

Framework Adjustment 1
to the
Atlantic Mackerel, Squid, and Butterfish FMP
Summer Flounder, Scup, and Black Sea Bass FMP
Bluefish FMP
Tilefish FMP
(Quota Set-Aside for Research)

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Mid-Atlantic Fishery Management Council

in cooperation with the

National Marine Fisheries Service

and

Atlantic States Marine Fisheries Commission

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Executive Summary

The purpose of this framework is to enable a set-aside from the annual quota (or "Total Allowable Landings") of selected species to support research and data collection activities. Those species eligible for a set-aside include:

Atlantic mackerel	Loligo squid
Black sea bass	Scup
Bluefish	Summer flounder
Butterfish	Tilefish
Illex squid	

Each year, the Mid-Atlantic Council may designate between 0% and 3% of a species' allowable landings to be set-aside. Proposals may then be submitted that respond to the Council's research priorities, and set-aside poundage awarded to projects that are selected through the designated governmental process. Currently, set-aside awards are processed through NOAA's Grants Management Division. Proceeds from the sale of set-aside quota constitute the only source of revenue available to support research under this program.

Other program specifics include:

- For those species that have both a commercial quota and a recreational harvest limit, the set-aside calculation shall be made from the combined total allowable landing level.
- It is intended that the set-aside for a given species be utilized primarily for research involving that species. However, the harvest of up to 25% of the set-aside quota from species not directly involved in a particular research project will be considered, in order to promote research in those cases where it would otherwise be infeasible.

Every effort will be made to schedule the award of set-aside poundage prior to finalizing the upcoming season's quotas. This will allow any set-aside quantities that are ultimately unneeded to be released back to their respective recreational and commercial fisheries.

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1.0. Introduction

The Mid-Atlantic Council issues this document to establish a program in which data collection projects will be funded in part through a percentage set-aside from a species' Total Allowable Landings (TAL). The purpose is to support research and the collection of additional data that would otherwise be unavailable. The Mid-Atlantic Council wishes to encourage collaborative efforts between the public, research institutions, and government in broadening the scientific base upon which management decisions are made. Reserving a small portion of the annual harvest of a species to subsidize the research costs of vessel operations and scientific expertise is considered an important investment in the future of the nation's fisheries.

It should be stressed that any person or organization can conduct experimental programs without Council approval so long as the activity is not otherwise prohibited. Moreover, should special fishing permits be required, they can be applied for directly to NMFS without involving the Council. However, without Council approval and participation, an applicant cannot be assured that any quota set-aside for scientific use would be available to help defray project costs, or for any other legitimate use. Given the high costs of vessel operation and trained personnel, it is unlikely that quota set-asides alone will cover the entire cost of a project, and hence applicants are strongly encouraged to seek support from additional sources.

A key benefit that is sought from this program is the assurance that new data collected by non-governmental entities will receive the peer review and analysis necessary to be utilized in improving the management of public fisheries resources.

2.0. Purpose and Need for Action

2.1. Problems for Resolution

There are many issues that arise in the development of fishery management programs that have no clear resolution. Often a key factor in such cases is a lack of definitive information on the nature of a fishery resource, or a clear understanding of the impacts of human interaction with these resources. Common examples might include uncertainty as to the seaward extent of a resource in deeper waters, or how effective a particular gear configuration might be in reducing the bycatch of immature fish while still retaining the targeted adults.

Another important factor that can erode the effectiveness of a fishery management program is a lack of confidence on the part of the fishing community that it is based on sound scientific information. Research and data collection programs are often conducted by government agencies without the direct involvement of the public, and once completed may not be adequately interpreted so that non-scientists can comprehend their results. In some cases, the results may appear to run counter to the experience that fishermen have in their daily lives harvesting fishery resources. Frequently, this is due to differences in methodology. Commercial fishermen seek to maximize the revenue from their harvests, and will operate their vessels and deploy their gear in such a way as to best accomplish this end. Scientists, conversely, are bound by the "scientific method," and seek to gain information and verify its accuracy through rigorous experimental procedures.

Management programs based on this information may then be questioned by the public, and lack credibility in their eyes. Without the active cooperation of the fishing public, most management programs are destined to fail, as it is chiefly through the actions of commercial and recreational user groups that humans interact with and affect fisheries resources.

The Mid-Atlantic Council has developed the research set-aside program to address these concerns. Through cooperative projects that make use of expertise in the fishing community as well as the research community, it is anticipated that information of strategic importance to management decisions will be obtained. When combined with a commitment to effectively communicate the results and implications of the research back out to the fishing community, it is expected that new management programs incorporating the results will have greater public support and ultimately be more effective.

2.2. Objectives

- 1) Facilitate the collection of data that the Council and public deem important for fishery management purposes.

- 2) Create a mechanism whereby the data collected can be reviewed and certified acceptable for use by NMFS scientists and those individuals involved in the fishery management process.

3.0. Preferred and Alternative Management Measures

3.1. Preferred Management Measures

3.1.1. Set-Aside Amounts

- The annual research set-aside amount may vary between 0 and 3% of each species' quota.
- For those species that have both a commercial quota and a recreational harvest limit, the set-aside calculation shall be made from the combined total allowable landing level.

3.1.2. Projects Involving More than One Species

- Individual research projects may involve multiple species, and therefore may apply for the use of more than one set-aside.
- It is intended that the set-aside for a given species be utilized primarily for research involving that species. However, the harvest of up to 25% of the set-aside quota from species not directly involved in a particular research project will be considered, in order to promote research in those cases where it would otherwise be infeasible.

3.1.3. Set-Aside Process and Schedule

- Specification of research set-aside amounts (percentages) for the coming year shall be incorporated into the Council's annual quota specification packages submitted to NMFS.
- For each proposal cycle, the Council will publish a Request for Proposals (RFP) that specifies research priorities and application procedures. Each RFP will include:

Dates of Submission

Eligibility Criteria

Proposal Requirements and Format

Research Priorities

General Project Administration Requirements

Evaluation Criteria

Selection Procedures

Interim and/or Final Report Requirements

- It is the Council's intention that, whenever possible, research proposals be reviewed and approved prior to the publication of final quota specifications for the upcoming year. In the event that the approved proposals do not make use of any or all of the set-aside for a particular species, NMFS would be authorized to release the unutilized portion back to its respective commercial and recreational fisheries when the final specifications are published.
- Proposals may request that the quota set-aside be collected separately from the research trip or other related research trip. The separate research compensation trips do not necessarily have to be conducted by the same vessel.

3.1.3.1. Sample Process and Schedule

The following schedule provides an example of the anticipated review and approval process for projects requesting set-asides. The timing may vary dependant on the fishery involved and pending workloads of the involved agencies.

Month 1 At Council Meeting: Council establishes research priorities for next fishing year based on advice and comment from its various committees and ASMFC.

Month 2 Council staff submits RFP to NMFS (anticipate up to 2-month review period).

Month 3 NMFS publishes RFP. RFP specifies:

- 30 days to submit proposals to NMFS Northeast Regional Grants Office.
- Detailed description of proposal (as specified in framework).
- Applicant must provide a list of the regulations he/she expects to be waived.

Month 4 Proposal submission deadline.

Month 5 NMFS Grants Office completes initial review for completeness and sends proposals out for formal review.

- NMFS Grants Office will send proposals to Comprehensive Management Committee and other designated reviewers from ASMFC, Center staff, academia, etc.
- Reviewers will follow standard Saltenstall-Kennedy (SK) review procedures where they are instructed to score and rank the proposals.

Month 6 NMFS Grants Office convenes a joint meeting with the Comprehensive Management Committee and other reviewers to make final recommendations to NMFS on behalf of the Council.

Month 7 Council Meeting - Council establishes TALs and research set-aside percentages for each species. Council staff:

- analyzes the set-aside allotment (% allocated to each fishery).
- analyzes the regulations to be waived.

Month 9/10 NMFS publishes proposed specifications for upcoming fishing year and request for comments. NMFS Grants Office renders decision on proposals.

- Regional Administrator (RA) reviews recommendations forwarded by Comprehensive Management Committee, ASMFC, and other reviewers. If RA concurs, proposals are forwarded to NOAA Grants Office for final approval.
- NOAA Grants Office renders decision on proposals.
- If NOAA Grants Office disapproves a grant (proposal), during comment period, Council may submit request to NMFS to re-allocate disapproved research set-aside back to commercial and recreational specifications.

Month 11 NMFS publishes final specifications announcing:

- Specifications for the commercial & recreational fisheries and the percentage allocated to research set-aside.
- Commercial management measures.
- Regulations that may be waived by vessels conducting approved research or compensation trips for research endeavors.

Month 12/13 NMFS issues Letter of Authorizations (LOA) to research vessels and research begins.

3.1.3.2. Additional Project Considerations

On behalf of the Council, the Comprehensive Management Committee will have the primary responsibility for evaluation of research proposals. The evaluation will be based on criteria specified in the Request For Proposals (RFP). NMFS will have three additional review responsibilities: 1) determine that the proposed research is in compliance with the intent and design of the governing fishery management plan; 2) approve (or disapprove) the experimental

design of each proposal as being scientifically valid; and 3) certify that the data generated will be of a quality and format that are acceptable for inclusion in NMFS' and ACCSP's databases.

3.1.4. Waiving of Regulations

3.1.4.1. General Description

Vessels conducting research and data collection activities under the auspices of this program may require an exemption from selected regulations, such as closed seasons or gear requirements. In order for any regulation to be waived, an analysis must first be prepared that evaluates the impacts of that waiver. Rather than have analysis of regulatory waivers (exemptions) analyzed in the framework document or by the applicants as part their respective proposal submissions, the analysis of waivers will be a part of the quota specification document. At the Council meeting which sets a particular species' quota, staff will know the quantity of that species requested for research and which regulations would need to be waived for each proposal recommended for approval. As part of its specification package, staff would analyze both the amount of quota requested (0% to 3%) and the impacts of waiving the specified regulations.

3.1.4.2. Benefits

It is not feasible to analyze waivers in the framework document because Council staff would not know what combination of requirements would be requested by applicants. However, requiring analysis to be done by the applicant would slow the review process. Including analysis in the specifications will "streamline" the Experimental Fisheries Permit (EFP) process by allowing the approved requests to be awarded a grant without going through the rigors of an EFP review.

Specific regulations that may NOT be waived include:

Reporting requirements

3.1.5. Species Eligible for Research Set-Asides

Species under management by the Mid-Atlantic Council that are eligible for research set-asides are:

Atlantic mackerel	<i>Scomber scombrus</i>
Black Sea Bass	<i>Centropristis striata</i>

Bluefish	<i>Pomatomus saltatrix</i>
Butterfish	<i>Peprilus triacanthus</i>
Illex squid	<i>Illex illecebrosus</i>
Loligo squid	<i>Loligo pealei</i>
Scup	<i>Stenotomus chrysops</i>
Summer Flounder	<i>Paralichthys dentatus</i>
Tilefish	<i>Lopholatilus chamaeleonticeps</i>

3.1.6. Project Funding

No Federal funds are provided for research under this program. The Federal Government's contribution to projects will be a Letter of Authorization that will provide special fishing privileges in response to research proposals selected to participate in this program. The Federal Government shall not be liable for any costs incurred in the conduct a project. Any funds generated from the landings authorized in the Letter of Authorization shall be used to cover the cost of the research, including vessel costs, and to compensate vessel owners for expenses incurred. Therefore, the owner of each fishing vessel selected to land a species in excess of a trip limit or seasonal quota must use the proceeds of the sale of the excess catch to compensate the researcher for costs associated with the research activities and use of the vessel. Any additional funds above the cost of the research activities (or excess program income) shall be retained by the vessel owner as compensation for the use of his/her vessel.

The researcher's proposal must state the amount of funds required to support the research project, as well as the amount required to compensate the vessel owner either for the collection of set-aside species or for participation in the research project, or both. The proposal must also include the agreement between the vessel owner and researcher that shows exactly how the research activity is to be paid for.

3.1.7. Final Reports and Data Submission

Research and data collection projects may vary substantially in their objectives and the ultimate "products" they seek to deliver. However, there are certain requirements that all approved projects will be expected to fulfill. In general, these requirements will be specified in the published RFP, and respond to the needs of the governing administrative process. Currently, set-aside awards are processed through NOAA's Grants Management Division, and treated as a federal grant.

All approved projects will be required to submit a final report. Additionally, those projects designed to collect new data will be required to submit that data in electronic format with appropriate documentation.

3.1.7.1. Final Reports

NMFS and the Council will require project researchers to submit an interim and/or final report describing their research project results, or other acceptable deliverable(s), in a time frame that is specific to the type of research conducted. The format of the final report may vary, but must contain:

1. A brief summary of the final report;
2. A description of the issue/problem that was addressed;
3. A detailed description of methods of data collection and analyses;
4. A discussion of results and any relevant conclusions presented in a format that is understandable to a non-technical audience; this should include benefits and/or contributions to management decision-making;
5. A list of entities, firms or organizations that actually performed the work and a description of how that was accomplished; and
6. A detailed final accounting of all funds used to conduct the research, including those provided through the research quota set-aside.

3.1.7.2. Data Submission

Projects designed to collect new data for inclusion in NMFS' or ACCSP's databases must submit the data in electronic format with appropriate documentation. Certain databases will have highly-specific requirements as to required fields and content. Researchers must agree to provide newly-collected data in a format acceptable to the administrators of the receiving database.

Documentation, or "metadata" describing the data's format, content, and idiosyncrasies must accompany any data submission.

3.2. Alternatives to Preferred Management Measures

3.2.1. Non-preferred Alternative 1: Research Quota Set-Aside Set to a Flat 1%

Initial discussions focused on specifying the research set-aside as a flat 1% of the total allowable landings for each species. This was patterned after the New England Council's specification of a 1% research set-aside for harvests of scallops in the groundfish closed areas. Further consideration brought out the fact that some species' quotas are relatively small, and that 1% of these amounts would be inadequate to sponsor research efforts. For example, the recommended 2001 quota for Tilefish was 1,760,000 lbs. One percent of this total equals 17,600 lbs, with a value of \$44,000 at the 1999 average price of \$2.48 per lb. Assuming the vessel and labor costs of harvesting these fish are 50% of the exvessel value, there would remain only \$22,000 in "profit" available to support research.

Creating an allowable range of 0 - 3% provides the flexibility to triple that amount in the event that one or more high priority research projects are submitted.

3.2.2. Non-preferred Alternative 2: Allow for "Rapid-Response" Projects

Serious consideration was given to the concept of "rapid-response" projects, which would respond to information needs that might arise on short notice. In the event that such a situation would occur, the Council would issue a special request for proposals to address the issue in question. A fast-track submission and review process would be created to allow these "rapid-response" projects to be carried out in the shortest possible time frame.

Further consideration brought to light a number of problems that would accompany such a mechanism. The principal issue was how quota could be reserved for rapid-response projects and not be "wasted" if special needs did not arise. An example might be one where a total of 3% of a species' quota is set aside for research projects in a given year. Two percent could be dedicated to proposals approved in the normal project cycle, and one percent reserved for rapid-response projects. In order to ensure that the entire quota is utilized by the end of the year, one approach put forth was to release all quota set aside for rapid-response projects in the fourth quarter if it was not needed by the end of the third quarter.

The complicating factor in such an approach is one of equity among the various sectors in a fishery. Frequently, seasonal quotas are designed with the express purpose of allowing different sectors of the fleet equal access to a resource. For example, one species might migrate from the south to the north over the course of a year. Vessels based in the southern

states would have access to the resource in the first half of the year, and the northern states would have access in the second half. Seasonal quotas that apportion the Total Allowable Landings equally to each half of the year would ensure that the southern states do not harvest the entire annual quota before the fish even arrive in the northern states.

A mechanism that would return unused research set-aside quota to only those fisheries active in the final months of the year is likely to be considered unfair by those that can only operate in other seasons.

A final concern about the feasibility of rapid-response projects related to whether the government could process them in a timely manner. So long as research quota set-asides are administered as grants, they must adhere to the requirements of the grant's process. The typical amount of time required for processing a federal grant is six months. The process starts with a 30 to 60 day interval for submission of proposals once an RFP is published in the Federal Register. The "State Federal and Constituent Programs Office" of NMFS will then initiate a technical review process requiring approximately two months. Finally, NOAA's Grants Management Division requires from 45 to 60 days to finish processing and award the grant.

