

South Atlantic Research and Monitoring Prioritization Plan Source Document 2017

Introduction

The 2006 reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) directed the Federal Regional Fishery Management Councils to develop a prioritized research plan for submission to the Secretary of Commerce. The initial South Atlantic Council (Council) plan, addressing needs for 2008-2012, was submitted to NMFS in 2007. That plan detailed overall data needs by fishery, provided a list of priority stocks for stock assessment, and included a number of specific data needs. Updates to the Council plan were prepared and submitted annually from 2007 through 2015.

Given the long-term nature of many research needs, the fact that the priority plans cover a 5 year period, and recognizing that only minor changes were occurring from year to year, in 2015 the Council recommended moving to an bi-annual update process. Additionally, the research plan approach also changed with the 2015 submission, becoming more focused, explicit, and time specific. However, as the Council did not want to lose the information developed over 9 years of prior submissions that documented broad data needs and expectations, the detailed research plan transitioned to this Source Document to provide background on future updates of specific priorities.

Highlighted Issues

- The Council requests that NMFS provide, as required in the MSFCMA, annual Stock Assessment and Fishery Evaluation (SAFE) reports that provide stock status including OFL and MSY, an evaluation of the management program including whether ACLs were met or AMs triggered and addressing reasons for such, results of independent fisheries monitoring, complete landings and discard losses in weight and numbers of fish, fishery dependent monitoring statistics, and measures of effort and economic value for all managed stocks by June 1 of each year. This information is critical for the Council and its SSC to set annual specifications (including ABC, ACL, and ACT) and evaluate AMs.
- The Council requests that NMFS obtain and provide accurate fishery information including increased spatial resolution for landings, discards, and effective effort.
- The Council requests that NMFS continue to improve recreational fisheries data collection, with increased emphasis on improving the precision of estimates for the many stocks in the snapper-grouper complex, especially those with extremely high PSE's and low ACLs.
- The Council requests increased funding for fisheries independent monitoring in the South Atlantic. This includes restoration of MARMAP funding to a minimum of \$850,000 annually, funding to allow reinitiating long bottom longline sampling that provides the only abundance information for deepwater stocks such as tilefish, and sufficient funding of the SEFIS program to ensure video monitoring data are available by June 1 of the year following collection. The Council requests that an Annual Report on the SEFIS program be provided, in writing, by October 1 of each year for review by the Council and SSC.

- The Council requests evaluation of stock structure and identification of stock units before conducting a first time benchmark assessment for any stock.
- The Council requests increased monitoring of discards during seasonal and area closures.
- The Council requests that NMFS implement adequate monitoring to enable evaluating the effectiveness of South Atlantic MPAs and SMZs for protecting and ensuring adequate spawning biomass of snapper grouper stocks.
- The Council requests that NMFS provide an annual progress report detailing efforts to implement the research recommendations noted in Council Research and Monitoring Priority reports. This report should be provided by May 1 of each year.

SAFMC General Research Recommendations

Research and monitoring priorities to enable the Council to manage the resources under its jurisdiction in a manner consistent with the requirements of the MSRA are listed below in priority order:

1. Provide annual SAFE Reports for all FMPs and managed stocks that include stock status, estimates of MSY and OFL, schedules of ACLs and ABCs, landings and discards by fishery sector in pounds and numbers, trends in abundance as provided by fishery surveys, descriptive statistics on observer coverage, evaluation of current management addressing if and why ACLs were met and AMs triggered, measures of economic value, evaluation of social concerns, and summarized findings of any relevant research activities conducted since the prior reporting period.
2. Provide an evaluation of fishery-independent data and available biological sampling information for all Council-managed stocks that are currently unassessed. This evaluation should document past sampling intensity and current sampling targets and provide guidance on the type of stock assessments feasible given the available data.
3. Implement fishery and population monitoring programs that will support the Council's assessment expectations for primary and secondary stocks as noted below. Monitoring progress should be noted in the annual SAFE report.
 - a. Collect basic fishery information (landings, discards, and biological characteristics) for all managed stocks.
 - b. Collect additional biological and survey information necessary to develop age-based quantitative stock assessments for those stocks which comprise the bulk of the fishery, or serve as important ecological indicators. These are listed in Appendix 2 as primary species.
 - c. Initiate comprehensive fishery monitoring and sampling to support quantitative assessments, not necessarily age-based, for all secondary species listed in Appendix 2.
 - d. Initiate monitoring programs to provide adequate stock status and fishery exploitation information on stocks characterized as "Special Needs" (See Appendix 2)

