPOSED
Note: Action 10 was listed as Action 8 in the amendment at the time.

The Dolphin Wahoo AP discussed this action again and provided the following recommendation during their October 28, 2020 meeting:

- In **Action 10**, the AP endorsed their previous motion to remove the operator card requirements for both the recreational and commercial sectors (Alternatives 2 and 3).

The Law Enforcement AP discussed this action and provided the following recommendation during their February 1, 2021 meeting:

- In the code of federal regulations, "operator cards" are referred to as "operator permits" so make sure that they are properly referenced in the amendment to avoid confusion when implementing regulation changes.
- Concern was raised by a member of the public over the action, noting that in instances when the operator is not the owner there may not be considerable incentive for that person to report under the new for-hire reporting requirements. The potential to revoke an operator card could provide this incentive and improve reporting compliance.
- The NOAA Office of General Counsel Enforcement Section may have concerns with removal of the operator card requirement as a potential tool.
- While the LE AP initially noted that the operator card requirement could be removed without notable loss to law enforcement capabilities since it has been largely unused for enforcement purposes, it would be an effective tool to help increase compliance with new for-hire reporting requirements particularly if expanded to include other fisheries.
- During Other Business, it was noted that the requirement could be kept for the for-hire fishery but removed for the commercial fishery.
- **Recommendation: Consider extending the operator card to other fishery management plans to help enforce for-hire reporting requirements.**

Summary of Public Hearing Comments:

- Several comments in favor of removing the operator card requirement (**Preferred Alternatives 2** and **3**).
- Maintaining operator card could encourage compliance with the new for-hire reporting requirement, particularly for captains that do not own the vessel (**Alternative 1 (No Action)** or **Preferred Alternative 3**).
- Previously burdensome to apply for and renew. Ability to apply online has streamlined the renewal process. Support for **Alternative 1 (No Action)**.

Draft Council Rationale:

- In discussion of this action, the Council noted that the operator card requirement is only included in two Council-managed fisheries (Dolphin Wahoo and Rock Shrimp).
- The Council noted that there is some potential value for operator cards in aiding law enforcement efforts, but the inconsistent requirement between fisheries greatly diminishes this utility.
- Public testimony has indicated that operator cards are rarely checked and are burdensome to renew.

- Additionally, at the March 2016 Council meeting, NMFS Office of Law Enforcement gave a presentation on operator cards, mentioning that currently the operator cards are not used for gathering data, distributing information, or enforcement to a large extent.
- The Council determined that the limited use that operator cards were exhibiting did not outweigh the cost and burden to fishermen to obtain the card.

Committee Action:

- NONE REQUIRED.
- THE COMMITTEE MAY WANT TO DISCUSS THE LANGUAGE OF THE ACTION/ALTERNATIVES AND MODIFY IF NEEDED.
- REVIEW DRAFT COUNCIL RATIONALE AND MODIFY AS APPROPRIATE.

Action 11. Reduce the recreational vessel limit for dolphin

Note: **Alternative 1 (No Action)**, **Alternative 2** and **Alternative 3** (including their respective sub-alternatives) do not apply to headboats. The current limit of 10 dolphin per paying passenger onboard a headboat will not change under this action and its alternatives.

Alternative 1 (No Action). The recreational daily bag limit is 10 dolphin per person, not to exceed 60 dolphin per vessel, whichever is less.

Preferred Alternative 2. The recreational daily bag limit is 10 dolphin per person, not to exceed:

Sub-alternative 2a. 30 dolphin per vessel, whichever is less.
Sub-alternative 2b. 40 dolphin per vessel, whichever is less.
Sub-alternative 2c. 42 dolphin per vessel, whichever is less.
Preferred Sub-alternative 2d. 48 dolphin per vessel, whichever is less.
Sub-alternative 2e. 54 dolphin per vessel, whichever is less.

Alternative 3. In Florida only, the recreational daily bag limit is 10 dolphin per person, not to exceed:

Sub-alternative 3a. 30 dolphin per vessel, whichever is less.
Sub-alternative 3b. 40 dolphin per vessel, whichever is less.
Sub-alternative 3c. 42 dolphin per vessel, whichever is less.
Sub-alternative 3d. 48 dolphin per vessel, whichever is less.
Sub-alternative 3e. 54 dolphin per vessel, whichever is less.

Alternative 4. In South Carolina, Georgia, and Florida only, the recreational daily bag limit is 10 dolphin per person, not to exceed:

Sub-alternative 4a. 30 dolphin per vessel, whichever is less.
Sub-alternative 4b. 40 dolphin per vessel, whichever is less.
Sub-alternative 4c. 42 dolphin per vessel, whichever is less.
Sub-alternative 4d. 48 dolphin per vessel, whichever is less.
Sub-alternative 4e. 54 dolphin per vessel, whichever is less.

Summary of Environmental Effects:

Biological Effects

- Biological benefits would be greater under **Alternatives 2**, **3**, and **4** (including their respective sub-alternatives) compared with **Alternative 1 (No Action)**, because they consider a reduction in the amount of dolphin that can be retained per trip.