Given that the intent of the Council was to enable research projects to be executed quickly with this mechanism, there appears to be a basic conflict with the timetable required for administration through the Grants program.

3.2.3. Non-preferred Alternative 3: Set-Asides Dedicated to One Species Only

This alternative would specify that the quota set-aside for a species could only be used for research that would directly involve that species. The intention is to address equity concerns that might arise if proposals seek to fund projects involving one species or gear type with the set-aside for another, seemingly unrelated species. Specifically, those individuals participating in the fisheries for high-value species such as summer flounder may feel that their set-aside is unfairly targeted as a funding source for projects that will not clearly benefit the management of their fishery.

There are two circumstances that argue against requiring a tight link between a research project and a particular species. First, research focusing on a particular gear and its behavior may have broad applicability to a number of different species. For example, a particular gear modification may improve the selectivity of one species and as a consequence reduce the discards of many others.

A second circumstance arises in those cases where a species is not very abundant, and even a full 3% quota set-aside may be insufficient to subsidize research requiring expensive vessel operations. As mentioned previously, tilefish is the most frequently cited example of a species that has important management needs, yet has a quota set-aside value that is among the lowest. Allowing a tilefish project to utilize the set-aside of another species may be the only alternative that will enable research to proceed.

Note that the preferred alternative attempts to strike a balance between the competing goals of enabling research on small populations and limiting the use of unrelated species' set-aside. It specifies that no more than 25% of a species' set-aside may be utilized by projects that do not directly involve that species.

3.2.4. Non-preferred Alternative 4: Compensation Trips Not Allowed

This alternative would prohibit the harvest of set-aside quota on separate trips from those conducting research.

The concept of "compensation trips" arose from the New England Council's scallop research program. Researchers expressed frustration at the difficulties that can arise when the needs of a research protocol conflict with the need to make a profitable fishing trip. If, for example, the commercial portion of the trip is given top priority and always conducted first, then the research component may end up being rushed if bad weather approaches, or the commercial catch needs to be landed before it spoils. A request was then made to allow the quota set-aside to be harvested on separate "compensation trips" from those conducting research. While it would not be as cost effective as a trip that can fulfill both needs on a single voyage, it would provide several key advantages.

A first advantage would be greater freedom to dedicate vessel time to the needs of each purpose. In the winter months, good weather may only be available for a few short days at a time, allowing for only one activity to be conducted. Additionally, if the commercial fishing grounds are widely separated from the location where research efforts are needed, separate trips to each location may prove to be only slightly more costly than a single trip.

A second advantage that may be gained from separating research from commercial fishing is that different vessels could be used for each activity. Vessels that are already rigged with the equipment best suited to the needs of each activity could be selected, and contracted separately.

The primary reason put forth to prohibit compensation trips would be to discourage financial misconduct. The potential exists for proposals to be submitted and set-aside quota harvested without a serious intention to conduct research. The fact that the set-aside could be harvested without scientific personnel or observers on board simply makes such conduct slightly easier.

It is not considered likely that researchers or vessel owners would risk their reputations by engaging in such behavior. At the very least, they would be barred from further participation in federal grant programs.

3.2.5. Non-preferred Alternative 5: Compensation Trips Allowed with Funds Held in Escrow Account

This alternative would allow for compensation trips, yet require that the proceeds from the sale of set-aside quota be deposited in an escrow account. An independent, third party would be responsible for disbursing funds to researchers and reimbursing vessel owners for the costs of harvesting the set-aside quota. Involving an third party in the financial management of the project may decrease the likelihood of misconduct. The third party would be selected through a bidding process, and would most likely be an accounting firm or non-profit agency.

The reason this measure was not selected as part of the preferred alternative is because it would add significantly to the administrative overhead of the program. Administrative costs would be higher, given that the third party agency would be compensated for its services, and implementation times would be longer.

In contrast to the research program being conducted in New England, the Mid-Atlantic effort has no cash grants available to it. The entire support must take the form of access to certain fisheries resources, and the potential relaxation of selected fisheries regulations. Revenue generated from the sale of set-aside fish must first cover the costs of harvesting them, with perhaps one-half of the gross sales value available to support research. Under these conditions, it is possible that interest in the Mid-Atlantic research program may be modest. At this time, therefore, it is not recommended that the program be further burdened with the costs of administering an escrow fund.

3.2.6. Non-preferred Alternative 6: ITQ Fisheries Are Eligible for a Set-Aside

This alternative would enable a research quota set-aside for the surfclam and ocean quahog fisheries managed by Individual Transferable Quotas (ITQ).

The Mid-Atlantic Council is not recommending such a measure be included in the framework amendment at this time. The primary reason for this position is the fact that industry has been voluntarily supporting surfclam and ocean quahog research for several years. Vessel time and quota have been donated to conduct depletion studies and dredge efficiency estimates. Government and academic scientists have worked cooperatively in these efforts, which have included side-by-side tows made by industry and government vessels.

Industry representatives have expressed a preference that these efforts continue to be voluntary, rather than obligatory through a new research set-aside program. Given the industry's history of voluntary contributions to research in these fisheries, the Council is inclined to support their request.

4.0. Description of the Affected Environment

4.1. Description of the Stocks

Information on the following stock characteristics:

- Species Range and Distribution
- Status of the Stock
- Stock Characteristics and Ecological Relationships
- Feeding and Predation

can be found in the latest FMP or Amendment for each fishery as follows:

- Amendment 12 to the Summer Flounder, Scup, and Black Sea Bass FMP - Section 2.1
- Amendment 8 to the Atlantic Mackerel, Squid, and Butterfish FMP - Section 2.1
- Tilefish FMP - Section 2.1.
- Amendment 1 to the Bluefish FMP - Section 2.1.

Additionally, the annual quota specification packages prepared by the Mid-Atlantic Council contain the latest available landings and status information.

4.2. Description of Habitat

4.2.1. Introduction

Information on the following habitat characteristics:

- Inventory of Environmental and Fisheries Data
- Habitat Requirements by Life History Stage
- Fishing Activities that May Adversely Affect EFH
- Options for Managing Adverse Effects from Fishing
- Identification of Non-Fishing Activities and Associated Conservation and Enhancement
- Research and Information Needs
- Review and Revision of EFH Components of FMP

can be found in the latest FMP or Amendment for each fishery as follows:

- Amendment 12 to the Summer Flounder, Scup, and Black Sea Bass FMP - Section 2.2
- Amendment 8 to the Atlantic Mackerel, Squid, and Butterfish FMP - Section 2.2
- Tilefish FMP - Section 2.2.
- Amendment 1 to the Bluefish FMP - Section 2.2.

4.2.2. Description and Identification of Essential Fish Habitat

This Essential Fish Habitat (EFH) Assessment is provided pursuant to 50 CFR 600.920 of the Essential Fish Habitat Interim Final Rule for the Council to initiate EFH consultation with the National Marine Fisheries Service.

The following are text descriptions of essential fish habitat for each Mid-Atlantic Council species included in the Quota Set-Aside Framework, as presented in section 2.2.2.2 of each SFA Amendment. Figures and tables referenced within each description can be found in the individual FMPs. Information used to determine EFH for each species is presented in section 2.2.1 of each SFA Amendment.

4.2.2.1. Summer flounder

Source: Amendment 12 to the Summer Flounder, Scup, and Black Sea Bass Fishery Management Plan, pp. 64-67.

Eggs: 1) North of Cape Hatteras, EFH is the pelagic waters found over the Continental Shelf (from the coast out to the limits of the EEZ), from the Gulf of Maine to Cape Hatteras, North Carolina, in the highest 90% of all the ranked ten-minute squares for the area where summer flounder eggs are collected in the MARMAP survey (Figure 47a). 2) South of Cape Hatteras, EFH is the waters over the Continental Shelf (from the coast out to the limits of the EEZ), from Cape Hatteras, North Carolina to Cape Canaveral, Florida, to depths of 360 ft (Figure 46). In general, summer flounder eggs are found between October and May, being most abundant between Cape Cod and Cape Hatteras, with the heaviest concentrations within 9 miles of shore off New Jersey and New York. Eggs are most commonly collected at depths of 30 to 360 ft.

Larvae: 1) North of Cape Hatteras, EFH is the pelagic waters found over the Continental Shelf (from the coast out to the limits of the EEZ), from the Gulf of Maine to Cape Hatteras, North Carolina, in the highest 90% of all the ranked ten-minute squares for the area where summer flounder larvae are collected in the MARMAP survey (Figure 47b). 2) South of Cape Hatteras, EFH is the nearshore waters of the Continental Shelf (from the coast out to the limits of the EEZ), from Cape Hatteras, North Carolina to Cape Canaveral Florida, in nearshore waters (out to 50 miles from shore; Figure 46). 3) Inshore, EFH is all the estuaries where summer flounder were identified as being present (rare, common, abundant, or highly abundant) in the ELMR database (Table 14), in the "mixing" (defined in ELMR as 0.5 to 25.0 ppt) and "seawater" (defined in ELMR as greater than 25 ppt) salinity zones (Figure 36). In general, summer flounder larvae are most abundant nearshore (12-50 miles from shore) at depths between 30 to 230 ft. They are most frequently found in the northern part of the Mid-Atlantic Bight from September to February, and in the southern part from November to May.

Juveniles: 1) North of Cape Hatteras, EFH is the demersal waters over the Continental Shelf (from the coast out to the limits of the EEZ), from the Gulf of Maine to Cape Hatteras, North Carolina, in the highest 90% of all the ranked ten-minute squares for the area where juvenile summer flounder are collected in the NEFSC trawl survey (Figure 47c). 2) South of Cape Hatteras, EFH is the waters over the Continental Shelf (from the coast out to the limits of the EEZ) to depths of 500 ft, from Cape Hatteras, North Carolina to Cape Canaveral, Florida (Figure 46). 3) Inshore, EFH is all of the estuaries where summer flounder were identified as being present (rare, common, abundant, or highly abundant) in the ELMR database (Table 14) for the "mixing" and "seawater" salinity zones (Figure 36). In general, juveniles use several estuarine habitats as nursery areas, including salt marsh creeks, seagrass beds, mudflats, and open bay areas in water temperatures greater than 37°F and salinities from 10 to 30 ppt range.

Adults: 1) North of Cape Hatteras, EFH is the demersal waters over the Continental Shelf (from the coast out to the limits of the EEZ), from the Gulf of Maine to Cape Hatteras, North

Carolina, in the highest 90% of all the ranked ten-minute squares for the area where adult summer flounder are collected in the NEFSC trawl survey (Figure 47d). 2) South of Cape Hatteras, EFH is the waters over the Continental Shelf (from the coast out to the limits of the EEZ) to depths of 500 ft, from Cape Hatteras, North Carolina to Cape Canaveral, Florida (Figure 46). 3) Inshore, EFH is the estuaries where summer flounder were identified as being common, abundant, or highly abundant in the ELMR database (Table 14) for the "mixing" and "seawater" salinity zones (Figure 36). Generally summer flounder inhabit shallow coastal and estuarine waters during warmer months and move offshore on the outer Continental Shelf at depths of 500 ft in colder months.

4.2.2.2. Scup

Eggs: EFH is estuaries where scup eggs were identified as common, abundant, or highly abundant in the ELMR database (Table 15) for the "mixing" and "seawater" salinity zones (Figure 36). In general scup eggs are found from May through August in southern New England to coastal Virginia, in waters between 55 and 73°F and in salinities greater than 15 ppt.

Larvae: EFH is estuaries where scup were identified as common, abundant, or highly abundant in the ELMR database (Table 15) for the "mixing" and "seawater" salinity zones (Figure 36). In general scup larvae are most abundant nearshore from May through September, in waters between 55 and 73°F and in salinities greater than 15 ppt.

Juveniles: 1) Offshore, EFH is the demersal waters over the Continental Shelf (from the coast out to the limits of the EEZ), from the Gulf of Maine to Cape Hatteras, North Carolina, in the highest 90% of all the ranked ten-minute squares of the area where juvenile scup are collected in the NEFSC trawl survey (Figure 48a). 2) Inshore, EFH is the estuaries where scup are identified as being common, abundant, or highly abundant in the ELMR database (Table 15) for the "mixing" and "seawater" salinity zones (Figure 36). Juvenile scup, in general during the summer and spring are found in estuaries and bays between Virginia and Massachusetts, in association with various sands, mud, mussel and eelgrass bed type substrates and in water temperatures greater than 45°F and salinities greater than 15 ppt.

Adults: 1) Offshore, EFH is the demersal waters over the Continental Shelf (from the coast out to the limits of the EEZ), from the Gulf of Maine to Cape Hatteras, North Carolina, in the highest 90% of all the ranked ten-minute squares of the area where adult scup are collected in the NEFSC trawl survey (Figure 48b). 2) Inshore, EFH is the estuaries where scup were identified as being common, abundant, or highly abundant in the ELMR database (Tables 15) for the "mixing" and "seawater" salinity zones (Figure 36). Generally, wintering adults

(November through April) are usually offshore, south of New York to North Carolina, in waters above 45°F.

4.2.2.3. Black sea bass

Eggs: EFH is the estuaries where black sea bass eggs were identified in the ELMR database as common, abundant, or highly abundant (Table 16) for the "mixing" and "seawater" salinity zones (Figure 36). Generally, black sea bass eggs are found from May through October on the Continental Shelf, from southern New England to North Carolina.

Larvae: 1) North of Cape Hatteras, EFH is the pelagic waters found over the Continental Shelf (from the coast out to the limits of the EEZ), from the Gulf of Maine to Cape Hatteras, North Carolina, in the highest 90% of all ranked ten-minute squares of the area where black sea bass larvae are collected in the MARMAP survey (Figure 49a). 2) EFH also is estuaries where black sea bass were identified as common, abundant, or highly abundant in the ELMR database (Table 16) for the "mixing" and "seawater" salinity zones (Figure 36). Generally, the habitats for the transforming (to juveniles) larvae are near the coastal areas and into marine parts of estuaries between Virginia and New York. When larvae become demersal, they are generally found on structured inshore habitat such as sponge beds.

Juveniles: 1) Offshore, EFH is the demersal waters over the Continental Shelf (from the coast out to the limits of the EEZ), from the Gulf of Maine to Cape Hatteras, North Carolina, in the highest 90% of all the ranked squares of the area where juvenile black sea bass are collected in the NEFSC trawl survey (Figure 49b). 2) Inshore, EFH is the estuaries where black sea bass are identified as being common, abundant, or highly abundant in the ELMR database (Table 16) for the "mixing" and "seawater" salinity zones (Figure 36). Juveniles are found in the estuaries in the summer and spring. Generally, juvenile black sea bass are found in waters warmer than 43°F with salinities greater than 18 ppt and coastal areas between Virginia and Massachusetts, but winter offshore from New Jersey and south. Juvenile black sea bass are usually found in association with rough bottom, shellfish and eelgrass beds, man-made structures in sandy-shelly areas; offshore clam beds and shell patches may also be used during the wintering.

Adults: 1) Offshore, EFH is the demersal waters over the Continental Shelf (from the coast out to the limits of the EEZ), from the Gulf of Maine to Cape Hatteras, North Carolina, in the highest 90% of all the ranked ten-minute squares of the area where adult black sea bass are collected in the NEFSC trawl survey (Figure 49c). 2) Inshore, EFH is the estuaries where adult black sea bass were identified as being common, abundant, or highly abundant in the ELMR

database (Table 16) for the "mixing" and "seawater" salinity zones (Figure 36). Black sea bass are generally found in estuaries from May through October. Wintering adults (November through April) are generally offshore, south of New York to North Carolina. Temperatures above 43°F seem to be the minimum requirements. Structured habitats (natural and man-made), sand and shell are usually the substrate preference.

