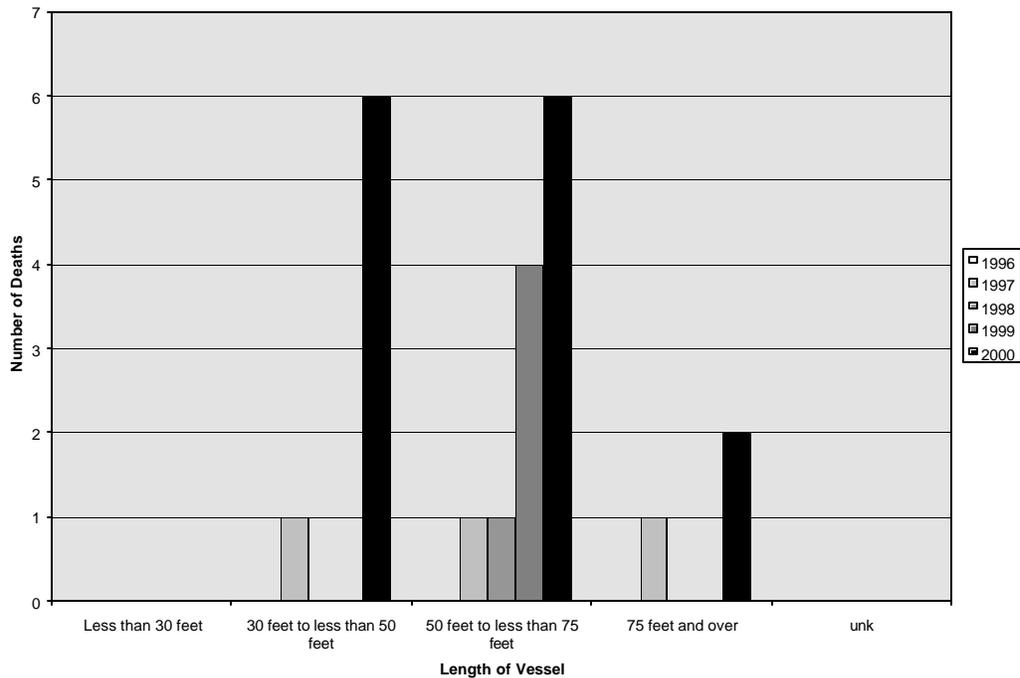


Figure 97 Number of Fishing Vessel Deaths, by Vessel Length, Trawl, Gillnet, and Longline Vessels Only, Groundfish Fishing Years



Source: U.S. Coast Guard, unpublished data.

8.0 DATA AND RESEARCH NEEDS

Adequate and comprehensive scientific information (both biological and socioeconomic) about the species and fisheries proposed to be managed under the Skate FMP is currently lacking. This information is critical to managing the Northeast Region’s skate complex consistent with the Sustainable Fisheries Act. Without this information, uncertainty in the scientific data will constrain the ability of the Council to take appropriate management actions. In addition, effective monitoring and appropriate recommendations for management adjustments, especially for fisheries in which skates are caught incidentally, hinge on the availability of more comprehensive scientific information about these species.

One of the primary objectives of this FMP is to collect information critical for substantially improving knowledge of skate fisheries by species and for monitoring: (a) the status of skate fisheries, resources, and related markets and (b) the effectiveness of skate management approaches. To achieve this objective, the Council is proposing to implement a comprehensive permit and catch reporting program. Such a program addresses many of the data and research needs discussed below, but much additional research will be necessary to obtain the necessary biological and ecological information about the individual species in the complex.

During SAW 30, the SARC identified the following sources of uncertainty relative to the assessment of the Northeast Region's skate complex:

- 1) The species composition and size structure of landings are unknown.
- 2) The true level of discards and the discard mortality rate are unknown.
- 3) A lack of information on the stock structure of the species in the skate complex has increased the uncertainty of conclusions about historical trends in abundance, recommendations of appropriate biological reference points, and conclusions about the status of barndoor skate relative to ESA listing factors.
- 4) Life history data are uncertain for winter and little skate and incomplete and totally lacking for five species.
- 5) Mortality estimates are based on equilibrium assumptions which are only partially met for these stocks. A preferable approach for future assessments would be an age-based method for determining mortality rates and estimates of longevity. This will require several years of future adequate length and age sampling, both from the commercial and research survey catches.
- 6) The proposed SFA biomass reference points are based on selected time periods of survey indices, but it is unknown how these relate to true estimates of B_{MSY} .

Based on the above sources of uncertainty, the SARC identified the following "research recommendations:"

- 1) The commercial fishery statistics sampling programs should be adapted to report skates landings by species.
- 2) Commercial fishery size composition data should be collected by species.
- 3) Sea sampling of directed skate landings and skate bycatch should be increased, and the identification of the species composition of the skate catch improved.
- 4) Age and growth studies, for all seven species in the complex, are needed.
- 5) Maturity and fecundity studies, for all seven species in the complex, are needed. Use of life history models requires these data and may prove useful in establishing biological reference points for the skate species.
- 6) Estimates of commercial and recreational fishery discard mortality rates, for different fishing gears and coastal regions and/or bottom types, for all seven species in the complex, are needed.
- 7) Studies of the stock structure of the species in the skate complex are needed to identify unit stocks. Stock identification studies, especially for barndoor, thorny, winter, and little skate, are needed.
- 8) Explore possible stock-recruit relationships by examination of NEFSC survey data. A simultaneous examination of the species in the complex may prove a useful first step.
- 9) Investigate trophic interactions between skate species in the complex, and between skates and other groundfish.
- 10) Further consideration of the validity of NEFSC trawl survey catchability conversion factors for skate species is needed (diel, gear, vessel).