- Under **Alternative 2**, in the Atlantic, 78% of private recreational/charter vessel (MRIP) trips harvested less than 10 dolphin per vessel. 16% of MRIP harvested between 10 and 39 dolphin per vessel, and 2% or less of all recreational trips (MRIP) harvested between 40 to 60 dolphin per vessel (**Figure 8**).
- Under **Alternatives 3** and **4**, off East Florida only and off South Carolina, Georgia and east Florida, respectively, 96% of all MRIP trips harvested less than 10 dolphin per vessel and 4% harvested between 10 and 39 fish per vessel (**Figures 9** and **10**).
    - Under both **Alternatives 3** and **4** (including their respective sub-alternatives), biological effects would not notably vary between each other, because negligible reductions in recreational landings from private recreational and charter vessels are expected.

- Biological benefits would be greatest under **Sub-alternative 2a**, followed by **Sub-alternatives 2b**, **2c**, **Preferred Sub-alternative 2d**, **Sub-alternatives 2e**, **3a/4a**, **3b/4b**, **3c/4c**, **3d/4d**, and **3e/4e**, and **Alternative 1 (No Action)**.

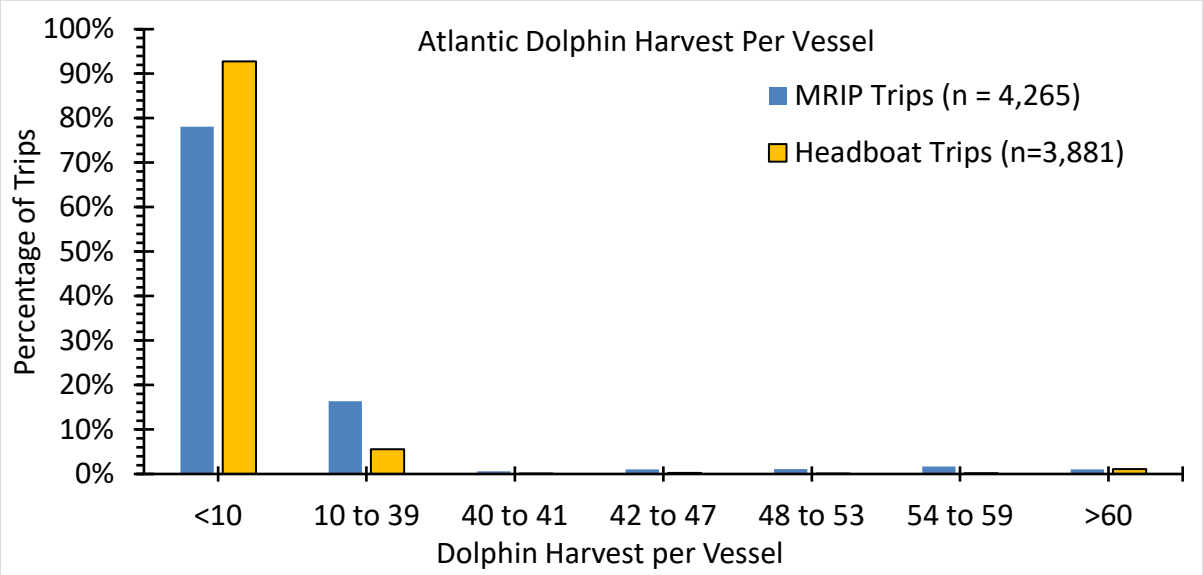

Figure 8. Percentage of trips for a range of dolphin harvested per vessel. The data are from 2015 through 2019, and data from both MRIP (private rec./charter vessels) and the Headboat survey are provided. The dolphin stock is from Maine to east Florida (including Monroe County, Florida).