4.2.2.4. Bluefish

Source: Amendment 1 to the Bluefish Fishery Management Plan, Volume 1, pp. 45-46

Eggs: 1) North of Cape Hatteras, EFH is pelagic waters found over the Continental Shelf (from the coast out to the limits of the EEZ) at mid-shelf depths, from Montauk Point, NY south to Cape Hatteras in the highest 90% of the area where bluefish eggs were collected in the MARMAP surveys (Figure 26). 2) South of Cape Hatteras, EFH is 100% of the pelagic waters over the Continental Shelf (from the coast out to the eastern wall of the Gulf Stream) through Key West, Florida at mid-shelf depths (Figure 25). Bluefish eggs are generally not collected in estuarine waters and thus there is no EFH designation inshore. Generally, bluefish eggs are collected between April through August in temperatures greater than 64°F (18°C) and normal shelf salinities (>31 ppt).

Larvae: 1) North of Cape Hatteras, EFH is pelagic waters found over the Continental Shelf (from the coast out to the limits of the EEZ) most commonly above 49 ft (15 m), from Montauk Point, New York south to Cape Hatteras, in the highest 90% of the area where bluefish larvae were collected during the MARMAP surveys (Figure 27). 2) South of Cape Hatteras, EFH is 100% of the pelagic waters greater than 45 feet over the Continental Shelf (from the coast out to the eastern wall of the Gulf Stream) through Key West, Florida (Figure 25). 3) EFH also includes the "slope sea" and Gulf Stream between latitudes 29° 00 N and 40° 00 N (Figure 5). Bluefish larvae are not generally collected inshore so there is not EFH designation inshore for larvae. Generally, bluefish larvae are collected April through September in temperatures greater than 64°F (18°C) in normal shelf salinities (>30 ppt).

Juveniles: 1) North of Cape Hatteras, EFH is pelagic waters found over the Continental Shelf (from the coast out to the limits of the EEZ) from Nantucket Island, Massachusetts south to Cape Hatteras, in the highest 90% of the area where juvenile bluefish are collected in the NEFSC trawl survey (Figure 28). 2) South of Cape Hatteras, EFH is 100% of the pelagic waters over the Continental Shelf (from the coast out to the eastern wall of the Gulf Stream) through Key West, Florida (Figure 25). 3) EFH also includes the "slope sea" and Gulf Stream between latitudes 29° 00 N and 40° 00 N (Figure 5). 4) Inshore, EFH is all major estuaries between

Penobscot Bay, Maine and St. Johns River, Florida in Table 10 (Figure 16). Generally juvenile bluefish occur in North Atlantic estuaries from June through October, Mid-Atlantic estuaries from May through October, and South Atlantic estuaries March through December, within the "mixing" and "seawater" zones (Nelson et al. 1991, Jury et al. 1994, Stone et al. 1994). Distribution of juveniles by temperature, salinity, and depth over the continental shelf is undescribed (Fahay 1998).

Adults: 1) North of Cape Hatteras, EFH is the pelagic waters found over the Continental Shelf (from the coast out to the limits of the EEZ), from Cape Cod Bay, Massachusetts south to Cape Hatteras, in the highest 90% of the area where adult bluefish were collected in the NEFSC trawl survey (Figure 29). 2) South of Cape Hatteras, EFH is 100% of the pelagic waters over the Continental Shelf (from the coast out to the eastern wall of the Gulf Stream) through Key West, Florida (Figure 25). 3) Inshore, EFH is all major estuaries between Penobscot Bay, Maine and St. Johns River, Florida in Table 10 (Figure 17). Adult bluefish are found in North Atlantic estuaries from June through October, Mid-Atlantic estuaries from April through October, and in South Atlantic estuaries from May through January in the "mixing" and "seawater" zones (Nelson et al. 1991, Jury et al. 1994, Stone et al. 1994). Bluefish adults are highly migratory and distribution varies seasonally and according to the size of the individuals comprising the schools. Bluefish are generally found in normal shelf salinities (> 25 ppt).

4.2.2.5. Atlantic mackerel

Source: Amendment 8 to the Atlantic Mackerel, Squid, and Butterfish Fishery Management Plan, pp. 53-56

Eggs: Offshore, EFH is the pelagic waters found over the Continental Shelf (from the coast out to the limits of the EEZ), from Maine through Cape Hatteras, North Carolina in areas that comprise the highest 75% of the catch where Atlantic mackerel eggs were collected in MARMAP ichthyoplankton surveys (Figure 53a). Inshore, EFH is the "mixing" and/or "seawater" portions of all the estuaries where Atlantic mackerel eggs are "common," "abundant," or "highly abundant" on the Atlantic coast, from Passamaquoddy Bay, Maine to James River, Virginia (Table 13; Figures 13a, 44). Generally, Atlantic mackerel eggs are collected from shore to 50 ft and temperatures between 41°F and 73°F.

Larvae: Offshore, EFH is the pelagic waters found over the Continental Shelf (from the coast out to the limits of the EEZ), from the Gulf of Maine through Cape Hatteras, North Carolina that comprise the highest 75% of the catch where Atlantic mackerel larvae were collected in the MARMAP ichthyoplankton survey (Figure 53b). Inshore, EFH is also the "mixing" and/or

"seawater" portions of all the estuaries where Atlantic mackerel larvae are "common," "abundant," or "highly abundant" on the Atlantic coast, from Passamaquoddy Bay, Maine to James River, Virginia (Table 13; Figures 13b, 44). Generally, Atlantic mackerel larvae are collected in depths between 33 ft and 425 ft and temperatures between 43°F and 72°F.

Juveniles: Offshore, EFH is the pelagic water found over the Continental Shelf (from the coast out to the limits of the EEZ), from the Gulf of Maine through Cape Hatteras, North Carolina in areas that comprise the highest 75% of the catch where juvenile Atlantic mackerel were collected in the NEFSC trawl surveys (Figure 53c). Inshore, EFH is the "mixing" and/or "seawater" portions of all the estuaries where juvenile Atlantic mackerel are "common," "abundant," or "highly abundant" on the Atlantic coast, from Passamaquoddy Bay, Maine to James River, Virginia (Table 13; Figures 13c, 44). Generally, juvenile Atlantic mackerel are collected from shore to 1,050 ft and temperatures between 39°F and 72°F.

Adults: Offshore, EFH is the pelagic waters found over the Continental Shelf (from the coast out to the limits of the EEZ), from the Gulf of Maine through Cape Hatteras, North Carolina, in areas that comprise the highest 75% of the catch where adult Atlantic mackerel were collected in the NEFSC trawl surveys (Figure 53d). Inshore, EFH is the "mixing" and/or "seawater" portions of all the estuaries where adult Atlantic mackerel are "common," "abundant," or "highly abundant" on the Atlantic coast, from Passamaquoddy Bay, Maine to James River, Virginia (Table 13; Figures 13d, 44). Generally, adult Atlantic mackerel are collected from shore to 1,250 ft and temperatures between 39°F and 61°F.

4.2.2.6. Loligo

Pre-recruits: EFH is the pelagic waters found over the Continental Shelf (from the coast out to the limits of the EEZ), from the Gulf of Maine through Cape Hatteras, North Carolina in areas that comprise the highest 75% of the catch where pre-recruit Loligo were collected in the NEFSC trawl surveys (Figure 54a). Generally, pre-recruit Loligo are collected from shore to 700 ft and temperatures between 39°F and 81°F.

Recruits: EFH is the pelagic waters found over the Continental Shelf (from the coast out to the limits of the EEZ), from the Gulf of Maine through Cape Hatteras, North Carolina in areas that comprise the highest 75% of the catch where recruited Loligo were collected in the NEFSC trawl surveys (Figure 54b). Generally, recruited Loligo are collected from shore to 1,000 ft and temperatures between 39°F and 81°F.

Pre-recruits and recruits are stock assessment terms used by NEFSC and correspond roughly

to the life history stages juveniles and adults, respectively. Loligo pre-recruits are less than or equal to 8 cm and recruits are greater than 8 cm.

4.2.2.7. Illex

Pre-recruits: EFH is the pelagic waters found over the Continental Shelf (from the coast out to the limits of the EEZ), from the Gulf of Maine through Cape Hatteras, North Carolina in areas that comprise the highest 75% of the catch where pre-recruit Illex were collected in the NEFSC trawl surveys (Figure 55a). Generally, pre-recruit Illex are collected from shore to 600 ft and temperatures between 36°F and 73°F.

Recruits: EFH is the pelagic waters found over the Continental Shelf (from the coast out to the limits of the EEZ), from the Gulf of Maine through Cape Hatteras, North Carolina in areas that comprise the highest 75% of the catch where recruited Illex were collected in the NEFSC trawl surveys (Figure 55b). Generally, recruited Illex are collected from shore to 600 ft and temperatures between 39°F and 66°F.

Pre-recruits and recruits are stock assessment terms used by NEFSC and correspond roughly to the life history stages juveniles and adults, respectively. Illex pre-recruits are less than or equal to 10 cm and recruits are greater than 10 cm.

4.2.2.8. Butterfish

Eggs: Offshore, EFH is the pelagic waters found over the Continental Shelf (from the coast out to the limits of the EEZ), from the Gulf of Maine through Cape Hatteras, North Carolina in areas that comprise the highest 75% of the catch where butterfish eggs were collected in MARMAP ichthyoplankton surveys (Figure 56a). Inshore, EFH is the "mixing" and/or "seawater" portions of all the estuaries where butterfish eggs are "common," "abundant," or "highly abundant" on the Atlantic coast, from Passamaquoddy Bay, Maine to James River, Virginia (Table 14; Figures 43a, 44). Generally, butterfish eggs are collected from shore to 6,000 ft and temperatures between 52°F and 63°F.

Larvae: Offshore, EFH is the pelagic waters found over the Continental Shelf (from the coast out to the limits of the EEZ), from the Gulf of Maine through Cape Hatteras, North Carolina areas that comprise the highest 75% of the catch where butterfish larvae were collected in the NEFSC trawl surveys (Figure 56). Inshore, EFH is the "mixing" and/or "seawater" portions of all the estuaries where butterfish larvae are "common," "abundant," or "highly abundant" on the Atlantic coast, from Passamaquoddy Bay, Maine to James River, Virginia (Table 14; Figures

43b, 44). Generally, butterfish larvae are collected in depths between 33 ft and 6,000 ft and temperatures between 48°F and 66°F.

Juveniles: Offshore, EFH is the pelagic waters found over the Continental Shelf (from the coast out to the limits of the EEZ), from the Gulf of Maine through Cape Hatteras, North Carolina in areas that comprise the highest 75% of the catch where juvenile butterfish were collected in the NEFSC trawl surveys (Figure 56c). Inshore, EFH is the "mixing" and/or "seawater" portions of all the estuaries where juvenile butterfish are "common," "abundant," or "highly abundant" on the Atlantic coast, from Passamaquoddy Bay, Maine to James River, Virginia (Table 14; Figures 43c, 44). Generally, juvenile butterfish are collected in depths between 33 ft and 1,200 ft and temperatures between 37°F and 82°F.

Adults: Offshore, EFH is the pelagic waters found over the Continental Shelf (from the coast out to the limits of the EEZ), from the Gulf of Maine through Cape Hatteras, North Carolina in areas that comprise the highest 75% of the catch where adult butterfish were collected in the NEFSC trawl surveys (Figure 56d). Inshore, EFH is the "mixing" and/or "seawater" portions of all the estuaries where adult butterfish are "common," "abundant," or "highly abundant" on the Atlantic coast, from Passamaquoddy Bay, Maine to James River, Virginia (Table 14; Figures 43d, 44). Generally, adult butterfish are collected in depths between 33 ft and 1,200 ft and temperatures between 37°F and 82°F.

4.2.2.9. Tilefish

Source: Tilefish Fishery Management Plan. Final draft submitted for Secretarial approval Nov. 2000, pp. 42-43.

Eggs and Larvae: Tilefish eggs and larvae have EFH identified as the water column between the 250 and 1,200 foot isobath, from United States/ Canadian boundary to the Virginia/North Carolina boundary (Figure 4). Tilefish eggs and larvae are generally found in water temperatures from 46-66°F.

Juveniles and Adults: Tilefish juveniles and adults have EFH identified as benthic waters and substrate between the 250 and 1200 ft isobath, from United States/ Canadian boundary to the Virginia/North Carolina boundary (Figure 4). Tilefish are generally found in rough bottom, small burrows and sheltered areas in water temperatures from 46-64°F.

The definition for tilefish Habitat Areas of Particular Concern (HAPC) is as follows:

HAPC for juvenile and adult tilefish is substrate between the 250 and 1,200 ft isobath within statistical areas 616 and 537.

4.3. Description of the Human Environment

Information on the following fishery characteristics:

- Description of Fishing Activities and the Economic Environment
- Commercial Fishery
- Recreational Fishery Description
- Exports and Imports
- Port and Community Description

can be found in the latest FMP or Amendment for each fishery as follows:

- Amendment 12 to the Summer Flounder, Scup, and Black Sea Bass FMP - Section 2.3.
- Amendment 8 to the Atlantic Mackerel, Squid, and Butterfish FMP - Section 2.3.
- Tilefish FMP - Section 2.3.
- Amendment 1 to the Bluefish FMP - Section 2.3.

Additionally, the annual quota specification packages prepared by the Mid-Atlantic Council contain the latest available landings and status information.

5.0. Consistency with Applicable Laws

5.1. The Amendment Relative to National Standards

Section 301(a) of the MSFCMA states: "Any fishery management plan prepared, and any regulation promulgated to implement such plan pursuant to this title shall be consistent with the following National Standards for fishery conservation and management." The following is a discussion of the standards and how this framework meets them.

5.1.1. National Standard 1 - Prevent Overfishing

"Conservation and management measures shall prevent overfishing while achieving, on a continuous basis, the optimum yield from each fishery for the United States fishing industry."

The Sustainable Fisheries Act (SFA), which reauthorized and amended the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) made a number of changes to the existing National Standards. With respect to National Standard 1, the SFA imposed new requirements concerning definitions of overfishing in US fishery management plans. In order to comply with National Standard 1, the SFA requires that each Council FMP define overfishing as a rate or level of fishing mortality that jeopardizes a fishery's capacity to produce maximum sustainable yield (MSY) on a continuing basis and defines an overfished stock as a stock size that is less than a minimum biomass threshold.

The SFA also requires that each FMP specify objective and measurable status determination criteria for identifying when stocks or stock complexes covered by the FMP are overfished. To fulfill the requirements of the SFA, status determination criteria are comprised of two components: 1) a maximum fishing mortality threshold and 2) a minimum stock size threshold. The maximum F threshold is specified as F_{msy} . The minimum biomass threshold is specified as $\frac{1}{2}$ the MSY level.

In order to comply with the SFA requirements, the Mid-Atlantic Council specifies annual harvest quotas for each species that limit fishing to the required levels. This framework action works within the parameters of the annual quotas by specifying that research set-asides be *subtracted from* the quota for each species, and not taken *in addition to* annual quotas. Hence, this framework action is consistent with National Standard 1

5.1.2. National Standard 2 - Scientific Information

"Conservation and management measures shall be based upon the best scientific information available."

This framework action does not specify any conservation or management measures, per se. It is an administrative action which allows for the set-aside of up to 3% of Total Allowable Landings to support research and data collection efforts. However, the analyses in this framework contain the latest available commercial and recreational fisheries data. The environmental assessment sections either contain, or refer to the best scientific information currently available.

5.1.3. National Standard 3 - Management Units

"To the extent practicable, an individual stock of fish shall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination."

Each species included in this framework is managed as a single unit throughout its range, from Maine through Florida. The proposed action does not alter the management units. Therefore, this framework action is consistent with National Standard 3.

5.1.4. National Standard 4 - Allocations

"Conservation and management measures shall not discriminate between residents of different states. If it becomes necessary to allocate or assign fishing privileges among various United States fishermen, such allocation shall be (A) fair and equitable to all such fishermen; (B) reasonably calculated to promote conservation; and (C) carried out in such a manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges."

This framework action is designed such that all participants are impacted equally. Any quantities that are set-aside for research are taken "off the top," prior to any allocation that may subsequently be made to commercial, recreational, or other harvest sectors. Therefore the proposed action is consistent with National Standard 4.

5.1.5. National Standard 5 - Efficiency

"Conservation and management measures shall, where practicable, consider efficiency in the utilization of the fishery resources; except that no such measure shall have economic allocation as its sole purpose."

As described in previous sections, this framework proposes an administrative action which allows for the set-aside of up to 3% of Total Allowable Landings to support research and data collection efforts. It does not have an impact on the efficiency of harvest operations. Therefore, the proposed action is consistent with National Standard 5.