4. Resolve data collection and dissemination issues that burden constituents, create delays in data availability, and impede access by the Council and its technical bodies to the information required for adequate management.
 - a. Fully implement the biological, economic, and social data collection standards developed through ACCSP and ensure all data are provided to ACCSP in a timely basis.
 - b. Resolve data confidentiality issues that prevent dissemination of basic landings information to the Council and its SSC.
 - c. Eliminate duplicative data collection programs and adopt electronic reporting options for commercial and for-hire fisheries.
5. Evaluate the effectiveness of current MPAs and other closed areas with regard to preventing overfishing and restoring overfished stocks, and provide a full report on findings to the Council.
6. Monitor the mixing rates of Gulf and South Atlantic king mackerel. Mixing rates may change over time and should therefore be regularly evaluated, although annual monitoring may not be necessary.
7. Implement a monitoring and research program to address issues relevant to ecosystem management. Topics include trophic interactions, food preferences, predator-prey relationships, and ecosystem connectivity.
8. Evaluate the cumulative biological, economic and social impacts of existing regulations on the multi-species snapper grouper fishery in the South Atlantic.
9. Request that appropriate SEFSC staff meet with the SSC when these research priorities are reviewed, to increase interaction and communication between the SSC and agency scientists.

Basic Fishery Data Required for Managed Species

The following information is required for all managed fisheries and stocks:

- Complete catch and bycatch reporting by species, including location;
- Complete effort and participation information by fishery sector;
- Representative biological sampling of catches;
- Representative sampling of bycatch and discards; and
- Adequate observer coverage to validate discard reporting.

Supplemental Information:

- License ID information for all participants and vessels linked to trip and set reports;
- Global participant frame provided through licensing of all participants; and
- Per unit (i.e., tow, set, site, deployment, depending on the nature of the fishery) information on catch and discard from for-hire and commercial fisheries collected through onboard electronic logbooks linked to GPS.

1. Shrimp Trawl Fishery

Per tow: duration, location, trawl details, catch estimate, discard estimate
Per trip: landings by species, trip costs, price paid per lb, # crew
Supplement: 5% observer coverage for discard, 20% coverage for detailed social & economic reporting.

2. Finfish Trap Fisheries

Per trap/string: duration, location, trap details, catch estimate, discard count
Per trip: landings by species, trip costs, price paid per lb, # crew
Supplement: 2% observer coverage for discard, 10 % video discard coverage, 20% coverage for detailed social & economic reporting.

3. Dive or Spear Fisheries

Per dive: duration, location, gear details, # divers, catch estimate
Per trip: landings by species, trip costs, price paid per lb, # crew
Supplements: 20% coverage for detailed social & economic reporting.

4. Handline Fisheries

Per set/site: duration, location, gear details, catch estimate, discard count
Per trip: landings by species, trip costs, price paid per lb, # crew
Supplement: 5% observer coverage for discard, 10% video discard coverage, 20% coverage for detailed social & economic reporting.

5. Deepwater Longline Fishery

Per set/deployment: duration, location, gear details, catch estimate, discard count
Per trip: landings by species, trip costs, price paid per lb, # crew
Supplement: 5% observer coverage for discard, 10% video discard coverage, 20% coverage for detailed social & economic reporting.