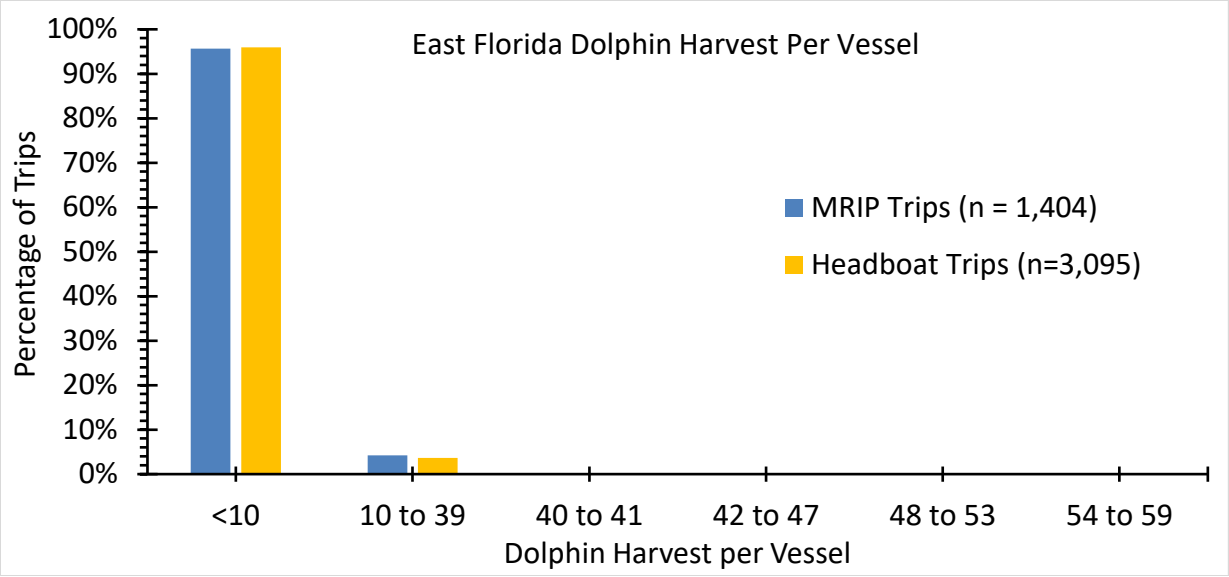

Figure 9. Percentage of trips for a range of east Florida dolphin harvested per vessel. The data are from 2015 through 2019, and data from both MRIP (private rec./charter vessels) and the Headboat survey are provided. East Florida includes data from Monroe County, Florida.

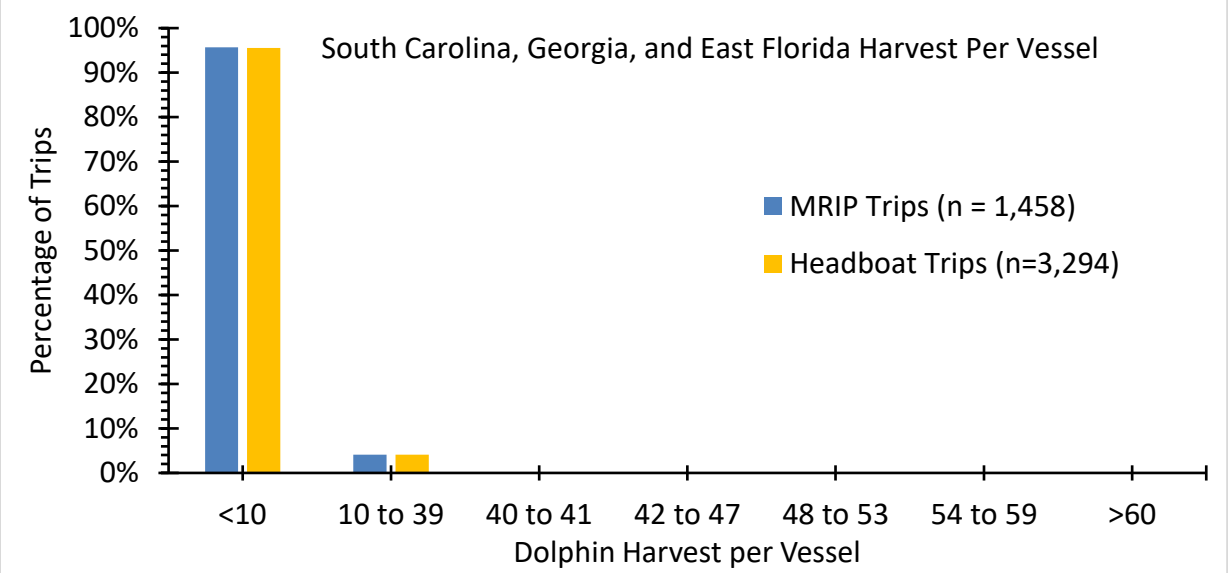

Figure 10. Percentage of trips for South Carolina, Georgia, and east Florida (including Monroe County, Florida). The data are from 2015 through 2019, and data from both MRIP (private rec./charter vessels) and the Headboat survey are provided.

Table 27. Estimated reduction in recreational landings from a range of different vessel limits in **Action 11** for dolphin based on private and for-hire recreational dolphin landings from 2015-2019.

Alternative	Vessel Limit	Total recreational landings reduction on a percent basis (private recreational and charter)	Total estimated reduction in landings (lbs ww)
Atlantic Region			
Sub-alt 2a	30 Dolphin	12.7%	1,983,501
Sub-alt 2b	40 Dolphin	5.71%	943,816

Alternative	Vessel Limit	Total recreational landings reduction on a percent basis (private recreational and charter)	Total estimated reduction in landings (lbs ww)
Sub-alt 2c	42 Dolphin	4.71%	778,524
Pref. Sub-alt 2d	**48 Dolphin**	**2.32%**	**383,477**
Sub-alt 2e	54 Dolphin	0.69%	114,051
Florida Only			
Sub-alt 3a	30 Dolphin	0.04%	6,612
Sub-alt 3b	40 Dolphin	0.04%	6,612
Sub-alt 3c	42 Dolphin	0.03%	4,959
Sub-alt 3d	48 Dolphin	0.01%	1,653
Sub-alt 3e	54 Dolphin	0.01%	1,653
South Carolina, Georgia, and Florida Only			
Sub-alt 4a	30 Dolphin	0.04%	6,612
Sub-alt 4b	40 Dolphin	0.04%	6,612
Sub-alt 4c	42 Dolphin	0.03%	4,959
Sub-alt 4d	48 Dolphin	0.01%	1,653
Sub-alt 4e	54 Dolphin	0.01%	1,653

Economic Effects

- The sub-alternatives of **Alternatives 2 (Preferred), 3,** and **4** are expected to lower total landings in the short-term, thus total CS for the recreational sector is expected to decrease as well in comparison to **Alternative 1 (No Action)**.