5.1.6. National Standard 6 - Variations and Contingencies

"Conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches."

This framework action does not specify any conservation or management measures, per se. It is an administrative action which allows for the set-aside of up to 3% of Total Allowable Landings to support research and data collection efforts. Therefore, the proposed action is consistent with National Standard 6.

5.1.7. National Standard 7 - Cost and Benefits

"Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication."

The proposed framework action is designed to support research and data collection efforts in those areas where there are important gaps in available information. NMFS scientists will participate in the review of all proposals, and are in a position to rank them on the degree to which they respond to information needs, or identify those that represent a duplication of information already collected.

Another important aspect of the proposed research program is to minimize the cost of information collection by taking advantage of platforms that are already on the water. With the high costs of vessel operation, research efforts that can be conducted in tandem with a commercial or recreational fishing trip have the potential of significantly reducing costs.

A further benefit that may result from a collaborative effort between the scientific community and the fishing public is a transfer of knowledge between the two sectors. Scientists may learn more about the operation of fishing gear, its impacts on the environment, and the idiosyncracies of fisheries data collected with a particular gear type. They will be in a position to develop contacts with fishermen that have a wealth of knowledge related to fisheries populations and their behavior.

Scientists, on the other hand, can share the perspectives of their discipline and the insights most relevant to the lives of the fishing public. For all the reasons mentioned above, this framework is deemed consistent with National Standard 7.

5.1.8. National Standard 8 - Communities

"Conservation and management measures shall, consistent with the conservation requirements of the Magnuson-Stevens Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities

in order to (A) provide for the sustained participation of such communities, and (B) to the extent practicable, minimize adverse economic impacts on such communities."

A complete description of ports and their reliance on the species included in this framework action is provided in the Council-sponsored publication "Fishing Ports of the Mid-Atlantic" (McCay and Cieri 2000).

While the administrative action proposed by this framework does not include any conservation or management measures per se, the research and data collection activities that it promotes are expected to have a positive impact on all fishing communities through improved fisheries management. Public comment at the two Council meetings which considered the framework action was favorable. Therefore, this Framework Action is consistent with National Standard 8.

5.1.9. National Standard 9 - Bycatch

"Conservation and management measures shall, to the extent practicable, (A) minimize bycatch and (B) to the extent bycatch cannot be avoided, minimize the mortality of such bycatch."

The administrative action proposed by this framework does not contain any management measures that would have a direct impact on bycatch. However, bycatch reduction is one of the highest research priorities the Council has identified for inclusion in the set-aside program. It is very likely that a variety of bycatch reduction projects will be sponsored over the course of the program. Therefore this framework action is consistent with National Standard 9.

5.1.10. National Standard 10 - Safety at Sea

"Conservation and management measures shall, to the extent practicable, promote the safety of human life at sea."

The administrative action proposed by this framework does not contain any management measures that would have a direct impact on fishing practices or safety at sea. However, it is anticipated that the information provided by the proposed set-aside program will lead to an overall improvement in fisheries management. To the extent that profitability of fishing operations can be improved, and the incentives for derby-style fisheries can be reduced, there will be a positive impact on safety at sea. Therefore the action is consistent with National Standard 10.

5.2. Other Magnuson-Stevens Act Requirements

5.2.1. Additional Characterization of the Recreational and Party/Charter Fisheries

Section 303(a)(12) of the MSFCMA requires the Councils to assess the type and amount of fish caught and released alive during recreational fishing under catch and release fishery management programs and the mortality of such fish, and include conservation and management measures that, to the extent practicable, minimize mortality and ensure the extended survival of such fish.

Section 303(a)(13) of the MSFCMA requires the Councils to include a description of the commercial, recreational, and charter fishing sectors which participate in the fishery and, to the extent practicable, quantify trends in landings of the managed fishery resources by the commercial, recreational, and charter fishing sectors.

Section 303(a)(14) of the MSFCMA requires that to the extent that rebuilding plans or other conservation and management measures, which reduce the overall harvest in a fishery are necessary, allocate any harvest restrictions or recovery benefits fairly and equitably among commercial, recreational, and charter fishing sectors in the fishery.

This framework action is an administrative procedure that does not impact the manner in which recreational fisheries are prosecuted. However, the latest information on the status of recreational fisheries included in this framework is available in the annual quota specification packages prepared by the Mid-Atlantic Council. Additional information can be found in the latest FMP or Amendment for each fishery as follows:

- Amendment 12 to the Summer Flounder, Scup, and Black Sea Bass FMP - Section 3.5
- Amendment 8 to the Atlantic Mackerel, Squid, and Butterfish FMP - Section 3.5
- Tilefish FMP - Section 2.3.1.2.
- Amendment 1 to the Bluefish FMP - Section 2.3.1.2.

5.3. National Environmental Policy Act (NEPA) - Environmental Assessment

5.3.1. Introduction

This Environmental Assessment (EA) is undertaken for Framework Adjustment 1 for all the FMPs of the MAFMC with the exception of the surfclam and ocean quahog, and dogfish FMPs.

Biological assessments of these resources are conducted by the National Marine Fisheries Service (NMFS) Northeast Region's Stock Assessment Workshop (SAW), which evaluates biological parameters such as overall population size, geographic distribution, age structure, and mortality rates from both natural causes and fishing activities. Copies of the various species assessments are available both from the National Marine Fisheries Service in Woods Hole, MA, and the Mid-Atlantic Fishery Management Council (Council).

The purpose of the framework is to enable a set-aside from the annual quota (or "Total Allowable Landings") of selected species to support research and data collection activities. A detailed description of the alternatives considered for this action is presented in Section 3.0. Descriptions of the commercial and recreational fisheries for each species can be found in the respective Fishery Management Plans and subsequent amendments. The most recent status information is available in the annual specification packages prepared by the Council when recommending annual quotas for each species to NMFS.

The framework itself does not contain any measures that directly impact the environment. It simply creates an administrative mechanism whereby a small portion of the annual harvest from a stock of fish can be held in reserve. In any given year, that reserve may be set as high as 3% of the Total Allowable Landings, or may be foregone with a set-aside of 0%.

Members of the public and research community will be encouraged to respond to Requests for Proposals (RFPs) with projects that can provide information useful to the management of these fisheries resources. Proceeds from the sale of set-aside quota constitute the only source of revenue available to support research under this program.

5.3.2. Biological Impacts

The biological impacts of harvesting the annual quotas for each species are analyzed in the specification packages submitted to NMFS each year. The set-asides enabled by this framework action will always be *deducted from* and not *in addition to* the Total Allowable Landings that are set for each species. Hence the biological impacts resulting from the harvest of set-aside quantities will always be fully accounted for.

Moreover, if a research project requests an exemption from an existing fisheries regulation, an analysis must be prepared which analyzes the impact of that exemption.

5.3.3. Economic Impacts

The economic impacts of a set-aside program are discussed in Sections 5.4 (Regulatory Impact Review) and 5.5 (Review of Impacts Relative to the Regulatory Flexibility Act).

5.3.4. Social and Community Impacts

Extensive information on port communities and their dependence on these fishery resources can be found in two reports sponsored by the Mid-Atlantic Council: "Fishing Ports of the Mid-Atlantic" (McCay and Cieri 2000), and its predecessor "Report, Part 2, Phase I, Fishery Impact Management Project to the Mid-Atlantic Fishery Management Council" (McCay, *et. al.* 1993).

There should be no significant impacts resulting from this action on any particular port community. The framework was specifically designed to have no more than a minor impact (3% maximum) on any species' fishery, and to dilute the impacts on any particular entity or group by spreading them coastwide. Set-asides for research are taken off the top of the Total Allowable Landings for any species, before any allocations are made to commercial, recreational, or other sectors of a fishery.

5.3.5. Finding of No Significant Impacts

Having reviewed the Environmental Assessment for the Framework Adjustment 1 (Quota Set-Aside for Research) and the available information relating to the proposed action, I have determined that there will be no significant adverse environmental impact resulting from the action and that preparation of an environmental impact statement on the action is not required by Section 102(2)(c) of the National Environmental Policy Act or its implementing regulations.

Assistant Administrator for
Fisheries, NOAA

Date

5.4. Regulatory Impact Review

5.4.1. Introduction

The National Marine Fisheries Service (NMFS) requires the preparation of a Regulatory Impact Review (RIR) for all regulatory actions that either implement a new Fishery Management Plan (FMP) or significantly amend an existing plan or regulation. The RIR is part of the process of preparing and reviewing FMPs and provides a comprehensive review of the changes in net economic benefits to society associated with proposed regulatory actions. The analysis also provides a review of the problems and policy objectives prompting the regulatory proposals and an evaluation of the major alternatives that could be used to solve the problems. The purpose of the analysis is to ensure that the regulatory agency systematically and comprehensively considers all available alternatives so that the public welfare can be enhanced in the most efficient and cost-effective way.

The RIR addresses many items in the regulatory philosophy and principles of Executive Order (E.O.) 12866. The RIR also serves as the basis for determining whether any proposed regulation is a "significant regulatory action" under certain criteria provided in E.O. 12866.

5.4.2. Management Objectives

The purpose of the framework is to enable a set-aside from the annual quota (or "Total Allowable Landings") of selected species to support research and data collection activities. As stated in Section 2.2., the specific objectives are to:

- 1) Facilitate the collection of data that the Council and public deem important for fishery management purposes.
- 2) Create a mechanism whereby the data collected can be reviewed and certified acceptable for use by NMFS scientists and those individuals involved in the fishery management process.

5.4.3. Description of the Affected Fisheries

This action is intended to apply to selected fisheries under management by the Mid-Atlantic Fishery Management Council. Current exceptions consist of the surfclam and ocean quahog fisheries which utilize Individual Transferable Quotas (ITQs), and Dogfish, which is a joint plan with the New England Fishery Management Council. The nine species eligible for quota set-asides are:

Atlantic mackerel	<i>Scomber scombrus</i>
Black Sea Bass	<i>Centropristis striata</i>
Bluefish	<i>Pomatomus saltatrix</i>
Butterfish	<i>Peprilus triacanthus</i>
Illex squid	<i>Illex illecebrosus</i>
Loligo squid	<i>Loligo pealei</i>
Scup	<i>Stenotomus chrysops</i>
Summer Flounder	<i>Paralichthys dentatus</i>
Tilefish	<i>Lopholatilus chamaeleonticeps</i>

Descriptions of the commercial and recreational fisheries for each species can be found in the respective Fishery Management Plans and subsequent amendments. The most recent status information is available in the submission package prepared by the Council when recommending annual quotas for each species to NMFS.

Extensive information on port communities and their dependence on these fishery resources can be found in two reports sponsored by the Mid-Atlantic Council: Fishing Ports of the Mid-Atlantic (McCay and Cieri 2000), and Report, Part 2, Phase I, Fishery Impact Management Project to the Mid-Atlantic Fishery Management Council (McCay, et. al. 1993).

5.4.4. Problem Statement

A description of the problems addressed by this action is presented in Section 2.1.

5.4.5. Management Alternatives

A detailed description of the alternatives considered for this action is presented in Section 3.0. They can be summarized as follows:

3.0. PREFERRED AND ALTERNATIVE MANAGEMENT MEASURES

3.1. Preferred Management Measures

- 3.1.1. Set-Aside Amounts
- 3.1.2. Projects Involving More than One Species
- 3.1.3. Set-Aside Process and Schedule
- 3.1.4. Waiving of Regulations
- 3.1.5. Species Eligible for Research Set-Asides
- 3.1.6. Project Funding
- 3.1.7. Final Reports and Data Submission

3.2. Alternatives to Preferred Management Measures

- 3.2.1. Non-preferred Alternative 1: Quota Set-Aside Set to a Flat 1%
- 3.2.2. Non-preferred Alternative 2: Allow for "Rapid-Response" Projects
- 3.2.3. Non-preferred Alternative 3: Set-Asides Dedicated to One Species Only
- 3.2.4. Non-preferred Alternative 4: Compensation Trips Not Allowed
- 3.2.5. Non-preferred Alternative 5: Compensation Trips Allowed with Funds Held in Escrow Account
- 3.2.6. Non-preferred Alternative 6: ITQ Fisheries Are Eligible for a Set-Aside

5.4.6. Analysis of Alternatives

This framework action represents an unusual case in that it does not contain any measures that directly impact the fishing public. It simply creates an administrative mechanism whereby a small portion of the annual harvest from a stock of fish can be held in reserve. No impacts can result unless further governmental actions are taken to invoke the set-aside. In any given year, that reserve may be set as high as 3% of the Total Allowable Landings, or may be foregone with a set-aside of 0%.

The alternatives to the recommended action are essentially administrative or programmatic in nature. The traditional measures of economic impact, such as changes in consumer or producer surplus, are not relevant to potential changes in a program's administration. Whether "rapid response" projects are allowed, for example, does not have a direct bearing on exvessel prices or harvest costs borne by the public at large.

The principal economic impacts that can be evaluated relate to whether the program is implemented or not, and if it is implemented, what are the likely consequences of diverting 1%, 2%, or 3% of harvests to support research and data collection. In the following sections, areas of "no impact" will be discussed first, followed by those that would be affected from implementation of a set-aside program.

5.4.6.1. Items Not Impacted by a Set-Aside Program

5.4.6.1.1. Total Landings

The Total Allowable Landings of any given species should not be altered by the set-aside program. Annual quota determinations will continue to be made as they have in the past. The Total Allowable Landings will still come ashore each year. The difference is simply that set-aside quantities may only be harvested by authorized sponsors of approved research and data

collection projects. Revenue from the sale of these fish will be used to cover the cost of their harvest, as well as the costs of research operations, personnel, and equipment.

5.4.6.1.2. Exvessel Prices

Exvessel prices of fish are not expected to change significantly from the implementation of a set-aside program. Overall quantities landed should be approximately the same.

It is likely that research activities will make a small quantity of fish unsaleable, such as those individuals that are dissected. Additionally, if the vessel is at sea for an extended time, the freshness of those fish caught earlier in the trip may have declined.

5.4.6.1.3. Harvest Costs

In general, industry harvest costs should not be impacted by a set-aside program. Vessels will not be obliged to operate in a less-efficient manner.

The profitability of harvest operations will be impacted slightly from the reduced quantities of fish available to the general public. This aspect will be examined in detail in subsequent sections.

5.4.6.1.4. Consumer Surplus and Consumer Prices

Benefit-cost analysis is conducted to evaluate the net social benefit arising from changes in consumer and producer surpluses that are expected to occur upon implementation of a regulatory action. Total Consumer Surplus (CS) is the difference between the amounts consumers are willing to pay for products or services and the amounts they actually pay. Thus CS represents net benefits to consumers. When the information necessary to plot the supply and demand curves for a particular commodity is available, consumer surplus is represented by the area that is below the demand curve and above the market clearing price where the two curves intersect. Due to lack of an empirical model for these fisheries and knowledge of elasticities of supply and demand, a qualitative approach to the economic assessment was adopted. Nevertheless, quantitative measures are provided whenever possible.

A quota set-aside program is not expected to have any significant impact on consumer markets or prices. The quantities landed should be similar to those landed in the absence of a set-aside program.

5.4.6.1.5. Distributive Impacts

Distributive impacts from a regulatory action are those that fall unequally among the affected groups. The quota set-aside program enabled by this framework would impact all user groups equally, as the set-aside quantity would come "off-the-top" of the Total Allowable Landings. Any allocations to commercial or recreational user groups would come after the set-aside was deducted.

5.4.6.2. Items Impacted by a Set-Aside Program

5.4.6.2.1. Producer Surplus and Net Revenue

Net benefit to producers is producer surplus (PS). Total PS is the difference between the amounts producers actually receive for providing goods and services and the economic cost producers bear to do so. Graphically, it is the area above the supply curve and below the market clearing price where supply and demand intersect. Economic costs are measured by the opportunity cost of all resources including the raw materials, physical and human capital used in the process of supplying these goods and services to consumers.

In the case of a quota set-aside program, a small portion of the profit from fishery resources is diverted to subsidize research and data collection. Section 5.4.6.3 will examine the commercial and recreational fisheries for each species, and evaluate the impacts that a set-aside of up to 3% may have on each.

