

PUBLIC HEARING SUMMARY

for Shrimp Amendment 9

to the Shrimp Fishery Management Plan of the South
Atlantic Region

August 2012

This document is intended to serve as a SUMMARY for the actions and alternatives in Shrimp Amendment 9. It also provides background information and includes a summary of the expected biological and socio-economic effects from these proposed management measures.

Send written comments to:
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Comments must be received by 5 p.m. on August 20, 2012



Why is the South Atlantic Council taking Action?

Currently, the process to request a concurrent closure of the EEZ due to cold weather requires a state to provide data to demonstrate an 80% decrease in abundance of overwintering white shrimp to a review panel, and the panel's recommendations are reviewed at the next South Atlantic Council meeting (usually in March). After approval by the South Atlantic Council, a letter is drafted to the NOAA Fisheries Regional Administrator requesting that the EEZ for the states be closed to penaeid shrimp harvest. The Regional Administrator then publishes an official notice of closure. Although the process takes only a week or so to implement the closure after the South Atlantic Council approves the state's request, it is likely that the severe weather event has occurred weeks or even months earlier. The South Atlantic Council is concerned that the process may not be as helpful in protecting the overwintering stock affected by cold weather as it could be and wanted to consider modifications to improve the timeliness and effectiveness of the concurrent closures.

For the action to revise the overfished (B_{MSY}) proxy for pink shrimp, the South Atlantic Council discussed that the biological parameters used in pink shrimp management can be improved through different surveys and MSST proxy. Currently, data from the Southeast Area Monitoring and Assessment Program (SEAMAP) survey is used to determine the proxy for pink shrimp. According to SEAMAP sampling data, the stock of South Atlantic pink shrimp has been below the B_{MSY} proxy (0.461 shrimp/hectare) in recent years, which translates into an overfished status for pink shrimp. However, the Shrimp Review Panel (a group made up of scientists from North Carolina Department of Natural Resources, South Carolina Department of Natural Resources, Georgia Department of Natural Resources, Florida Fish and Wildlife Conservation Commission, and NOAA Fisheries Service) reviewed information about pink shrimp and discussed that other factors likely affect the pink shrimp stock other than fishing mortality. Further, the SEAMAP survey does not have adequate data south of Cape Canaveral, Florida and north of Cape Hatteras, North Carolina. The Shrimp Review Panel has recommended other surveys to be considered in monitoring the pink shrimp population status in addition to or in replacement of SEAMAP.



Purpose for Action

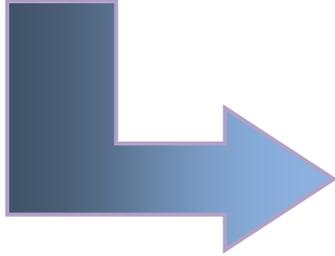
The ***purpose*** of Amendment 9 is to modify the criteria for South Atlantic states requesting a concurrent closure to protect overwintering white shrimp, streamline the process by which a state can request a concurrent closure, and revise the methodology for monitoring and establishing an overfished (B_{MSY}) proxy for pink shrimp.

Need for Action

The ***need*** for action in Amendment 9 is to allow for a more efficient process to facilitate timely concurrent closure requests to maximize protection of overwintering white shrimp during cold weather events, and to improve the accuracy of the biological parameters for pink shrimp management.

What Are the Proposed Actions?

There are three actions being proposed in Amendment 9. Each *action* has a range of *alternatives*, including a ‘no action alternative’ and a ‘preferred alternative’.




Indicates the Council’s preferred option (Alternative) for a management measure (Action)

Proposed Actions in Amendment 9

1. Specify criteria that triggers states’ ability to request a concurrent closure of the overwintering white shrimp fishery in the adjacent EEZ during severe winter weather
2. Modify the process for a state to request a concurrent closure of the overwintering white shrimp fishery in the adjacent EEZ during severe winter weather
3. Revise the overfished status determination criteria (B_{MSY} proxy) for the pink shrimp stock

What Are the Alternatives?

Action 1. Specify criteria that triggers a states' ability to request a concurrent closure of the overwintering white shrimp fishery in the adjacent EEZ during severe winter weather

Note: The Interagency Planning Team recommends the Council consider changing the wording of this action to state: Action 1. Specify criteria that triggers a states' ability to request a concurrent prohibition on the harvest of South Atlantic penaeid stocks in the adjacent EEZ during severe winter weather

Alternative 1. No Action. Currently, as defined under the FMP for the South Atlantic shrimp fishery, states may request a concurrent closure of the EEZ adjacent to their closed state waters following severe winter weather upon providing information that demonstrates an 80 % or greater reduction in the population of overwintering white shrimp.