- In terms of short-term negative economic effects, the potential reductions in CS would be highest under **Sub-alternative 2a**, followed by **Sub-alternative 2b**, **Sub-alternative 2c**, **Preferred Sub-alternative 2d**, **Sub-alternative 2e, Sub-alternatives 3a**, **3b**, **4a** and **4b**, **Sub-alternatives 3c** and **4c**, **Sub-alternatives 3d** and **4d**, **Sub-alternatives 3e** and **4e,** and **Alternative 1 (No Action)**.

- **Preferred Sub-alternative 2d** would result in an estimate decrease in CS of $297,743 (2019 $)(**Table 28**).

Table 28. Estimated reduction in recreational landings and CS for **Action 11** in comparison to **Alternative 1 (No Action)** based on private and for-hire recreational dolphin landings from 2015-2019.

Alternative	Total change in recreational landings on a percent basis	Total estimated change in landings (lbs ww)	Total estimated change in landings (numbers of fish)	Total estimated change in consumer surplus (2019$)
Sub-alternative 2a	-12.70%	-2,099,204	-312,382	-$1,602,518
Sub-alternative 2b	-5.71%	-943,816	-140,449	-$720,502
Sub-alternative 2c	-4.71%	-778,524	-115,852	-$594,320
Pref. Sub-alt. 2d	**-2.32%**	**-383,477**	**-57,065**	**-$292,743**
Sub-alternative 2e	-0.69%	-114,051	-16,972	-$87,066
Sub-alternative 3a	-0.04%	-6,612	-984	-$5,047

Alternative	Total change in recreational landings on a percent basis	Total estimated change in landings (lbs ww)	Total estimated change in landings (numbers of fish)	Total estimated change in consumer surplus (2019$)
Sub-alternative 3b	-0.04%	-6,612	-984	-$5,047
Sub-alternative 3c	-0.03%	-4,959	-738	-$3,785
Sub-alternative 3d	-0.01%	-1,653	-246	-$1,262
Sub-alternative 3e	-0.01%	-1,653	-246	-$1,262
Sub-alternative 4a	-0.04%	-6,612	-984	-$5,047
Sub-alternative 4b	-0.04%	-6,612	-984	-$5,047
Sub-alternative 4c	-0.03%	-4,959	-738	-$3,785
Sub-alternative 4d	-0.01%	-1,653	-246	-$1,262
Sub-alternative 4e	-0.01%	-1,653	-246	-$1,262

Social Effects

- While **Preferred Alternative 2**, **Alternative 3**, and **Alternative 4** could restrict recreational fishing opportunities for dolphin, the harvest limits may help to extend the recreational fishing season by slowing the rate of harvest if landings were to increase.

- Different levels of recreational fishing opportunities under each alternative could affect recreational anglers and for-hire businesses targeting dolphin. In general, benefits to the recreational sector would result from harvest limits that do not result in restricted access to dolphin (i.e., because an AM is triggered) but still maintain harvest limits high enough to have minimal effect on recreational trip satisfaction.

- **Alternative 3**, and **Alternative 4** are unlikely to result in decreased trip satisfaction as recreational data indicates that majority of private recreational and for-hire/charter trips do not land more than 40 fish per trip.
    - However, **Preferred Alternative 2** may have negative social effects on recreational fishing opportunities in North Carolina as data and public comment indicates that catches from the area do regularly exceed 30-fish per vessel.

- **Sub-alternative 2a** proposes the lowest vessel limit and thus would result in the largest negative short-term social effects followed by **Sub-alternative 2b**, **Sub-Alternative 2c**, **Preferred Sub-alternative 2d**, and **Sub-alternative 2e**. Should recreational harvest increase beyond current estimates, **Alternative 2**, **Alternative 3** and **Alternative 4** would help slow harvest and extend the fishing season.

Advisory Panel Recommendations:

- During the April 21, 2017 Dolphin Wahoo AP meeting, there was initial support by the Dolphin Wahoo AP for a 40 fish vessel limit for dolphin if added as a step down once the recreational ACT has been landed.
- During the August 22, 2019 Dolphin Wahoo AP webinar, there was discussion on lowering the retention limit for dolphin, with some AP members noting that this may be acceptable while others felt that this may not be necessary and offering caution in reducing bag limits as

"once you give it up, you may never get it back." Additionally, it was noted that reducing retention limits too far could have a notable negative impact on the ability to book charter trips, therefore caution should be exercised if there is a change in the retention limit. While some members noted that a retention limit reduction may be acceptable in the South Florida area, others felt that any changes should apply region-wide. There seemed to be general consensus that if the Council reduces recreational limits for dolphin, consider reducing the vessel limit but do not change the bag limit of 10 fish per person per day.

- The Dolphin Wahoo AP discussed this action and passed the following motion during their October 28, 2020 meeting:

Recommendation:

- In **Action 11** (reduce the recreational vessel limit for dolphin), there was support for **Alternative 1 (No Action)**, particularly in North Carolina or to take action just in Florida (**Alternative 3**). It was noted that the 60 fish limit is very important to the for-hire fishery in North Carolina, particularly when "slinger" dolphin are abundant.
- If limits are reduced, maintaining limits divisible by 6 is preferred.