What is important to note here is that set-aside reductions should not be viewed simply as a small percentage loss to the user community. A well-executed research program that is subsidized through set-aside poundage may be viewed as an investment in the future of those fisheries. An improved understanding of a species' population dynamics and interactions with fishing gear can support targeted management measures that have fewer unintended consequences and improve yields in future years.

5.4.6.2.2. Administrative Costs

Administration of a new research program subsidized through quota set-asides will impose new costs upon the federal government. A major component will be the time of government scientists allocated to the review of research proposals. Additional costs will be incurred for general programmatic oversight and administration.

Governmental entities that will contribute staff support include:

Mid-Atlantic Fisheries Management Council, Dover, DE

NMFS Regional Office in Gloucester, MA

Sustainable Fisheries Division

State Federal and Constituent Programs Office

Office of the General Council

NMFS Northeast Fisheries Science Center, Woods Hole, MA

NOAA's Grants Management Division, Silver Spring, MD

Demands of the program are likely to be higher at the outset, while routines and procedures are being ironed out. Subsequent, recurring costs are likely to be directly proportional to the number of project applications submitted.

5.4.6.2.3. Enforcement Costs

One of the more visible costs to society of fisheries regulation is that of enforcement. From a budgetary perspective, the cost of enforcement is equivalent to the total public expenditure devoted to enforcement. However, the economic cost of enforcement is measured by the opportunity cost of devoting resources to enforcement vis à vis some other public or private use and/or by the opportunity cost of diverting enforcement resources from one fishery to another.

It is not anticipated that the set-aside program will require a major investment of enforcement resources. Some oversight of at-sea operations is expected to be provided by observers and scientists involved in the research. However, some research operations will likely include activities that would otherwise be prohibited. Enforcement officials from NMFS and the Coast Guard will need to provide some oversight to ensure the privileges accorded to research projects are not exceeded.

5.4.6.3. Set-Aside Impacts on Individual Fisheries

The following sections will evaluate the impacts of a 1%, 2%, or 3% set-aside on the commercial and recreational fisheries for each species. Commercial landings data are primarily from the National Marine Fisheries Service Commercial Fisheries database. This database contains comprehensive data for the states of Maine through Virginia, but only partial data for North Carolina.

The first table of information under each species' section is derived from the NMFS database. The "Number of Vessels" column must be considered a minimum estimate for the number of distinct vessels that landed in each state, as some of the landings data submitted by the states cannot be attributed to an individual vessel. Additionally, while the "Number of Vessels" figures accurately reflect the number of identifiable vessels landing in each state, they cannot be summed across states because some vessels land in more than one state. For this reason, a separate "Min # of Distinct Vessels" figure is supplied which counts each vessel only once across all states in the database.

Comprehensive landings and vessel participation data for North Carolina was obtained from the NC Commercial Trip Ticket program. It is summary data, and cannot be combined with the NMFS data because it is not possible to identify unique numbers of vessels between them. Hence, the NMFS and North Carolina commercial landings data are presented separately for each species.

In order to estimate the potential impacts of a 1%, 2%, or 3% set-aside on the commercial fisheries for each species, these quantities were calculated for the landed value of each species in 1999. Then, an "Average Value per Vessel" is calculated by dividing the "Min # of Distinct Vessels" by the 1%, 2%, and 3% figures. These values represent the revenue that would have been foregone by an average commercial vessel due to a quota set-aside at each level.

Recreational harvest estimates were also obtained for each species in 1999 from the Marine Recreational Fisheries Statistics Survey. While the value of foregone harvests are not easily determined in the recreational sector, estimates for poundage (A + B1 fish) and numbers of trips targeting each species were available.

In an attempt to parallel the commercial evaluation as much as possible, the poundage represented by a 1%, 2% or 3% set-aside was calculated, and then divided by numbers of trips in order to estimate the poundage that would be foregone by an average vessel on any given trip. For all the recreationally-harvested species eligible for a set-aside (bluefish, summer flounder, scup, black sea bass, and Atlantic mackerel), the numbers of trips taken are sufficiently large that the average pounds per trip forgone does not exceed 0.5 pounds for any species.

5.4.6.3.1. Bluefish Impacts

1999 Commercial Bluefish Landings by State

Includes: All landings from Maine - Virginia, partial landings for North Carolina, and Florida East Coast

State	Number of Vessels	Landed Pounds	Landed Value (\$)	1% of Value (\$)	2% of Value (\$)	3% of Value (\$)
Maine & New Hampshire	22	11,161	5,313	53	106	159
Massachusetts	222	408,949	171,012	1,710	3,420	5,130
Rhode Island & Conn.	151	623,504	238,208	2,382	4,764	7,146
New York	214	1,423,726	741,132	7,411	14,823	22,234
New Jersey	148	1,082,310	466,025	4,660	9,321	13,981
Delaware & Maryland	24	170,095	52,321	523	1,046	1,570
Virginia	90	491,800	148,188	1,482	2,964	4,446
North Carolina	117	2,268,404	706,555	7,066	14,131	21,197
Florida East Coast	136	346,401	104,017	1,040	2,080	3,121
Total		6,826,350	2,632,771	26,328	52,655	78,983

Min. # of Distinct Vessels 1,005

Average Value per Vessel 26 52 79

Source: NMFS Commercial Fisheries (Weighout) Data and Florida Fish and Wildlife Conservation Commission

North Carolina Commercial Trip Ticket Program	Number of Vessels	Landed Pounds	Landed Value (\$)	1% of Value (\$)	2% of Value (\$)	3% of Value (\$)
Bluefish	941	2,759,697	877,543	8,775	17,551	26,326

Average Value per Vessel 9 19 28

Source: NC Division of Marine Fisheries

1999 Bluefish Recreational Harvests by State

A + B1 harvested fish

Source: MRFSS Web Query on 12-7-2000

State	Pounds Caught	Proportional Std. Error	1% of Pounds	2% of Pounds	3% of Pounds
Maine	28,135	35.7	281	563	844
New Hampshire	33,054	40.8	331	661	992
Massachusetts	700,820	19.3	7,008	14,016	21,025
Rhode Island	837,785	23.3	8,378	16,756	25,134
Connecticut	910,923	20.0	9,109	18,218	27,328
New York	1,137,624	15.6	11,376	22,752	34,129
New Jersey	3,159,736	50.8	31,597	63,195	94,792
Delaware	92,051	19.3	921	1,841	2,762
Maryland	358,020	25.0	3,580	7,160	10,741
Virginia	212,537	29.2	2,125	4,251	6,376
North Carolina	421,180	13.0	4,212	8,424	12,635
South Carolina	20,335	44.6	203	407	610
Georgia	8,657	37.7	87	173	260
East Florida	332,255	12.9	3,323	6,645	9,968
Total	8,253,112		82,531	165,062	247,593

No. Trips Targeting 1,316,939

Average Lbs/Trip 0.06 0.13 0.19

Source: MRFSS Web Query on 12-7-2000

5.4.6.3.2. Summer Flounder Impacts

1999 Summer Flounder Commercial Landings by State

Includes: All landings from Maine - Virginia, and partial landings for North Carolina

State	Number of Vessels	Landed Pounds	Landed Value (\$)	1% of Value (\$)	2% of Value (\$)	3% of Value (\$)
Maine & Massachusetts	237	810,961	1,636,690	16,367	32,734	49,101
Rhode Island & Conn.	199	1,881,747	4,347,318	43,473	86,946	130,420
New York	152	803,903	1,837,474	18,375	36,749	55,124
New Jersey	168	1,917,732	3,039,898	30,399	60,798	91,197
Delaware	3	7,917	16,787	168	336	504
Maryland	22	234,358	472,189	4,722	9,444	14,166
Virginia	133	2,195,832	3,066,806	30,668	61,336	92,004
North Carolina	129	2,800,749	3,540,383	35,404	70,808	106,211
Total		10,653,199	17,957,545	179,575	359,151	538,726

Min. # of Distinct Vessels 840

Average Value per Vessel 214 428 641

Source: NMFS Commercial Fisheries (Weighout) Data

North Carolina Commercial Trip Ticket Program	Number of Vessels	Landed Pounds	Landed Value (\$)	1% of Value (\$)	2% of Value (\$)	3% of Value (\$)
Summer Flounder	365	2,870,967	5,014,812	50,148	100,296	150,444

Average Value per Vessel 137 275 412

Source: NC Division of Marine Fisheries

1999 Summer Flounder Recreational Harvests by State

A + B1 harvested fish

State	Pounds Caught	Proportional Std. Error	1% of Pounds	2% of Pounds	3% of Pounds
New Hampshire	0	0.0	0	0	0
Massachusetts	509,379	25.5	5,094	10,188	15,281
Rhode Island	829,988	13.7	8,300	16,600	24,900
Connecticut	388,651	19.6	3,887	7,773	11,660
New York	1,714,581	10.8	17,146	34,292	51,437
New Jersey	3,075,973	7.4	30,760	61,519	92,279
Delaware	292,647	12.8	2,926	5,853	8,779
Maryland	445,274	12.1	4,453	8,905	13,358
Virginia	827,261	15.0	8,273	16,545	24,818
North Carolina	282,451	13.3	2,825	5,649	8,474
South Carolina	7,509	53.4	75	150	225
Georgia	5,366	52.1	54	107	161
East Florida	5,688	79.0	57	114	171
Total	8,384,768		83,848	167,695	251,543

No. Trips Targeting 4,230,627

Average Lbs/Trip 0.02 0.04 0.06

Source: MRFSS Web Query on 12-7-2000

5.4.6.3.3. Scup Impacts

1999 Scup Commercial Landings by State

Includes: All landings from Maine - Virginia, and partial landings for North Carolina

State	Number of Vessels	Landed Pounds	Landed Value (\$)	1% of Value (\$)	2% of Value (\$)	3% of Value (\$)
Massachusetts	105	661,581	773,811	7,738	15,476	23,214
Rhode Island & Conn.	149	1,376,850	1,849,207	18,492	36,984	55,476
New York	127	459,331	718,155	7,182	14,363	21,545
New Jersey	68	796,423	885,346	8,853	17,707	26,560
Maryland	4	502	431	4	9	13
Virginia & North Carolina	12	28,146	1,193	12	24	36
Total		3,322,833	4,228,143	42,281	84,563	126,844

Min. # of Distinct Vessels 432

Average Value per Vessel 98 196 294

Source: NMFS Commercial Fisheries (Weighout) Data

[Commercial landings of scup are confidential in North Carolina.]

1999 Scup Recreational Harvests by State

A + B1 harvested fish

Source: MRFSS Web Query on 12-7-2000

State	Pounds Caught	Proportional Std. Error	1% of Pounds	2% of Pounds	3% of Pounds
Massachusetts	584,514	26.8	5,845	11,690	17,535
Rhode Island	392,029	22.2	3,920	7,841	11,761
Connecticut	199,316	40.0	1,993	3,986	5,979
New York	575,323	19.5	5,753	11,506	17,260
New Jersey	133,502	39.7	1,335	2,670	4,005
Delaware	284	73.3	3	6	9
Maryland	1,142	64.3	11	23	34
Virginia	0	0.0	0	0	0
Total	1,886,110		18,861	37,722	56,583

No. Trips Targeting 133,703

Average Lbs/Trip 0.14 0.28 0.42

Source: MRFSS Web Query on 12-7-2000

5.4.6.3.4. Black Sea Bass Impacts

1999 Black Sea Bass Commercial Landings by State

Includes: All landings from Maine - Virginia, and partial landings for North Carolina

State	Number of Vessels	Landed Pounds	Landed Value (\$)	1% of Value (\$)	2% of Value (\$)	3% of Value (\$)
Massachusetts	131	573,541	961,181	9,612	19,224	28,835
Rhode Island & Conn.	202	190,541	358,482	3,585	7,170	10,754
New York	171	209,464	453,099	4,531	9,062	13,593
New Jersey	164	500,896	780,686	7,807	15,614	23,421
Delaware	5	168,339	275,431	2,754	5,509	8,263
Maryland	27	485,427	760,285	7,603	15,206	22,809
Virginia	118	740,015	1,194,715	11,947	23,894	35,841
North Carolina	100	180,536	456,452	4,565	9,129	13,694
Total		3,048,759	5,240,331	52,403	104,807	157,210

Min. # of Distinct Vessels 799

Average Value per Vessel

66 131 197

Source: NMFS Commercial Fisheries (Weighout) Data

North Carolina Commercial Trip Ticket Program	Number of Vessels	Landed Pounds	Landed Value (\$)	1% of Value (\$)	2% of Value (\$)	3% of Value (\$)
Black Sea Bass	391	587,580	1,004,101	10,041	20,082	30,123

Average Value per Vessel

26 51 77

Source: NC Division of Marine Fisheries

1999 Black Sea Bass Recreational Harvests by State

A + B1 harvested fish

State	Pounds Caught	Proportional Std. Error	1% of Pounds	2% of Pounds	3% of Pounds
Massachusetts	22,324	34.7	223	446	670
Rhode Island	38,669	46.2	387	773	1,160
Connecticut	2,546	78.8	25	51	76
New York	126,134	32.2	1,261	2,523	3,784
New Jersey	522,497	25.7	5,225	10,450	15,675
Delaware	36,744	26.8	367	735	1,102
Maryland	152,710	33.5	1,527	3,054	4,581
Virginia	699,879	31.4	6,999	13,998	20,996
North Carolina	95,067	24.3	951	1,901	2,852
South Carolina	118,813	45.9	1,188	2,376	3,564
Georgia	7,615	56.9	76	152	228
East Florida	126,313	17.5	1,263	2,526	3,789
Total	1,949,311		19,493	38,986	58,479

No. Trips Targeting 124,799

Average Lbs/Trip

0.16 0.31 0.47

Source: MRFSS Web Query on 12-7-2000

5.4.6.3.5. Atlantic Mackerel Impacts

1999 Atlantic Mackerel Commercial Landings by State

Includes: All landings from Maine - Virginia, and partial landings for North Carolina

State	Number of Vessels	Landed Pounds	Landed Value (\$)	1% of Value (\$)	2% of Value (\$)	3% of Value (\$)
Maine	13	8,491	4,064	41	81	122
New Hampshire	29	21,350	8,611	86	172	258
Massachusetts	161	1,330,381	338,069	3,381	6,761	10,142
Rhode Island & Conn.	123	4,450,936	879,624	8,796	17,592	26,389
New York	88	249,993	65,019	650	1,300	1,951
New Jersey	98	20,036,047	2,207,869	22,079	44,157	66,236
Delaware & Maryland	22	45,205	8,589	86	172	258
Virginia	30	289,538	44,160	442	883	1,325
North Carolina	31	123,195	13,679	137	274	410
Total		26,555,136	3,569,684	35,697	71,394	107,091

Min. # of Distinct Vessels 562

Average Value per Vessel

64 127 191

Source: NMFS Commercial Fisheries (Weighout) Data

North Carolina Commercial Trip Ticket Program	Number of Vessels	Landed Pounds	Landed Value (\$)	1% of Value (\$)	2% of Value (\$)	3% of Value (\$)
Atlantic Mackerel	37	128,417	14,982	150	300	449

Average Value per Vessel

4 8 12

Source: NC Division of Marine Fisheries

1999 Atlantic Mackerel Recreational Harvests by State

A + B1 harvested fish

State	Pounds Caught	Proportional Std. Error	1% of Pounds	2% of Pounds	3% of Pounds
Maine	569,232	18.9	5,692	11,385	17,077
New Hampshire	344,147	17.5	3,441	6,883	10,324
Massachusetts	1,375,726	23.1	13,757	27,515	41,272
Rhode Island	99,061	52.0	991	1,981	2,972
New York	33,752	59.1	338	675	1,013
New Jersey	472,031	37.9	4,720	9,441	14,161
Maryland	37,666	34.3	377	753	1,130
Virginia	11,757	58.5	118	235	353
North Carolina	0	0.0	0	0	0
Total	2,943,372		29,434	58,867	88,301

No. Trips Targeting 218,558

Average Lbs/Trip

0.13 0.27 0.40

Source: MRFSS Web Query on 12-7-2000

5.4.6.3.6. *Illex Squid Impacts*

1999 *Illex* Commercial Landings by State

Includes: All landings from Maine - Virginia, and partial landings for North Carolina

State	Number of Vessels	Landed Pounds	Landed Value (\$)	1% of Value (\$)	2% of Value (\$)	3% of Value (\$)
Maine	4	5,219	2,633	26	53	79
New Hampshire	13	4,518	1,611	16	32	48
Massachusetts	18	1,007,076	308,775	3,088	6,176	9,263
Rhode Island & Conn.	8	8,816,237	2,260,043	22,600	45,201	67,801
New York & New Jersey	22	5,798,599	1,171,217	11,712	23,424	35,137
Virginia	8	482,748	79,251	793	1,585	2,378
North Carolina	15	174,264	26,564	266	531	797
Total		16,288,661	3,850,094	38,501	77,002	115,503

Min. # of Distinct Vessels 88

Average Value per Vessel

438 875 1,313

Source: NMFS Commercial Fisheries (Weighout) Data

North Carolina Commercial Trip Ticket Program	Number of Vessels	Landed Pounds	Landed Value (\$)	1% of Value (\$)	2% of Value (\$)	3% of Value (\$)
<i>Illex</i> squid	14	54,333	26,511	265	530	795

Average Value per Vessel

19 38 57

Source: NC Division of Marine Fisheries

[*Illex* squid are not typically targeted on marine recreational fishing trips.]