Alternative 2. A state may request a concurrent closure upon providing information that demonstrates an exceeded threshold for water temperature. Water temperature must be 7°C (45°F) or below for at least one week.

 **Preferred Alternative 3.** A state may request a concurrent closure upon providing information that demonstrates an exceeded threshold for water temperature. Water temperature must be 8°C (46°F) or below for at least one week.

Alternative 4. A state may request a concurrent closure upon providing information that demonstrates an exceeded threshold for water temperature. Water temperature must be 9°C (48°F) or below for at least one week.

Proposed Actions in Amendment 9

- 1. Specify criteria that triggers states' ability to request a concurrent closure of the overwintering white shrimp fishery in the adjacent EEZ during severe winter weather**
2. Modify the process for a state to request a concurrent closure of the overwintering white shrimp fishery in the adjacent EEZ during severe winter weather
3. Revise the overfished status determination criteria (B_{MSY} proxy) for the pink shrimp stock

Action 1: Summary of Effects

Biological: The lower the temperature threshold is set, the less likely the temperature criterion would be met for requesting a concurrent closure. Therefore, the option with the lowest temperature threshold (**Alternative 2**) would be expected to have the smallest biological benefit to shrimp species of the action alternatives considered. Alternately, **Alternative 4** would be most biologically beneficial because it is the highest temperature option under consideration, and the concurrent closure criteria would more easily be met than under **Alternative 2** and **Preferred Alternative 3**. **Preferred Alternative 3** represents a mid-point between **Alternatives 2** and **4**, and would likely result in biological benefits greater than **Alternative 2**, but less than **Alternative 4**.

Economic: Presumably, the higher the temperature for the closure, the sooner fishing pressure on the stock will end. While this might have short-term negative economic consequences for fishermen, preserving the remaining biomass for the next fishing season would have greater, positive economic impact the following season.

Social: The social effects from **Alternative 1 (No Action)** would depend upon whether shrimp stocks were significantly affected by the present closure system, which may not be as timely as that outlined in other alternatives. **Alternative 2** uses a water temperature threshold that would make the determination easier and more timely and may reduce the risk of negative social effects by protecting the shrimp stock. **Preferred Alternative 3** and **Alternative 4** each use a one-degree centigrade increase in temperature threshold respectively and the social effects would be determined by the ability of the alternative to provide sufficient protection to the stock. Overall, if the preferred alternative provides increased protection for the shrimp stock there should be positive social effects in the long-term that should outweigh any short-term negative impacts.

Administrative: The specification of criteria as identified through **Alternatives 2-4** would not result in increased administrative impacts on the agency from the status quo (**Alternative 1 No Action**). Primarily, a state would bear any administrative burden associated with this measure. Under **Alternatives 2-4**, states would be required to demonstrate that data (from a state-level monitoring program) indicate an exceeded threshold in water temperatures. With a change in the required criteria that a state would demonstrate in order to request a concurrent closure (**Alternatives 2-4**), modifications may occur at the state-level in how such a request is administered.

AP Recommendations

The Shrimp Review Panel discussed that 46°F (8°C) temperature is a suitable benchmark for a temperature threshold criteria.

The Shrimp and Deepwater Shrimp APs endorse Alternative 3 as preferred. The APs prefer for a temperature threshold criteria to replace the current requirement for this measure.

Action 2. Modify the process for a state to request a concurrent closure of the overwintering white shrimp fishery in the adjacent EEZ during severe winter weather

Note: The Interagency Planning Team recommends the Council consider changing the wording of this action to state: Action 2. Modify the process for a state to request a concurrent prohibition on the harvest of South Atlantic penaeid stocks in the adjacent EEZ during severe winter weather

Alternative 1. No Action. Currently, the process requires any state requesting a concurrent closure to provide data to demonstrate an 80% decrease in abundance of overwintering white shrimp to a review panel, and the panel’s recommendations are reviewed at the next Council meeting. After approval by the Council, a letter is sent to the NOAA Fisheries Regional Administrator requesting that the EEZ adjacent to the state be closed to penaeid shrimp harvest. The Regional Administrator then publishes an official notice of closure in the *Federal Register*.

 **Preferred Alternative 2.** Any state requesting a concurrent closure would send a letter directly to NOAA Fisheries Service with the request and necessary data to demonstrate that criterion has been met.