MOTION: SUPPORT ALTERANTIVE 3B OR 3C AS PREFERRED IN ACTION 11. APPROVED BY AP

The Law Enforcement AP discussed this action and provided the following recommendation during their February 1, 2020 meeting:

- The LE AP had no issue with enforceability of vessel limit changes; however, it was noted that consistency within the regulation is helpful for compliance.
- Implementing a vessel limit change through this action could mitigate some of the concerns expressed for the accountability measure actions since these measures would be in place year-round and would reduce the likelihood of the accountability measure being triggered.

Summary of Public Hearing Comments:

- Notable regional theme to many comments. With some exceptions, those in favor changing retention limits (vessel limits, bag limits, size limits) were largely based in Florida or South Carolina. Those in favor of maintaining the current retention limits were often based in North Carolina.
- Many commenters stressed the importance of maintaining the current vessel limit for dolphin and bag limit (**Alternative 1 (No Action)**, as a reduction would greatly harm the for-hire industry in North Carolina, particularly the Outer Banks (vessels fishing out of Oregon Inlet and Hatteras Inlet) and the southern Outer Banks (vessels fishing out of Beaufort Inlet).
    - Current retention limits are important to "justifying the cost of the trip" for many for-hire as well as some private vessel anglers.
    - Concern over notable economic hardship from reduced retention limits at a time when many in the for-hire industry have already faced challenges due to COVID-19.
    - Reducing vessel limits could lead to more pressure on other species such as those found in the Snapper Grouper complex.
    - If vessel limits are reduced, consider a regional approach rather than the entire Atlantic.

    - Consider holding off on changing vessel limits until several years of data from the for-hire logbook can be used to inform management decisions.
- Several comments in support of a reduced vessel limit for dolphin (**Alternatives 2**, **3**, and **4**). Many expressed support for a 30 fish vessel limit (**Sub-alternatives 2a**, **3a**, and **4a**) and to a lesser extent a 40 fish limit (**Sub-alternatives 2b**, **3b**, and **4b)**. Commenters in support were largely based out of Florida and South Carolina, with some exceptions.
    - Varying opinions on whether reduced vessel limits should cover the entire Atlantic or only apply to certain states.
- Limited and varying opinions on different retention limits between private and for-hire vessels. Most that did comment were in favor of a higher limit onboard for-hire vessels.

Draft Council Rationale:

- In choosing a preferred alternative, it was noted that a goal of the Dolphin and Wahoo FMP is to maintain a precautionary approach to management. While there is no stock assessment for dolphin, the Council heard a great deal of public comment, particularly from anglers in South Florida, that dolphin abundance appears to be low and that there was concern over the health of the dolphin stock and fishery.
- The Council chose to implement a coast-wide reduction in the vessel limit via **Preferred Alternative 2d** to maintain consistency of regulations across regions in the retention limits for dolphin.
    - It was also noted that such a change in retention limits would lead to more substantial harvest reductions than a Florida-specific or regional approach.

Committee Action:

- NONE REQUIRED.
- THE COMMITTEE MAY WANT TO DISCUSS THE LANGUAGE OF THE ACTION/ALTERNATIVES AND MODIFY IF NEEDED.
- REVIEW DRAFT COUNCIL RATIONALE AND MODIFY AS APPROPRIATE.

Action 12. Reduce the recreational bag limit and establish a recreational vessel limit for wahoo

Alternative 1 (No Action). The recreational daily bag limit is 2 wahoo per person. There is no recreational vessel limit for wahoo.

Preferred Alternative 2. The recreational daily bag limit is 1 wahoo per person.

Alternative 3. The recreational vessel limit is:

Sub-alternative 3a. 2 wahoo per vessel.
Sub-alternative 3b. 3 wahoo per vessel.
Sub-alternative 3c. 4 wahoo per vessel.
Sub-alternative 3d. 5 wahoo per vessel.
Sub-alternative 3e. 6 wahoo per vessel.
Sub-alternative 3f. 7 wahoo per vessel.

Sub-alternative 3g. 8 wahoo per vessel.

Summary of Environmental Effects:

Biological Effects

- Biological benefits would be expected to be greater under **Preferred Alternative 2** and **Alternative 3** (including their respective sub-alternatives) compared with **Alternative 1 (No Action)**, because they consider a reduction harvest for wahoo.

- From 2015-2019, 97% of private recreational and charter vessel (MRIP) trips harvested one wahoo per person (**Alternative 1 (No Action)**) and 100% of headboat trips harvested only one wahoo per person (**Figure 11**).
    - **Preferred Alternative 2** would result in a 3% reduction in MRIP landings, a 3% reduction in headboat landings (**Table 29**), and would be expected to have a slightly greater biological benefit compared with **Alternative 1 (No Action)**.

- From 2015-2019, 70% of MRIP trips harvested one wahoo per vessel (**Figure 12**). Seventy eight percent of headboat trips harvested only one wahoo per vessel (**Figure 12**). Under **Alternative 3**, **Sub-alternative 3a** would result in the greatest reduction in recreational landings with 30% (MRIP)/22% (headboat), followed by **Sub-alternatives 3b** (20%/16%), **3c** (13%/12%), **3d** (8%/10%), **3e** (5%/9%), **3f** (4%/8%), and **3g** (2%/7%) (**Table 29**).