5.4.6.3.7. Loligo Squid Impacts

1999 Loligo Commercial Landings by State

Includes: All landings from Maine - Virginia, and partial landings for North Carolina

State	Number of Vessels	Landed Pounds	Landed Value (\$)	1% of Value (\$)	2% of Value (\$)	3% of Value (\$)
Maine & Massachusetts	146	2,722,443	2,140,657	21,407	42,813	64,220
Rhode Island & Conn.	150	21,353,183	16,890,734	168,907	337,815	506,722
New York	108	9,312,719	7,450,515	74,505	149,010	223,515
New Jersey	101	7,530,143	5,429,605	54,296	108,592	162,888
Maryland	9	78,157	58,358	584	1,167	1,751
Virginia	66	338,151	205,956	2,060	4,119	6,179
North Carolina	73	32,205	14,487	145	290	435
Total		41,367,001	32,190,312	321,903	643,806	965,709

Min. # of Distinct Vessels 526

Average Value per Vessel

612 1,224 1,836

Source: NMFS Commercial Fisheries (Weighout) Data

North Carolina Commercial Trip Ticket Program	Number of Vessels	Landed Pounds	Landed Value (\$)	1% of Value (\$)	2% of Value (\$)	3% of Value (\$)
Loligo squid	174	37,299	20,851	209	417	626

Average Value per Vessel

1 2 4

Source: NC Division of Marine Fisheries

[Loligo squid are not typically targeted on marine recreational fishing trips.]

5.4.6.3.8. Butterfish Impacts

1999 Butterfish Commercial Landings by State

Includes: All landings from Maine - Virginia, and partial landings for North Carolina

State	Number of Vessels	Landed Pounds	Landed Value (\$)	1% of Value (\$)	2% of Value (\$)	3% of Value (\$)
Maine	3	308	134	1	3	4
New Hampshire	3	722	474	5	9	14
Massachusetts	82	162,604	80,590	806	1,612	2,418
Rhode Island & Conn.	141	2,908,710	1,668,008	16,680	33,360	50,040
New York	111	772,437	512,836	5,128	10,257	15,385
New Jersey	108	536,051	239,602	2,396	4,792	7,188
Delaware & Maryland	15	96,555	47,917	479	958	1,438
Virginia	29	139,277	85,595	856	1,712	2,568
North Carolina	96	47,978	25,336	253	507	760
Total		4,664,642	2,660,492	26,605	53,210	79,815

Min. # of Distinct Vessels 525

Average Value per Vessel

51 101 152

Source: NMFS Commercial Fisheries (Weighout) Data

North Carolina Commercial Trip Ticket Program	Number of Vessels	Landed Pounds	Landed Value (\$)	1% of Value (\$)	2% of Value (\$)	3% of Value (\$)
Butterfish	473	89,462	43,197	432	864	1,296

Average Value per Vessel

1 2 3

Source: NC Division of Marine Fisheries

[Butterfish are not typically targeted on marine recreational fishing trips.]

5.4.6.3.9. Tilefish Impacts

1999 Tilefish Commercial Landings by State

Includes: All landings from Maine - Virginia, and partial landings for North Carolina

State	Number of Vessels	Landed Pounds	Landed Value (\$)	1% of Value (\$)	2% of Value (\$)	3% of Value (\$)
Maine	13	6,736	15,472	155	309	464
New Hampshire	3	24	32	0	1	1
Massachusetts	20	3,599	8,581	86	172	257
Rhode Island & Conn.	80	176,385	443,812	4,438	8,876	13,314
New York	41	736,532	1,897,571	18,976	37,951	56,927
New Jersey	21	91,368	215,970	2,160	4,319	6,479
Maryland & Virginia	8	293	405	4	8	12
North Carolina	27	56,644	74,260	743	1,485	2,228
Total		1,071,581	2,656,103	26,561	53,122	79,683

Min. # of Distinct Vessels 202

Average Value per Vessel

131 263 394

Source: NMFS Commercial Fisheries (Weighout) Data

North Carolina Commercial Trip Ticket Program	Number of Vessels	Landed Pounds	Landed Value (\$)	1% of Value (\$)	2% of Value (\$)	3% of Value (\$)
Tilefish	18	5,109	9,553	96	191	287

Average Value per Vessel

5 11 16

Source: NC Division of Marine Fisheries

[Tilefish are not typically targeted on marine recreational fishing trips.]

5.4.6.4. Cumulative Impacts Across Species

Cumulative impacts of regulation are those that may accumulate over time or across multiple regulations. The greatest potential for cumulative impacts in a set-aside program exists when a vessel is participating in multiple fisheries that have quota set-asides designated for them simultaneously.

Of those fisheries eligible for a set-aside, the greatest overlap in vessel participation occurs in the fisheries for summer flounder, scup and black sea bass, as well as Atlantic mackerel, Illex squid, Loligo squid, and butterfish.

The following tables show that the largest impact would occur among the vessels in the Illex and Loligo squid fisheries. This is due to the relatively small number of vessels that specialize in the

squid fisheries. Even so, the cumulative impact on the average vessel is relatively modest, totaling less than \$3,500 in a given year.

Potential Cumulative Impacts of Quota Set-Asides in the Commercial Fisheries for Summer Flounder, Scup, and Black Sea Bass*

Species	Average Value per Vessel of a 1% Set-Aside	Average Value per Vessel of a 2% Set-Aside	Average Value per Vessel of a 3% Set-Aside
Summer Flounder	214	428	641
Scup	98	196	294
Black Sea Bass	66	131	197
Total Value	378	755	1,132

*Based on NMFS comprehensive 1999 Commercial landings data from Maine - Virginia and partial landings from North Carolina

Potential Cumulative Impacts of Quota Set-Asides in the Commercial Fisheries for Atlantic mackerel, Illex, Loligo, and Butterfish*

Species	Average Value per Vessel of a 1% Set-Aside	Average Value per Vessel of a 2% Set-Aside	Average Value per Vessel of a 3% Set-Aside
Atlantic Mackerel	64	127	191
Illex squid	438	875	1,313
Loligo squid	612	1,224	1,836
Butterfish	51	101	152
Total Value	1,165	2,327	3,492

*Based on NMFS comprehensive 1999 Commercial landings data from Maine - Virginia and partial landings from North Carolina

Much of the focus of this analysis has been directed to the costs of subsidizing research efforts through a small set-aside of the catch available to the fishing public. This is due largely to the fact that the anticipated benefits of the program are not readily quantifiable. As with any basic research program, the benefits will accrue over time, and are uncertain. If projects are chosen well and executed with professionalism, the potential exists for very substantial benefits to result, especially if the knowledge derived is applicable over a wide range of fisheries.

It is certainly the expectation of the Mid-Atlantic Fishery Management Council that benefits will far exceed the cost of a modest reduction in harvest levels available to the public. In the unlikely event that quality proposals are not put forth and properly executed, the Council and NMFS have the flexibility to reduce set-aside levels to zero and release 100% of the available

catch to the fishing public.

5.4.7. Determination of a Significant Regulatory Action

The proposed action does not constitute a significant regulatory action under Executive Order 12866 for the following reasons: (1) It will not have an annual effect on the economy of more than \$100 million.

1999 Summary Commercial Landings by State

Includes: All landings from Maine - Virginia and partial landings for North Carolina

Bluefish landings include the East Coast of Florida

Species	Minimum Number of Vessels	Landed Pounds	Landed Value	1% of Value	2% of Value	3% of Value
Bluefish	1,005	6,826,350	2,632,771	26,328	52,655	78,983
Black Sea Bass	799	3,048,759	5,240,331	52,403	104,807	157,210
Butterfish	525	4,664,642	2,660,492	26,605	53,210	79,815
Illex squid	88	16,288,661	3,850,094	38,501	77,002	115,503
Loligo squid	526	41,367,001	32,190,312	321,903	643,806	965,709
Atlantic mackerel	562	26,555,136	3,569,684	35,697	71,394	107,091
Scup	432	3,322,833	4,228,143	42,281	84,563	126,844
Summer Flounder	840	10,653,199	17,957,545	179,575	359,151	538,726
Tilefish	202	1,071,581	2,656,103	26,561	53,122	79,683
Total		113,798,162	74,985,475	749,854	1,499,710	2,249,564

*Min. # of Distinct Vessels 1,601

Average Value per Vessel 468 937 1,405

Source: NMFS Commercial Fisheries (Weighout) Data and Florida Fish & Wildlife Conservation Comm.

* Minimum number of distinct vessels total includes those in Commercial Fisheries Data (1,465) plus Florida (136).

Based on landings records, the maximum value of a 3% set-aside in all the eligible commercial fisheries would have totaled less than 2.3 million in 1999. Hence, it is not possible for a research set-aside program to exceed the \$100 million impact threshold. The proposed action will not adversely affect, in the long-term, competition, jobs, the environment, public health or safety, or state, local, or tribal government communities. (2) The proposed actions will not create a serious inconsistency or otherwise interfere with an action taken or planned by another agency. No other agency has indicated that it plans an action that would affect a research set-aside program in the EEZ. (3) The proposed actions will not materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of their participants. (4) The proposed actions do not raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this Executive Order.

5.4.7.1. Conclusion

Due to the lack of meeting any of the four criteria described above, it is determined that the proposed research quota set-aside program does not constitute a "significant" regulatory action.

5.5. Review of Impacts Relative to the Regulatory Flexibility Act (Small Entity Impacts)

5.5.1. Introduction

The purpose of the Regulatory Flexibility Act (RFA) is to minimize the adverse impacts from burdensome regulations and record keeping requirements on small businesses, small organizations, and small government entities. The category of small entities likely to be affected by the proposed program is that of commercial and recreational participants in the fisheries for nine eligible species:

Atlantic mackerel	Loligo squid
Black sea bass	Scup
Bluefish	Summer flounder
Butterfish	Tilefish
Illex squid	

The impacts of the proposed action on the fishing industry and the economy as a whole were discussed above. The following discussion of impacts centers specifically on the effects of the proposed actions on the mentioned small businesses entities.

5.5.2. Description and Estimate of the Number of Small Entities to which the Rule Applies

The Regulatory Flexibility Act recognizes and defines three kinds of small entities: small businesses, small organizations, and small governmental jurisdictions. The established size standards are as follows:

Any fish-harvesting or hatchery business is a small business if it is independently owned and operated and not dominant in its field of operation (including its affiliates) and if it has annual receipts not in excess of \$3.0 million.

For related industries involved in canned and cured fish and seafood or prepared fish or frozen fish and seafoods, a small business is one that employs 500 employees or fewer.

For the wholesale industry, a small business is one that employs 100 or fewer.

For marinas and charter/party boats, a small business is one with annual receipts not in excess of \$5.0 million.

The tables in Section 5.4.6.3 provide information on the participation of commercial vessels and recreational "trips" targeting the nine species eligible for a research set-aside. Specific data identifying the size and gross receipts of parent companies which might own these entities is not readily available. In order to limit legal liability, owners will often register each vessel as being owned by a separate corporation. For example, the vessel "Sarah Jane" might be owned by "Sarah Jane Inc."

While it is likely that some firms participating in the fisheries for these nine species will have annual revenues in excess of \$3 million, the vast majority will readily fall within the definition of a small businesses. The summary table in Section 5.4.7 indicates a minimum estimate of the number of distinct commercial vessels that could be impacted by the set-aside program at 1,601.

5.5.3. Disproportionality: Do the Regulations Place a Substantial Number of Small Entities at a Significant Competitive Disadvantage to Large Entities?

The research set-aside program as it is constructed in this framework impacts all sectors of the industry equally. The set-aside percentage is deducted "off the top" of the Total Allowable Landings of each species, prior to its being allocated to either the commercial or recreational sectors.

5.5.4. Does the Regulation Significantly Reduce Profit for a Substantial Number of Small Entities?

The research set-aside program is straightforward in its short-term impacts on profitability: a maximum of 3% may be deducted from the allowable harvest levels of each species available to the public. The Mid-Atlantic Council has already signaled its intentions at the August 2000 Council Meeting in Atlantic City, NJ, that a 2% set-aside may represent their preferred limit to the program.

However, a longer-term analysis must consider the potential benefits which may accrue to all stakeholders in these fisheries. The purpose of the program is to support research and the collection of additional data that may be used to improve fisheries management. The Mid-Atlantic Council wishes to encourage collaborative efforts between the public, research institutions, and government in broadening the scientific base upon which management decisions are made. Reserving a small portion of the annual harvest of a species to subsidize the research costs of vessel operations and scientific expertise is considered an important investment in the future of the nation's fisheries.

If the experience and information gleaned from this cooperative research program is successful in enhancing the profitability of each fishery, then the net benefits to all sectors will be positive in the longer term.

5.5.5. Set-Aside Program Deemed "Not Significant" Impact

As discussed in the preceding sections, the Mid-Atlantic Council has proposed the initiation of a program in which up to 3% of the Total Allowable Harvest of nine species may be set-aside in order to subsidize data collection and research. While the potential short-term reductions in revenue for commercial operations can reach a maximum of 3%, it is unlikely that even this small threshold would be reached by the average vessel, because:

- Most vessels do not participate in all of the fisheries for which a set-aside is enabled;
- The Mid-Atlantic Council may choose to recommend set-asides that are lower than 3% in any given year; and
- Set-aside quantities initially specified for a species in a given year may ultimately be returned to the commercial and recreational fisheries if no acceptable research projects are submitted.

In looking specifically at the recreational sector, it should be noted that the analysis focused on the number of pounds per trip that could potentially be withheld for each species. In all cases,

the number of trips targeting each species was so large that the potential reduction was less than 0.5 pounds per trip.

Therefore, it is concluded that there will be no significant negative impact on small businesses from the proposed set-aside program.

5.5.6. Indirect Impacts

A required component for preparation of this analysis under the Regulatory Flexibility Act is identification of the industries and economic sectors that will either be directly or indirectly affected by the proposed regulation. In addition to commercial fishing vessels, this information is specifically provided for the affected economic sectors for the commercial fishing industry in the following Table 4.