Alternative 3. Any state requesting a concurrent closure would send a letter directly to NOAA Fisheries Service with the request and necessary data to demonstrate that criterion has been met. The requesting state would also submit data to the Shrimp Review Panel, who would review data and make a recommendation to NOAA Fisheries Service. This option would require a notice to be published in the *Federal Register* at least 23 days prior to the convening of the Shrimp Review Panel.

Proposed Actions in Amendment 9

1. Specify criteria that triggers states’ ability to request a concurrent closure of the overwintering white shrimp fishery in the adjacent EEZ during severe winter weather
2. **Modify the process for a state to request a concurrent closure of the overwintering white shrimp fishery in the adjacent EEZ during severe winter weather**
3. Revise the overfished status determination criteria (B_{MSY} proxy) for the pink shrimp stock

Action 2: Summary of Effects

Biological: **Preferred Alternative 2** represents the most streamlined process by which South Atlantic states may request concurrent closures of federal waters to protect overwintering shrimp stocks. **Preferred Alternative 2** would, theoretically also require the least amount of time to actually implement the concurrent closure and is thus considered the most biologically beneficial alternative under this action.

Economic: **Action 2** is an administrative action and any alternative chosen will not have positive or negative economic effects on the fishery.

Social: Under **Alternative 1 (No Action)** the current process may not provide sufficient protection and therefore could have negative social effects. Under **Alternative 3**, review by the Shrimp Review Panel could delay the action more than **Preferred Alternative 2** that would be a more direct and timely approach. The social effects would depend upon the effect of any delay of a closure and its impact upon the stock. It is assumed that a more timely closure would have beneficial effects upon the stock which should have positive long-term social effects.

Administrative: Under **Preferred Alternative 2**, convening the Shrimp Review Panel following a state's concurrent closure request would no longer be required. From an administrative perspective for the agency, this often lengthy and multi-step process would be streamlined under **Preferred Alternative 2**. **Preferred Alternative 2** would also eliminate the need for discussion and review of this issue during the Shrimp Committee at a Council meeting.

Under **Alternative 3**, the agency would still be required to develop and publish a notice in the *Federal Register* to convene a meeting of the Shrimp Review Panel in order for a state's data to be reviewed, but the need to wait for review and discussion during a Council meeting would be eliminated. The intent of Action 2, to expedite the current process, would likely still be achieved under **Alternative 3**, but the process would require additional administrative steps than those identified in **Preferred Alternative 2**.

AP Recommendations

The Shrimp Review Panel is interested in remaining a part of the process in reviewing state data as identified in Alternative 3, only if the process is more expeditious than what is currently in place.

The Shrimp and Deepwater Shrimp APs endorse Alternative 2 as preferred for this measure.

Action 3. Revise the overfished status determination criteria (B_{MSY} proxy) for the pink shrimp stock

Alternative 1. No Action. A proxy for B_{MSY} (0.461 individuals per hectare) has been established for pink shrimp using CPUE information from SEAMAP-SA data as the lowest values in the 1990-2003 time period that produced catches meeting MSY the following year.

Alternative 2. Establish a proxy for B_{MSY} for pink shrimp using average CPUE values from SEAMAP-SA data during the 2007-2011 time period (.273 individuals per hectare).

Alternative 3. Establish a proxy for B_{MSY} for pink shrimp using average CPUE values from SEAMAP-SA during the 2009-2011 time period (.292 individuals per hectare).

Alternative 4. Establish a proxy for B_{MSY} for pink shrimp using the lowest CPUE value from SEAMAP-SA during the 1990-2011 time period (.089 individuals per hectare).

Alternative 5. Establish a proxy for B_{MSY} for pink shrimp using average CPUE values from Pamlico Sound Survey data during the 2007-2011 time period (5.143 individuals per hectare).

Alternative 6. Establish a proxy for B_{MSY} for pink shrimp using average CPUE values from Pamlico Sound Survey data during the 2009-2011 time period (1.526 individuals per hectare).