- Given that the recreational ACL in Action 4 is projected to be reached based on average landings from 2015-2019, a reduction in recreational landings through **Preferred Alternative 2** and sub-alternatives under **Alternative 3** in **Action 12** may slow down harvest rates so there is a lower likelihood of the recreational ACL being reached.

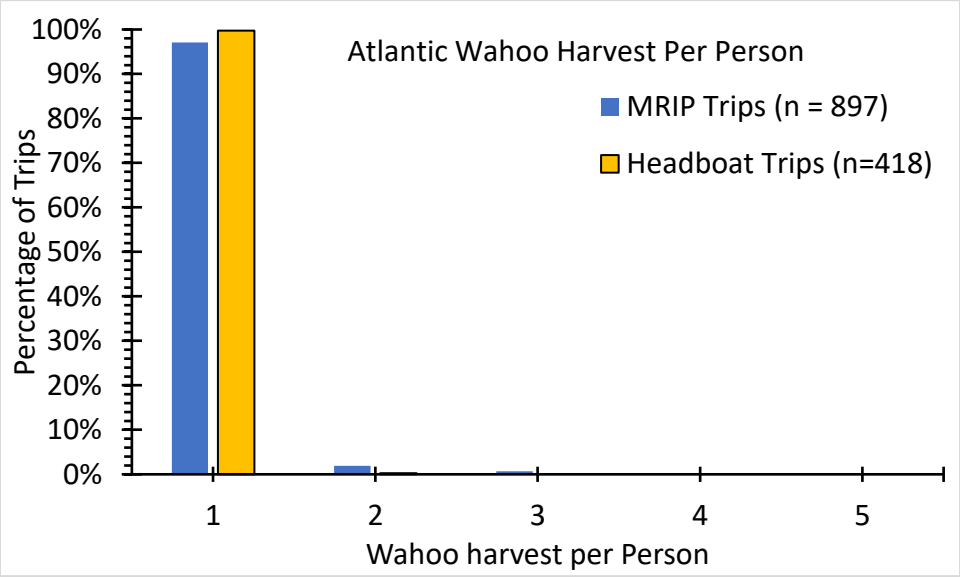

Figure 11. Percentage of trips for a range of Atlantic wahoo harvested per person. The data are from 2015 through 2019, and data from both MRIP and Headboat are provided. The Atlantic wahoo stock is from Maine to east Florida (including Monroe County, Florida).

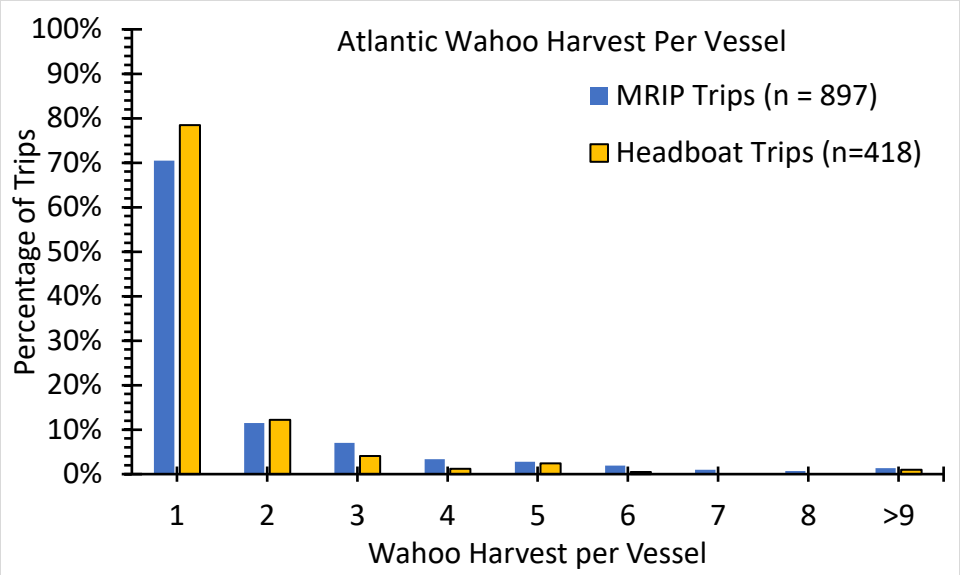

Figure 12. Percentage of trips for a range of Atlantic wahoo harvested per vessel. The data are from 2015 through 2019, and data from both MRIP and Headboat are provided. The Atlantic wahoo stock is from Maine to east Florida (including Monroe County, Florida).

Table 29. Percent reduction in landings for **Action 12**. Data covers MRIP (private recreational and charter vessels) and headboat vessels from 2015 to 2019.