Table 4. List of indirectly affected industry sectors

Commercial Fishing (0910)			Processors (2092)		
Sector	SIC Code	Impact Percent	Sector	SIC Code	Impact Percent
LUBRICATING OILS AND GREASES	2992	22.88%	COMMERCIAL FISHING	910	36.03%
CORDAGE AND TWINE	2298	11.84%	BUILDING MATERIALS AND GARDENING SUPPLIES	5200	18.07%
SHIP BUILDING AND REPAIRING	3731	11.72%	PREPARED FRESH OR FROZEN FISH OR SEAFOOD	2092	15.12%
MISCELLANEOUS REPAIR SHOPS	7690	6.53%	MISCELLANEOUS LIVESTOCK	0191, 0219, 0259, 0271, 0272, 0273, 0279, 0291	9.30%
MANUFACTURED ICE	2097	5.55%	WATER TRANSPORTATION	4400	6.05%
PETROLEUM REFINING	2910	4.76%	PAPERBOARD CONTAINERS AND BOXES	2650	4.03%
BOAT BUILDING AND REPAIRING	3732	4.23%	COMMUNICATIONS, EXCEPT RADIO AND TV	4810, 4820, 4849, 4890	2.36%
INSURANCE CARRIERS	6300	3.53%	GAS PRODUCTION AND DISTRIBUTION	4920, 4930	1.36%
AUTOMOBILE RENTAL AND LEASING	7510	2.24%			92.32%
WATER TRANSPORTATION	4400	2.05%			
	1500,				
	1600,				
MAINTENANCE AND REPAIR OTHER FACILITIES	1700	1.96%			
CANVAS PRODUCTS	2394	1.61%			
	4200,				
MOTOR FREIGHT TRANSPORT AND WAREHOUSING	4789	1.41%			
BANKING	6000	1.33%			
HOTELS AND LODGING PLACES	7000	1.16%			
MANAGEMENT AND CONSULTING SERVICES	8740	1.11%			
COMMERCIAL FISHING	910	1.04%			
AUTOMOTIVE DEALERS & SERVICE STATIONS	5500	1.03%			
HARDWARE, N.E.C.	3429	0.95%			
AUTOMOBILE REPAIR AND SERVICES	7530	0.92%			
INTERNAL COMBUSTION ENGINES, N.E.C.	3519	0.86%			
MANIFOLD BUSINESS FORMS	2760	0.77%			
BUSINESS ASSOCIATIONS	8610	0.62%			
		90.10%			

For the commercial sector, the proposed regulations will have direct effects on both commercial fishing and processing. These sectors are identified by their 4-digit Standard Industrial Classification (SIC) code as 0910 and 2092 respectively. The economic sectors that will be indirectly affected were identified in the following manner: An Input/Output model of the United States economy was estimated using a PC-Based software program called IMPLAN. IMPLAN has been in use since its development by the U.S. Forest Service in 1979. IMPLAN is based on Bureau of Economic Analysis (BEA) data for 521 industries. The U.S. model provides information on linkages among industries as well as an estimate of the required amount of purchases from all sectors in order to produce one dollar's worth of output in a given sector. The indirectly affected economic sectors for commercial fishing and processing were listed in Table 1, along with the SIC codes that comprise those sectors. Note that the list of sectors is not exhaustive, but include sectors in descending order of impact and only reports those sectors whose cumulative impact was 90 percent or greater.

In each column of Table 1, headed by the title "Impact Percent" are estimated proportions of expenditures by directly affected sectors on purchased inputs (i.e. expenses per dollar of commercial fishing output net of value added) from each of the indirectly affected sectors. For example, of the inputs used by commercial vessels, 22.88 percent were from SIC sector 2992 (lubricating oils and greases). Value added includes payments that go to labor (captain and crew) and profits. This means that for every dollar spent to produce a dollar's worth of commercial fishing \$0.75 goes to value added and \$0.25 goes to purchased inputs other than labor. Thus, the effect on indirectly affected industries is the product of \$0.25 and the "Impact Percent." Sector 2992 has the highest impact percent (22.88) and revenues in that sector would change at a rate of \$0.057 per dollar of output change in the commercial fishing sector. Since no significant impact was found on firms directly involved in the fisheries eligible for a set-aside, it is very unlikely that the any indirectly affected firms would be significantly impacted by any of the three criterion.

5.5.7. Explanation of Why The Action is Being Considered

The purpose and need for action are discussed in Section 2.0 and 2.1.

5.5.8. Objectives and Legal Basis for the Rule

The objectives of this framework are discussed in Section 2.2. The Magnuson-Stevens Fishery Conservation and Management Act (Public Law 94-265) as amended through October 11, 1996 provides the legal basis for the rule.

5.5.9. Demographic Analysis

Refer to the sections on "Description of Fishing Activities," and "Economic Characteristics of the Fishery" in the respective Fishery Management Plans.

5.5.10. Cost Analysis

This regulatory action does not impose any additional reporting or compliance costs on the industry. Participation in the proposed research set-aside program is voluntary, and the award of set-aside poundage is currently considered and administered as a grant.

5.5.11. Competitive Effects Analysis

Given that the proposed research set-aside program is designed to impact all participants of the commercial and recreational sectors equally, no competitive advantages or disadvantages accrue to any particular sector. The maximum 3% set-aside percentage is taken "off the top" of the Total Allowable Landings of each species, prior to its being allocated to either the commercial or recreational sectors.

5.5.12. Identification of Overlapping Regulations

The proposed action does not create regulations that conflict with any state regulations or other federal laws.

5.5.13. Conclusions

The preceding analysis of impacts relative to the Regulatory Flexibility Act indicates that the proposed regulatory actions will not have a significant negative impact on small entities engaged in the fisheries eligible for participation in the proposed set-aside program.

5.6. Other Applicable Laws

5.6.1. FMPs

This framework is related to other plans to the extent that all fisheries of the northwest Atlantic are part of the same general geophysical, biological, social, and economic setting. U.S. fishermen usually are active in more than a single fishery. Thus regulations implemented to

govern harvesting of one species or a group of related species may impact on other fisheries by causing transfers of fishing effort.

5.6.2. Treaties or International Agreements

No treaties or international agreements, other than GIFAs entered into pursuant to the MSFCMA, relate to the fisheries included in this framework.

5.6.3. Federal Law and Policies

5.6.3.1. Impacts on Protected Species Under the Endangered Species Act and Marine Mammal Protection Act

Given that this framework is a simple administrative action that allows for the set-aside of quota to support research and data collection, it does not have any direct impacts on protected species. However, the following sections describe the protected species that are present within the management units of this framework, and are included for informational purposes.

There are numerous species which inhabit the management unit of this framework that are afforded protection under the Endangered Species Act (ESA) of 1973 (i.e., for those designated as threatened or endangered) and/or the Marine Mammal Protection Act of 1972 (MMPA). Eleven are classified as endangered or threatened under the ESA, while the remainder are protected by the provisions of the MMPA. Marine mammals include the northern right whale, humpback whale, fin whale, minke whale, harbor porpoise, white-sided dolphin, bottlenose dolphin, common dolphin, harp seal, harbor seal and gray seal. The status of these and other marine mammal populations inhabiting the Northwest Atlantic has been discussed in detail in the U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments. Initial assessments were presented in Blaylock, *et al.* (1995) and are updated in Waring *et al.* (1999).

The protected species found in New England and Mid-Atlantic waters are listed below.

Endangered: Right whale (*Eubalaena glacialis*), Humpback whale (*Megaptera novaeangliae*), Fin whale (*Balaenoptera physalus*), Sperm whale (*Physeter macrocephalus*), Blue whale (*Balaenoptera musculus*), Sei whale (*Balaenoptera borealis*), Kemp's ridley (*Lepidochelys kempi*), Leatherback turtle (*Dermochelys coriacea*), Green sea turtle (*Chelonia mydas*) Shortnose sturgeon (*Acipenser brevirostrum*).

Threatened: Loggerhead turtle (*Caretta caretta*)

Species Proposed for ESA listing: Harbor porpoise: (*Phocoena phocoena*).

Other marine mammals: Other species of marine mammals likely to occur in the management unit include the minke whale (*Balaenoptera acutorostrata*), white-sided dolphin (*Lagenorhynchus acutus*), white-beaked dolphin (*Lagenorhynchus albirostris*), bottlenose dolphin (*Tursiops truncatus*), [coastal stock listed as depleted under the MMPA], pilot whale (*Globicephala melaena*), Risso's dolphin (*Grampus griseus*), common dolphin (*Delphinis delphis*), spotted dolphin (*Stenella spp.*), striped dolphin (*Stenella coeruleoalba*), killer whale (*Orcinus orca*), beluga whale (*Delphinapterus leucas*), Northern bottlenose whale (*Hyperoodon ampullatus*), goosebeaked whale (*Ziphius cavirostris*) and beaked whale (*Mesoplodon spp.*). Pinnipeds species include harbor (*Phoca vitulina*) and gray seals (*Halichoerus grypus*) and less commonly, hooded (*Cystophora cristata*) harp (*Pagophilus groenlandicus*) and ringed seals (*Phoca hispida*).

5.6.3.1.1. Protected Species of Particular Concern

5.6.3.1.1.1. North Atlantic Right Whale

The northern right whale was listed as endangered throughout its range on June 2, 1970 under the ESA. The current population is considered to be at a low level and the species remains designated as endangered (Waring *et al.* 1999). A Recovery plan has been published and is in effect (NMFS 1991). This is a strategic stock because the average annual fishery-related mortality and serious injury from all fisheries exceeds the Potential Biological Removal (PBR).

North Atlantic right whales range from wintering and calving grounds in coastal waters of the southeastern US to summer feeding grounds, nursery and presumed mating grounds in New England and northward to the Bay of Fundy and Scotian shelf (Waring *et al.* 1999). Approximately half of the species' geographic range is within the area in which the summer flounder fishery is prosecuted. In the management area as a whole, right whales are present throughout most months of the year, but are most abundant between February and June. The species uses mid-Atlantic waters as a migratory pathway from the winter calving grounds off the coast of Florida to spring and summer nursery/feeding areas in the Gulf of Maine.

NMFS designated right whale critical habitat on June 3, 1994 (59 FR 28793). Portions of the critical habitat within the action area include the waters of Cape Cod Bay and the Great South

Channel off the coast of Massachusetts, where the species is concentrated at different times of the year.

The western North Atlantic population of right whales was estimated to be 295 individuals in 1992 (Waring *et al.* 1999). The current population growth rate of 2.5% as reported by Knowlton *et al.* (1994) suggests the stock may be showing signs of slow recovery. However, considerable uncertainty exists about the true size of the current stock (Waring *et al.* 1999).

5.6.3.1.1.2. Humpback Whale

The humpback whale was listed as endangered throughout its range on June 2, 1970. This species is the fourth most numerically depleted large cetacean worldwide. In the western North Atlantic humpback whales feed during the spring through fall over a range which includes the eastern coast of the US (including the Gulf of Maine) northward to include waters adjacent to Newfoundland/Labrador and western Greenland (Waring *et al.* 1999). During the winter, the principal range for the North Atlantic population is around the Greater and Lesser Antilles in the Caribbean (Waring *et al.* 1999).

As noted above, humpback whales feed in the northwestern Atlantic during the summer months and migrate to calving and mating areas in the Caribbean. Five separate feeding areas are utilized in northern waters after their return; the Gulf of Maine (which is within the management unit of this framework) is one of those feeding areas. As with right whales, humpback whales also use the Mid-Atlantic as a migratory pathway. Since 1989, observations of juvenile humpbacks in that area have been increasing during the winter months, peaking January through March (Swingle *et al.*, 1993). It is believed that non-reproductive animals may be establishing a winter feeding area in the Mid-Atlantic since they are not participating in reproductive behavior in the Caribbean. It is assumed that humpbacks are more widely distributed in the management area than right whales. They feed on a number of species of small schooling fishes, including sand lance and Atlantic herring.

The most recent status and trends of the Western North Atlantic stock of humpback whales are given by Waring *et al.* (1999). The current rate of increase of the North Atlantic humpback whale population has been estimated at 9.0% (CV=0.25) by Katona and Beard (1990) and at 6.5% by Barlow and Clapham (1997). The minimum population estimate for the North Atlantic humpback whale population is 10,019 animals, and the best estimate of abundance is 10,600 animals (CV=0.07; Waring *et al.* 1999).

5.6.3.1.1.3. Fin Whale

The fin whale was listed as endangered throughout its range on June 2, 1970 under the ESA. The fin whale is ubiquitous in the North Atlantic and occurs from the Gulf of Mexico and Mediterranean Sea northward to the edges of the arctic ice pack (Waring *et al.* 1999). The overall pattern of fin whale movement is complex, consisting of a less obvious north-south pattern of migration than that of right and humpback whales. However, based on acoustic recordings from hydrophone arrays, Clark (1995) reported a general southward "flow pattern" of fin whales in the fall from the Labrador/Newfoundland region, south past Bermuda, and into the West Indies. The overall distribution may be based on prey availability, and fin whales are found throughout the management area for this framework in most months of the year. This species preys opportunistically on both invertebrates and fish (Watkins *et al.* 1984). As with humpback whales, they feed by filtering large volumes of water for the associated prey. Fin whales are larger and faster than humpback and right whales and are less concentrated in nearshore environments.

Hain *et al.* (1992) estimated that about 5,000 fin whales inhabit the northeastern United States continental shelf waters. Shipboard surveys of the northern Gulf of Maine and lower Bay of Fundy targeting harbor porpoise for abundance estimation provided an imprecise estimate of 2,700 (CV=0.59) fin whales (Waring *et al.* 1999).

5.6.3.1.1.4. Loggerhead Sea Turtle

The loggerhead turtle was listed as "threatened" under the ESA on July 28, 1978, but is considered endangered by the World Conservation Union (IUCN) and under the Convention on International Trade in Endangered Species of Flora and Fauna (CITES). Loggerhead sea turtles are found in a wide range of habitats throughout the temperate and tropical regions of the Atlantic. These include open ocean, continental shelves, bays, lagoons, and estuaries (NMFS & FWS 1995). In the management unit of this framework they are most common on the open ocean in the northern Gulf of Maine, particularly where associated with warmer water fronts formed from the Gulf Stream. The species is also found in entrances to bays and sounds and within bays and estuaries, particularly in the Mid-Atlantic.

Since they are limited by water temperatures, sea turtles do not usually appear on the summer foraging grounds in the Gulf of Maine until June, but are found in Virginia as early as April. They remain in these areas until as late as November and December in some cases, but the large majority leave the Gulf of Maine by mid-September. Loggerheads are primarily benthic feeders, opportunistically foraging on crustaceans and mollusks (NMFS & USFWS 1995). Under certain

conditions they also feed on finfish, particularly if they are easy to catch (e.g., caught in gillnets or inside pound nets where the fish are accessible to turtles).

A Turtle Expert Working Group (TEWG 1998) conducting an assessment of the status of the loggerhead sea turtle population in the Western North Atlantic (WNA), concluded that there are at least four loggerhead subpopulations separated at the nesting beach in the WNA (TEWG 1998). However, the group concluded that additional research is necessary to fully address the stock definition question. The four nesting subpopulations include the following areas: northern North Carolina to northeast Florida, south Florida, the Florida Panhandle, and the Yucatan Peninsula. Genetic evidence indicates that loggerheads from Chesapeake Bay southward to Georgia appear nearly equally divided in origin between South Florida and northern subpopulations. Additional research is needed to determine the origin of turtles found north of the Chesapeake Bay.

The TEWG analysis also indicated the northern subpopulation of loggerheads may be experiencing a significant decline (2.5% - 3.2% for various beaches). A recovery goal of 12,800 nests has been assumed for the Northern Subpopulation, but current nests number around 6,200 (TEWG 1998). Since the number of nests have declined in the 1980's, the TEWG concluded that it is unlikely that this subpopulation will reach this goal given this apparent decline and the lack of information on the subpopulation from which loggerheads in the WNA originate. Continued efforts to reduce the adverse effects of fishing and other human-induced mortality on this population are necessary.

The most recent 5-year ESA sea turtle status review (NMFS & USFWS 1995) highlights the difficulty of assessing sea turtle population sizes and trends. Most long-term data comes from nesting beaches, many of which occur extensively in areas outside U.S. waters. Because of this lack of information, the TEWG was unable to determine acceptable levels of mortality. This status review supports the conclusion of the TEWG that the northern subpopulation may be experiencing a decline and that inadequate information is available to assess whether its status has changed since the initial listing as threatened in 1978. NMFS & USFWS (1995) concluded that loggerhead turtles should remain designated threatened but noted that additional research will be necessary before the next status review can be conducted.

Sea sampling data from the sink gillnet fisheries, Northeast otter trawl fishery, and Southeast shrimp and summer flounder bottom trawl fisheries indicate incidental takes of loggerhead turtles. Loggerheads are also known to interact with the lobster pot fishery. The degree of interaction between loggerheads and the summer flounder recreational fishery is unknown.

However, by analogy with other fisheries (i.e., South Atlantic) interactions are expected to be minimal.