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2. Modify the process for a state to request a concurrent closure of the overwintering white shrimp fishery in the adjacent EEZ during severe winter weather
- 3. Revise the overfished status determination criteria (B_{MSY} proxy) for the pink shrimp stock**

Action 3: Summary of Effects

Biological: None of the alternatives under consideration address the issue of survey data not capturing the entire geographical range of pink shrimp abundance; however, **Alternatives 2, 3, 5** and **6** do use the most recent data available, which is a more accurate representation of current stock conditions relative to how pink shrimp is prosecuted now between Cape Hatteras, North Carolina and Cape Canaveral, Florida. The higher the B_{MSY} proxy, the greater the chance that catch per unit effort (CPUE) would fall below B_{MSY} in any given year and require administrative action to limit harvest. Therefore, if the B_{MSY} proxy is set too high, the probability of implementing corrective action when it may not be biologically necessary is higher relative other alternatives with low B_{MSY} values. Conversely, if the B_{MSY} proxy is set very low, the risk that CPUE would fall below B_{MSY} and corrective action may not be triggered when it is actually needed would be greater. Despite the limitations of the SEAMAP survey, it captures a broader geographic area in deeper water than the Pamlico Sound Survey, and may better represent the pink shrimp stock. Furthermore, the Pamlico Sound Survey shows much more variability in CPUE than the SEAMAP survey suggesting trends Pamlico Sound Survey may not represent pink shrimp abundance as well as the SEAMAP survey and could unnecessarily trigger an overfished/overfishing determination or fail to trigger such a determination when needed. The most accurate representation of biomass is likely to fall somewhere between the lowest and the highest B_{MSY} proxy alternatives (**Alternatives 4** and **5**, respectively), and a B_{MSY} proxy that is closer to a mid-point between the highest and lowest CPUE averages is less likely to trigger corrective action when it would not be needed, or fail to trigger corrective action when it is needed.

Economic: **Action 3** is a biological action that has indeterminate economic effects. Presumably, any alternative that would set an overfished level for pink shrimp that would lead to subsequent measures that might close the fishery early could have a negative economic effects. The lower the overfished threshold is set, the greater the probability the fishery could close early. However, such negative economic effects theoretically would only be short lived. Setting a lower overfished threshold could have positive economic effects for future fishing seasons.

Social: Utilizing SEAMAP-SA data (**Alternatives 2-4**) could add additional confidence regarding the proxy B_{MSY} for pink shrimp. While primarily a biological decision, it could improve the overall assessment and be beneficial to the overall process that could result in positive social effects by ensuring the most accurate information to base management decisions. **Alternative 5** would provide an alternative perspective and offers a higher threshold than **Alternative 6**. Whichever alternative chosen as preferred, as long as it reflects the best estimate of stock status, it should have beneficial social effects in the long-term as mentioned in previous alternatives.

Administrative: **Alternatives 2-4** establish a new proxy for B_{MSY} based on more recent time series data from the SEAMAP program. **Alternatives 5** and **6** establish a new proxy for B_{MSY} based on more recent time series data from the the Pamlico Sound Survey data. The Council has the option to add the Pamlico Sound Survey data into consideration of the overfished status of pink shrimp, or reference this data in replacement of the SEAMAP program data. For the agency, administrative impacts associated with **Alternatives 2-4** would not differ from the status

quo (**Alternative 1 No Action**). **Alternatives 5 and 6** would require agency review of the Pamlico Sound Survey data potentially in addition to the SEAMAP data on an annual cycle.

AP Recommendations

The Shrimp Review Panel recommends the inclusion of the Pamlico Sound Trawl Survey as an additional data source in development of a BMSY proxy for pink shrimp.

The Shrimp and Deepwater Shrimp APs support the Shrimp Review Panel's identification of additional sources of shrimp abundance data to either supplement or replace the SEAMAP survey.

Public Hearing Dates and Locations

Public Hearings will be held from 4 – 7 p.m.

<u>August 6, 2012</u> Richmond Hill City Center 520 Cedar Street Richmond Hill, GA 31324 Phone: 912-445-0043	<u>August 7, 2012</u> Jacksonville Marriott 4670 Salisbury Road Jacksonville, FL 32256 Phone: 904-296-2222
<u>August 8, 2012</u> Doubletree Hotel 2080 N. Atlantic Avenue Cocoa Beach, Florida 32931 Phone: 321-783-9222	<u>August 9, 2012</u> Hilton Key Largo Resort 97000 South Overseas Highway Key Largo, Florida 33037 Phone: 305-852-5553
<u>August 14, 2012</u> Hilton Garden Inn Airport 5265 International Blvd. North Charleston, SC 29418 Phone: 843-308-9330	<u>August 16, 2012</u> Hilton New Bern/Riverfront 100 Middle Street New Bern, NC 28560 Phone: 252-638-3585

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What are the Next Steps?