Alternatives	Bag/Vessel Limit	Percent Reduction MRIP	Percent Reduction Headboat
Wahoo per Person			
Alternative 1	2 Wahoo per Person	0.0%	0.0%
Preferred Alternative 2*	**1 Wahoo per Person**	**2.9%**	**3.2%**
Wahoo per Vessel			
Alternative 3 Sub-alternative 3a	2 Wahoo per Vessel	30.3%	21.8%
Alternative 3 Sub-alternative 3b	3 Wahoo per Vessel	19.6%	15.8%
Alternative 3 Sub-alternative 3c	4 Wahoo per Vessel	13.1%	12.4%
Alternative 3 Sub-alternative 3d	5 Wahoo per Vessel	8.2%	9.8%%
Alternative 3 Sub-alternative 3e	6 Wahoo per Vessel	5.4%	8.7%
Alternative 3 Sub-alternative 3f	7 Wahoo per Vessel	3.5%	8.0%
Alternative 3 Sub-alternative 3g	8 Wahoo per Vessel	2.3%	7.2%

Note: The estimated reduction for **Preferred Alternative 2** is considerably lower than when the Council reviewed the analysis at the March 2021 meeting. The previous analysis estimated a 27.1% in MRIP based landings while the revised analysis estimates a 2.9% reduction.

Economic Effects

- The sub-alternatives of **Alternatives 2 (Preferred)** and **3** are expected to lower total landings of wahoo in the short-term, thus total CS for the recreational sector is expected to decrease as well in comparison to **Alternative 1 (No Action)**.

- In terms of short-term negative economic effects, the potential reductions in CS would be highest under **Sub-alternative 3a**, followed by **Sub-alternative 3b**, **Sub-alternative 3c**, **Sub-alternative 3d**, **Sub-alternative 3e**, **Sub-alternative 3f**, **Preferred Alternative 2**, **Sub-alternative 3g**, and **Alternative 1 (No Action)**.

- The estimated reduction in CS is -$318,771 for **Preferred Alternative 2** (2019 $)(**Table 30**).

Table 30. Estimated reduction in recreational landings and CS for **Action 12** in comparison to **Alternative 1 (No Action)** based on recreational wahoo landings from 2015-2019.

Alternative	Total change in recreational landings on a percent basis	Total estimated change in landings (lbs ww)	Total estimated change in landings (numbers of fish)	Total estimated change in consumer surplus (2019$)
Preferred Alt. 2*	**-2.9%**	**-83,670**	**-3,036**	**-$318,771**
Sub-alternative 3a	-30.3%	-873,797	-31,705	-$3,329,051
Sub-alternative 3b	-19.6%	-565,288	-20,511	-$2,153,673
Sub-alternative 3c	-13.1%	-377,885	-13,711	-$1,439,691
Sub-alternative 3d	-8.2%	-236,610	-8,585	-$901,454
Sub-alternative 3e	-5.4%	-155,896	-5,657	-$593,942
Sub-alternative 3f	-3.5%	-101,126	-3,669	-$385,279
Sub-alternative 3g	-2.3%	-66,523	-2,414	-$253,443

Note: The estimated reduction for **Preferred Alternative 2** is considerably lower than when the Council reviewed the analysis at the March 2021 meeting. The previous analysis estimated a 27.1% in MRIP based landings that would result in 780,941 lbs ww of wahoo. The revised analysis estimates a 2.9% reduction in MRIP based landings that would result in 83,670 lbs ww of wahoo.

Social Effects

- In general, a reduction in the recreational bag limit (**Preferred Alternative 2**) or vessel limit (**Alternative 3**) may help slow the rate of harvest, lengthen a season, and prevent the ACL from being exceeded, but bag and vessel limits that are too low may make fishing trips inefficient and lower angler satisfaction.

- **Preferred Alternative 2** may have a slight negative effect on fishing opportunity for private recreational fishermen and charter businesses, and headboats as there would be a reduction in landings of approximately 2.9% and 3.2%, respectively.

- **Sub-alternative 3a** proposes the lowest vessel limit which may result in negative social effects associated with lower angler satisfaction. **Sub-alternative 3g** proposes the highest trip limit and would result in fewer negative social effects.

- The absence of a vessel limit under **Alternative 1 (No Action)** would likely have little effect on recreational fishermen in the short-term but could result in negative effects in the future if the recreational ACL is regularly exceeded. Slowing the rate of harvest and ensuring sustainable of harvest of the wahoo stock would provide for long-term social benefits.

Summary of Public Hearing Comments:

- Notable regional theme to many comments. With some exceptions, those in favor changing retention limits (vessel limits, bag limits, size limits) were largely based in Florida or South Carolina. Those in favor of maintaining the current retention limits were often based in North Carolina.
- Many commenters stressed the importance of maintaining the current bag limit and no vessel limit for wahoo (**Alternative 1 (No Action)**, as a reduction would greatly harm the for-hire industry in North Carolina, particularly the Outer Banks (vessels fishing out of Oregon Inlet and Hatteras Inlet) and the southern Outer Banks (vessels fishing out of Beaufort Inlet).
    - Current retention limits are important to "justifying the cost of the trip" for many for-hire as well as some private vessel anglers.
    - Concern over notable economic hardship from reduced retention limits at a time when many in the for-hire industry have already faced challenges due to COVID-19.
    - Reducing retention limits could lead to more pressure on other species such as those found in the Snapper Grouper complex.
    - If retention limits are reduced, consider a regional approach rather than the entire Atlantic.
    - Consider holding off on changing retention limits until several years of data from the for-hire logbook can be used to inform management decisions.
    - Varying opinions on whether reduced vessel limits should cover the entire Atlantic or only apply to certain states.
- Wahoo are an important species in the late summer and fall for private and for-hire vessels in the southern Outer Banks (typically fishing out of Beaufort Inlet). A harvest closure in the fall would be very detrimental. Wahoo is also an important recreational species in northeast Florida.
- Many commenters, particularly those from North Carolina, were not in favor of a vessel limit for wahoo (**Alternative 1 (No Action)**. If a vessel limit were to be implemented, consider a 12 fish vessel limit.
- Comments in favor of a vessel limit for wahoo ranged from 2 to 8 fish per vessel, with many focusing on 6 or 8 fish per vessel (**Sub-alternatives 3e** or **3g**).
- Several comments in support of a vessel limit for wahoo that would apply in Florida only. These comments were expressed both by commenters from Florida and North Carolina.
- Limited and varying opinions on different retention limits between private and for-hire vessels. Most that did comment were in favor of a higher limit onboard for-hire vessels.
- There were some comments supporting a reduced bag limit (**Alternative 2**) and relatively few supporting implementing a size limit for wahoo. Support for a vessel limit on wahoo was more common.