5.6.3.1.1.5. Leatherback Sea Turtle

The leatherback is the largest living sea turtle and ranges farther than any other sea turtle species, exhibiting broad thermal tolerances (NMFS& USFWS 1995). Leatherback turtles feed primarily on cnidarians (medusae, siphonophores) and tunicates (salps, pyrosomas) and are often found in association with jellyfish. These turtles are found throughout the management unit of the species included in this framework. While they are predominantly pelagic, they occur annually in Cape Cod Bay and Narragansett Bay primarily during the fall. Leatherback turtles appear to be the most susceptible to entanglement in lobster gear and longline gear compared to the other sea turtles commonly found in the management unit. This may be the result of attraction to gelatinous organisms and algae that collect on buoys and buoy lines at or near the surface.

Nest counts are the only reliable population information available for leatherback turtles. Recent declines have been seen in the number of leatherbacks nesting worldwide (NMFS & USFWS 1995). The status review notes that it is unclear whether this observation is due to natural fluctuations or whether the population is at serious risk. It is unknown whether leatherback populations are stable, increasing, or declining, but it is certain that some nesting populations (e.g, St. John and St. Thomas, U.S. Virgin Islands) have been extirpated (NMFS 1998).

Sea sampling data from the southeast shrimp fishery indicate recorded takes of leatherback turtles. As noted above, leatherbacks are also known to interact with the lobster pot fishery. However, by analogy with other fisheries (i.e., South Atlantic) interactions are expected to be minimal.

5.6.3.1.1.6. Kemp's Ridley Sea Turtle

The Kemp's ridley is probably the most endangered of the world's sea turtle species. The only major nesting site for ridleys is a single stretch of beach near Rancho Nuevo, Tamaulipas, Mexico (Carr 1963). Estimates of the adult population reached a low of 1,050 in 1985, but increased to 3,000 individuals in 1997. First-time nesting adults have increased from 6% to 28% from 1981 to 1989, and from 23% to 41% from 1990 to 1994, indicating that the ridley population may be in the early stages of growth (TEWG 1998).

Juvenile Kemp's ridleys inhabit northeastern US coastal waters where they forage and grow in

shallow coastal during the summer months. Juvenile ridleys migrate southward with autumnal cooling and are found predominantly in shallow coastal embayments along the Gulf Coast during the late fall and winter months.

Ridleys found in mid-Atlantic waters are primarily post-pelagic juveniles averaging 40 cm in carapace length, and weighing less than 20 kg (NMFS 1998). After loggerheads, they are the second most abundant sea turtle in Virginia and Maryland waters, arriving there during May and June and then emigrating to more southerly waters from September to November (NMFS 1998). In the Chesapeake Bay, ridleys frequently forage in shallow embayments, particularly in areas supporting submerged aquatic vegetation (Lutcavage and Musick 1985; NMFS 1998). The juvenile population in Chesapeake Bay is estimated to be 211 to 1,083 turtles (NMFS 1998).

The model presented by Crouse *et al.* (1987) illustrates the importance of subadults to the stability of loggerhead populations and may have important implications for Kemp's ridleys. The vast majority of ridleys identified along the Atlantic Coast have been juveniles and subadults. Sources of mortality in this area include incidental takes in fishing gear, pollution and marine habitat degradation, and other man-induced and natural causes. Loss of individuals in the Atlantic, therefore, may impede recovery of the Kemp's ridley sea turtle population.

Sea sampling data from the northeast otter trawl fishery and southeast shrimp and summer flounder bottom trawl fisheries has recorded takes of Kemp's ridley turtles. However, by analogy with other fisheries (i.e., South Atlantic) interactions are expected to be minimal.

5.6.3.1.1.7. Green Sea Turtle

Green sea turtles are more tropical in distribution than loggerheads, and are generally found in waters between the northern and southern 20° C isotherms (NMFS 1998). In the western Atlantic region, the summer developmental habitat encompasses estuarine and coastal waters as far north as Long Island Sound, Chesapeake Bay, and the North Carolina sounds, and south throughout the tropics (NMFS 1998). Most of the individuals reported in U.S. waters are immature (NMFS 1998). Green sea turtles found north of Florida during the summer must return to southern waters in autumn or risk the adverse effects of cold temperatures.

There is evidence that green turtle nesting has been on the increase during the past decade. For example, increased nesting has been observed along the Atlantic coast of Florida on beaches where only loggerhead nesting was observed in the past (NMFS 1998). Recent population estimates for the western Atlantic area are not available. Green turtles are threatened by incidental captures in fisheries, pollution and marine habitat degradation,

destruction/disturbance of nesting beaches, and other sources of man-induced and natural mortality.

Juvenile green sea turtles occupy pelagic habitats after leaving the nesting beach. At approximately 20 to 25 cm carapace length, juveniles leave pelagic habitats, and enter benthic foraging areas, shifting to a chiefly herbivorous diet (NMFS 1998). Post-pelagic green turtles feed primarily on sea grasses and benthic algae, but also consume jellyfish, salps, and sponges. Known feeding habitats along U.S. coasts of the western Atlantic include shallow lagoons and embayments in Florida, and similar shallow inshore areas elsewhere (NMFS 1998).

Sea sampling data from the scallop dredge fishery and southeast shrimp and summer flounder bottom trawl fisheries have recorded incidental takes of green turtles. However, by analogy with other fisheries (i.e., South Atlantic) interactions are expected to be minimal.

5.6.3.1.1.8. Shortnose Sturgeon

Shortnose sturgeon occur in large rivers along the western Atlantic coast from the St. Johns River, Florida (possibly extirpated from this system), to the Saint John River in New Brunswick, Canada. The species is anadromous in the southern portion of its range (i.e., south of Chesapeake Bay), while northern populations are amphidromous (NMFS 1998). Population sizes vary across the species' range with the smallest populations occurring in the Cape Fear and Merrimack Rivers and the largest populations in the Saint John and Hudson Rivers (Dadswell 1979; NMFS 1998).

Shortnose sturgeon are benthic and mainly inhabit the deep channel sections of large rivers. They feed on a variety of benthic and epibenthic invertebrates including molluscs, crustaceans (amphipods, chironomids, isopods), and oligochaete worms (Vladykov and Greeley 1963; Dadswell 1979). Shortnose sturgeon are long-lived (30 years) and mature at relatively old ages. In northern areas, males reach maturity at 5-10 years, while females reach sexual maturity between 7 and 13 years.

In the northern part of their range, shortnose sturgeon exhibit three distinct movement patterns that are associated with spawning, feeding, and overwintering periods. In spring, as water temperatures rise above 8° C, pre-spawning shortnose sturgeon move from overwintering

grounds to spawning areas. Spawning occurs from mid/late April to mid/late May. Post-spawned sturgeon migrate downstream to feed throughout the summer.

As water temperatures decline below 8° C again in the fall, shortnose sturgeon move to overwintering concentration areas and exhibit little movement until water temperatures rise again in spring (NMFS 1998). Young-of-the-year shortnose sturgeon are believed to move downstream after hatching (NMFS 1998) but remain within freshwater habitats. Older juveniles tend to move downstream in fall and winter as water temperatures decline and the salt wedge recedes. Juveniles move upstream in spring and feed mostly in freshwater reaches during summer.

Shortnose sturgeon spawn in freshwater sections of rivers, typically below the first impassable barrier on the river (e.g., dam). Spawning occurs over channel habitats containing gravel, rubble, or rock-cobble substrates (NMFS 1998). Additional environmental conditions associated with spawning activity include decreasing river discharge following the peak spring freshet, water temperatures ranging from 9 -12° C, and bottom water velocities of 0.4 - 0.7 m/sec (NMFS 1998).

5.6.3.1.1.9. Seabirds

Most of the following information about seabirds is taken from the Mid-Atlantic Regional Marine Research Program (1994) and Peterson (1963). Fulmars occur as far south as Virginia in late winter and early spring. Shearwaters, storm petrels (both Leach's and Wilson's), jaegers, skuas, and some terns pass through this region in their annual migrations. Gannets and phalaropes occur in the Mid-Atlantic during winter months. Nine species of gulls breed in eastern North America and occur in shelf waters off the northeastern US. These gulls include: glaucous, Iceland, great black-backed, herring, laughing, ring-billed, Bonaparte's and Sabine's gulls, and black-legged caduceus. Royal and sandwich terns are coastal inhabitants from Chesapeake Bay south to the Gulf of Mexico. The Roseate tern is listed as endangered under the ESA, while the Least tern is considered threatened (Safina pers. comm.).

Like marine mammals, seabirds are vulnerable to entanglement in commercial and recreational fishing gear. The interaction has not been quantified in the recreational fishery, but impacts are not considered significant. Human activities such as coastal development, habitat degradation and destruction, and the presence of organochlorine contaminants are considered the major threats to some seabird populations. Endangered, threatened or otherwise protected bird species, including the roseate tern and piping plover, are unlikely to be impacted by the gear types employed in the recreational summer flounder fishery.

5.6.3.2. National Marine Sanctuaries

In addition to the issue of general habitat degradation, several habitats within the management units of this framework are protected under the National Marine Sanctuaries Act of 1973. National marine sanctuaries are allowed to be established under the National Marine Sanctuaries Act of 1973. Currently, there are 11 designated marine sanctuaries that create a system that protects over 14,000 square miles.

There are two designated national marine sanctuaries in the area covered by the framework: the Monitor National Marine Sanctuary off North Carolina, and the Stellwagen Bank National Marine Sanctuary off Massachusetts. There are currently five additional proposed sanctuaries, but only one, the Norfolk Canyon, is on the east coast. The Monitor National Marine Sanctuary was designated on January 30, 1975, under Title III of the Marine Protection, Research and Sanctuaries Act of 1972 (MPRSA). Implementing regulations (15 CFR 924) prohibit deploying any equipment in the Sanctuary, fishing activities which involve "anchoring in any manner, stopping, remaining, or drifting without power at any time" (924.3(a)), and trawling (924.3(h)). The Sanctuary is clearly designated on all National Ocean Service (NOS) charts by the caption "protected area." This minimizes the potential for damage to the Sanctuary by fishing operations. Correspondence for this sanctuary should be addressed to: Monitor, NMS, NOAA Building 1519, Fort Eustis, VA 23604.

NOAA/NOS issued a proposed rule on February 8, 1991 (56 FR 5282) proposing designation under MPRSA of the Stellwagen Bank National Marine Sanctuary, in Federal waters between Cape Cod and Cape Ann, Massachusetts. On November 4, 1992, the Sanctuary was Congressionally designated. Implementing regulations (15 CFR 940) became effective March 1994. Commercial fishing is not specifically regulated by the Stellwagen Bank regulations. The regulations do however call for consultation between Federal agencies and the Secretary of Commerce on proposed agency actions in the vicinity of the Sanctuary that "may affect" sanctuary resources. Correspondence for this sanctuary should be addressed to: Stellwagen Bank NMS, 14 Union Street, Plymouth, MA 02360.

Details on sanctuary regulations may be obtained from the Chief, Sanctuaries and Resources Division (SSMC4) Office of Ocean and Coastal Resource Management, NOAA, 1305 East-West Highway, Silver Spring, MD 20910.

5.6.3.3. Indian Treaty Fishing Rights

No Indian treaty fishing rights are known to exist for the species included in this framework.

5.6.3.4. Oil, Gas, Mineral, and Deep Water Port Development

While Outer Continental Shelf (OCS) development plans may involve areas overlapping those contemplated for offshore fishery management, no major conflicts have been identified to date. The Councils, through involvement in the Intergovernmental Planning Program of the Mineral Management Service (MMS), monitor OCS activities and have opportunity to comment and to advise MMS of the Councils' activities. Certainly, the potential for conflict exists if communication between interests is not maintained or appreciation of each other's efforts is lacking. Potential conflicts include, from a fishery management position: (1) exclusion areas, (2) adverse impacts to sensitive biologically important areas, (3) oil contamination, (4) substrate hazards to conventional fishing gear, and (5) competition for crews and harbor space. The Councils are unaware of pending deep water port plans which would directly impact offshore fishery management goals in the areas under consideration, and are unaware of potential effects of offshore FMPs upon future development of deep water port facilities.

5.6.3.5. Paper Work Reduction Act of 1995

The Paperwork Reduction Act concerns the collection of information. The intent of the Act is to minimize the Federal paperwork burden for individuals, small businesses, state and local governments, and other persons as well as to maximize the usefulness of information collected by the Federal government.

The Council is not proposing measures under this framework action that require review under PRA. There are no changes to existing reporting requirements previously approved under OMB Control Nos. 0648-0202 (Vessel permits), 0648-0229 (Dealer reporting) and 0648-0212 (Vessel logbooks).

5.6.3.6. Impacts of the Plan Relative to Federalism

The Framework action does not contain policies with federalism implications sufficient to warrant preparation of a federalism assessment under Executive Order 12612.

5.6.4. State, Local, and Other Applicable Law and Policies

5.6.4.1. State Management Activities

This Framework action will apply to the management unit of all included species, which extends from Maine through Florida. This includes Maine, New Hampshire, Massachusetts, Rhode

Island, Connecticut, New York, New Jersey, Delaware, Potomac River Fisheries Commission, Maryland, Virginia, North Carolina, South Carolina, Georgia, and Florida.

Compliance with Commission management plans is reviewed annually by the Management Board and Plan Review Team through a process outlined in the Interstate Fisheries Management Program (ISFMP) Charter. Each year, the Plan Review Team prepares an FMP status report that documents landings and compliance for each state. If a state is out of compliance with the required management measures the Team forwards a recommendation of non-compliance to the Management Board. The Board then reviews the recommendations of the Plan Review Team and, if it determines a state is out of compliance, forwards a recommendation of non-compliance to the ISFMP Policy Board. The Policy Board considers the recommendation and makes a final compliance determination.

5.6.4.2. Impact of Federal Regulations on State Management Activities

The Mid-Atlantic Council will be working cooperatively with the Atlantic States Marine Fisheries Commission in the review of research proposals. It is possible that researchers will request that some state regulations be waived in addition to federal regulations while conducting research activities. In these instances, concurrence will be sought from the state fisheries agencies that the state regulations in question will be waived.

5.6.4.3. Coastal Zone Management Program Consistency

The Coastal Zone Management Act (CZM) of 1972, as amended, provides measures for ensuring stability of productive fishery habitat while striving to balance development pressures with social, economic, cultural, and other impacts on the coastal zone. It is recognized that responsible management of both coastal zones and fish stocks must involve mutually supportive goals.

The Council must determine whether the framework will affect a state's coastal zone. If it will, the framework must be evaluated relative to the state's approved CZM program to determine whether it is consistent to the maximum extent practicable. The states have 45 days in which to agree or disagree with the Councils' evaluation. If a state fails to respond within 45 days, the state's agreement may be presumed. If a state disagrees, the issue may be resolved through negotiation or, if that fails, by the Secretary.

The framework will be reviewed relative to CZM programs of Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Maryland,

Virginia, North Carolina, South Carolina, Georgia, and Florida. Letters will be sent to all of the states listed along with a copy of framework. The letters to all of the states will state that the Council concluded that the framework would not affect the state's coastal zone and was consistent to the maximum extent practicable with the state's CZM program as understood by the Council.

6.0. Council Review and Monitoring of the Framework

Review mechanisms are in place for all of the Fishery Management Plans included in this Framework. The quota set-aside mechanism enabled by this framework will be reviewed annually by the Council as part of the quota setting process. Moreover, Council members will be actively involved in the annual determination of research priorities and in reviewing proposals submitted to meet them.

7.0. List of Preparers

This framework was prepared with the assistance of the following members of the MAFMC staff: Clayton E. Heaton, Dr. Christopher M. Moore, Dr. Thomas B. Hoff, Valerie M. Whalon, José L. Montañez, and Richard J. Seagraves. Valuable guidance was provided by David Gouveia of NMFS Northeast Regional Office, and is much appreciated. Most of the included species and habitat information is based on documents provided by the Northeast Fisheries Science Center.

8.0. Agencies and Organizations

In preparing this Framework action, the Council and ASMFC consulted with NMFS, the New England Fishery Management Council, Fish and Wildlife Service, Department of State, and the states of Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, and North Carolina through their membership on the Council. As noted in Section 5.6.4.3, states that are members within the

management unit will also be consulted through the Coastal Zone Management Program consistency process.

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