6. Pelagic Longline Fishery

Per set/deployment: soak, location, gear details, catch estimate, discard count
Per trip: landings by species, trip costs, price paid per lb, # crew
Supplement: 5% observer coverage for discard, 10% video discard coverage, 20% coverage for detailed social & economic reporting.

7. Bottom Longline

Per set/deployment: soak, location, gear details, catch estimate, discard count
Per trip: landings by species, duration, trip costs, price paid per lb, # crew,
Supplement: 5% observer coverage for discard, 10% video discard coverage, 20% coverage for detailed social & economic reporting.

8. Private Recreational

Per trip: mode, location, gear details, duration, landings by species, discard by species, expenditures,
Per Year: # trips by mode, location
Supplement: Voluntary logbook for discard characteristics (e.g., size and reason for discarding), 20% coverage for detailed social & economic reporting.

9. Headboat Recreational

Per set/site: location, duration, catch & discard estimate by species
Per Trip: # anglers, # lines, duration, landings by species

Supplement: 5% observer coverage for discard characteristics. Voluntary logbook for discard (size), 20% coverage for detailed social & economic reporting of owner/operators. 20% coverage for social & economic evaluations of participants.

10. Party/Charter Recreational Fishery

Per trip: mode, location, gear details, duration, catch & discard by species

Supplement: 5% observer coverage for discard characteristics. Voluntary logbook for discard (size), 20% coverage for detailed social & economic reporting of owner/operators. 20% coverage for social & economic evaluations of participants.

Data and Assessment Priorities

SAFMC Primary Species:

Black Grouper	Mutton Snapper
Black Sea Bass	Red Grouper
Blueline Tilefish	Red Porgy
Cobia	Scamp
Gag	Snowy Grouper
Gray Snapper	Spanish Mackerel
Gray Triggerfish	Golden Tilefish
Greater Amberjack	Vermilion Snapper
Hogfish	White Grunt
King Mackerel	Yellowtail Snapper

Assessment Goal for Primary Species: Quantitative, age-based assessment that provides stock status estimates and probability distributions for MSY, B_{MSY} and F_{MSY}.

Expanded Data Elements for Primary Species:

- Representative sampling, adequate to support quantitative age-based stock assessments, by season, fishery, and area, of length, age, sex, and weight as appropriate, to represent both landed and discarded fish.
- Fishery-independent survey derived measures of population abundance (preferred). If this is not possible, develop appropriate fishery-dependent measures.
- Timely and up-to-date life history research: rates of growth, mortality, maturity, fecundity; movements, migrations, and stock structure evaluations.

SAFMC Secondary Data Collection Species:

Almaco Jack	Knobbed Porgy
Lane Snapper	Penaeid shrimp
Wahoo	Red Hind
Atlantic Spadefish	Rock Hind
Banded Rudderfish	Silk Snapper
Bar Jack	Tomtate

*Stocks listed in **BOLD** are the top priorities for assessment*

Assessment Goal for Secondary Species: Quantitative assessment that provides a measure of stock status relative to B_{MSY} and F_{MSY}

Additional Data Elements for Secondary species:

- Fishery-dependent survey measures of population abundance;
- Evaluation of life history traits: rates of growth, mortality, maturity, fecundity; and movements, migration, and stock structure evaluations.

SAFMC Special Data Collection Stocks:

The Special Data Collection classification includes those subject to restrictive management actions or possessing biological, behavioral, or geographic traits that hinder monitoring and evaluation by typical catch or survey based approaches. Some may also be listed as primary or secondary data collection stocks so they are not overlooked in data collection planning. The Council recognizes that stocks in this category may pose considerable obstacles to conventional assessment approaches.

Special Data Collection Stocks:

Dolphin

Golden Crab

Goliath Grouper

Nassau Grouper

Red Snapper

Speckled Hind

Spiny Lobster

Warsaw Grouper

Wreckfish