Draft Council Rationale:

- Council members noted that recreational wahoo landings in recent years (2015-2017) were above the potential new recreational ACL.
    - In doing so, the Council felt that a one fish limit under **Preferred Alternative 2** would help ensure that the recreational ACL is not exceeded and the season would not be shortened due to the recreational AM being triggered.

- The Council felt that a reduction to one wahoo per person would be preferable and more equitable than a vessel limit.
- A vessel limit would also allow some flexibility in retention limits, depending on the number of passengers onboard.

Committee Action:

- NONE REQUIRED.
- REVIEW THE REVISED ANALYSES.
- THE COMMITTEE MAY WANT TO DISCUSS THE LANGUAGE OF THE ACTION/ALTERNATIVES AND MODIFY IF NEEDED.
- REVIEW DRAFT COUNCIL RATIONALE AND MODIFY AS APPROPRIATE.

FMP Goals and Objectives

Discussion:

- At the March 2021 meeting, the Council reviewed the revised goals and objectives of the Dolphin and Wahoo FMP and voted to include them in Amendment 10. The following FMP goals and objectives will replace those that are currently in place:

Preamble: The original and ongoing intent of the Fishery Management Plan for the Dolphin and Wahoo Fishery of the Atlantic is to sustainably manage the stocks of dolphin and wahoo for the long-term benefit of all participants. Owing to the substantial importance of the fisheries for dolphin and wahoo, particularly to the recreational sector, this fishery management plan seeks to manage these fisheries using a precautionary approach that maintains access, minimizes competition, preserves the social and economic importance of the fisheries, as well as promotes research and incorporation of ecosystem considerations where practicable.

Goal 1 (Precautionary Approach): Management of the dolphin and wahoo fisheries is precautionary, risk-averse, and 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 bycatch of dolphin and wahoo in non-directed fisheries.
Goal 2 (Access): The recreational and commercial sectors retain access to the dolphin and wahoo resource.	
Objective 1	For the recreational sector, adopt management measures that ensure consistent and predictable access to dolphin and wahoo when they are regionally available as well as maintain abundant stock levels that lead to high encounter rates and elevated trip satisfaction.
Objective 2	For the commercial sector, adopt management measures that ensure consistent and predictable access to dolphin and wahoo when they are regionally available.
Objective 3	Address concerns as practicable over localized reduction in fish abundance and the resulting perceived decline in local availability of dolphin and wahoo.

Goal 3 (Minimize Competition Between User Groups): Competition between user groups is minimized.	
Objective 1	Ensure effort and catch levels of dolphin and wahoo by distinct user groups does not notably expand beyond their traditional share of the fishery.
Objective 2	Exercise caution in allowing development of new fisheries or expansion of existing fisheries that may increase competition between user groups.
Goal 4 (Economic and Social Importance): Management of the dolphin and wahoo fisheries recognizes and preserves their economic and social importance to both the recreational and commercial sectors.	
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. In the short-term, commercial markets (mainly local) may be disrupted if large quantities of dolphin are landed from intense commercial harvest or unregulated catch.
Objective 3	Encourage research that improves 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): Management of the dolphin and wahoo fisheries recognizes the importance of biologic information and incorporating ecosystem considerations.	
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	Support measures that incorporate ecosystem considerations for the management of dolphin and wahoo where practicable.
Objective 3	Promote research aimed at developing ecosystem based management of dolphin and wahoo.
Objective 4	Promote research that enhances collection of biologic and habitat data on dolphin and wahoo stocks and fisheries.

Committee Action:

- NONE REQUIRED.

Committee Action:

- CONSIDER RECOMMENDING AMENDMENT 10 FOR FORMAL REVIEW.

DRAFT MOTION: APPROVE AMENDMENT 10 TO THE FISHERY MANAGEMENT PLAN FOR THE DOLPHIN AND WAHOO FISHERY OF THE ATLANTIC FOR FORMAL SECRETARIAL REVIEW AND DEEM THE CODIFIED TEXT AS NECESSARY AND APPROPRIATE. GIVE STAFF EDITORIAL LICENSE TO MAKE ANY NECESSARY EDITORIAL CHANGES TO THE DOCUMENT/CODIFIED TEXT AND GIVE THE

COUNCIL CHAIR AUTHORITY TO APPROVE THE REVISIONS AND RE-DEEM THE CODIFIED TEXT.