- 11) Investigate the influence of annual changes in water temperature or other environmental factors on shifts in the range and distribution of the species in the skate complex. Establish the bathymetric distribution of the species in the complex off the U.S. Northeast coast.
- 12) Investigate the SEAMAP survey data for clearnose and rosette skate.
- 13) Investigate historical NEFSC survey data from the Albatross III cruises during 1948-1962 when they become readily accessible, as they may provide valuable historical context for long term trends in skate biomass.
- 14) Recalculate the error distributions of the survey indices using alternative distributions.

In addition to the above, during the development of the SAFE Report, the Skate PDT recommended the following:

- Promote comprehensive reporting, including items discussed above as well as direct sales from bait to lobster fishermen.
- Urge all dealers to use the species utilization code to better understand the total amount of skates sold for lobster bait.
- Urge all processors to report production in the Processed Products Survey.
- Urge states that report via the General Canvas to report landings by vessel permit number in order to better identify small businesses for the *regulatory impact review*.
- Collect trade statistics (Q and V) – U.S. exports by country and U.S. imports by country.
- Estimate production and/or cost functions for directed bait and wing fisheries.
- Estimate price models for bait and wing landings using current data (assuming that reporting is more complete).

The Skate Committee also has identified the transboundary nature of these species and the extent of overlap with Canadian skate fisheries as important sources of uncertainty.

9.0 FMP CONSISTENCY WITH THE MAGNUSON-STEVENSONS ACT

9.1 COMPLIANCE WITH THE NATIONAL STANDARDS

Section 301 of the Magnuson-Stevens Fishery Conservation and Management Act requires that fishery management plans (FMPs) contain conservation and management measures that are consistent with the ten National Standards:

National Standards [16 U.S.C. 1851 § 301]

In General. – Any fishery management plan prepared, and any regulation promulgated to implement any such plan, pursuant to this title shall be consistent with the...national standards for fishery conservation and management.

This section summarizes, in the context of the National Standards, the analyses and discussion of the proposed action that appear in various sections of this document.

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

Section 4.4.3 of this document (p. 21) proposes overfishing definitions for each of the skate species managed under this FMP. Consistent with the National Standard Guidelines (NSGs), the overfishing definitions include biomass-based and fishing mortality-based reference points to evaluate when a skate species is in an overfished condition and when overfishing may be occurring. Because information is currently not available to accurately estimate fishing mortality rates for the skate species, the proposed overfishing definitions include proxy reference points for fishing mortality that are based on trends in the NEFSC trawl survey.

Section 4.3.3 of this document (p. 15) specifies, to the extent possible, Optimum Yield (OY) for the individual species in the Northeast skate complex. In general, OY will equate to the yield of skates that results from effective implementation of the Skate FMP. Consistent with the NSGs and the Magnuson-Stevens Act, the Council intends that OY cannot exceed MSY or the allowable portion of MSY necessary to be consistent with the MSY-based control rule (see Section 4.5.2 of this document for a discussion of control rules). If the Skate FMP is successful in achieving its objective of rebuilding the skate species to their long-term target biomass levels, then the measures in the FMP should provide for extraction of the optimal amount of skates.

Related to OY are the following important considerations:

- The Council is proposing a management regime that it believes includes the most appropriate management measures to protect and rebuild the skate resources, maintain sustainable levels of fishing effort for some skate species, and has the least impact on other fisheries in the Northeast Region.
- Based on available information and the analyses presented in this document, the proposed action provides sufficient protection for the resources to prevent overfishing and rebuild overfished stocks.

- Landings that occur under the measures proposed in this FMP are intended to equate to OY.

To be as precautionary as possible, the Council is setting OY at zero for barndoor skate, thorny skate, and smooth skate, the three species proposed for prohibition in this FMP. For other species, because fishery data are lacking, there is currently no time series of catch or landings on which to base an absolute specification of OY. OY for these species will therefore be defined as the amount that is harvested legally under the provisions of this FMP and the yield that results from the management measures in other fisheries to the extent that these measures further impact (and likely reduce) the harvest of skates.

Section 4.5 of this document (p. 30) specifies a rebuilding program for overfished skate species. Currently, barndoor and thorny skates are considered to be in an overfished condition (based on the proposed overfishing definitions) and will be subject to a rebuilding program when the Skate FMP is implemented. Consistent with NMFS' NSGs, the rebuilding programs for barndoor and thorny skates will commence as soon as the management measures in the Skate FMP are implemented. The general conclusion that the Skate PDT and the Council reached is that rebuilding time periods for the species in the skate complex will be on the order of decades.

The rebuilding program for overfished skate species requires Council action if the three-year moving average of the appropriate survey mean weight per tow does not increase when compared to the average for the three years previous. The advantage to this rebuilding program is that it takes a proactive approach by requiring that the survey average must be increasing over time to ensure rebuilding. Nevertheless, it will be important to allow for maximum flexibility and discretion while evaluating progress towards rebuilding.

(2) Conservation and management measures shall be based upon the best scientific information available.

As discussed throughout this FMP, adequate and comprehensive scientific information (both biological and socioeconomic) about the species and fisheries proposed to be managed under the Skate FMP is currently lacking. One of the primary objectives of this FMP is to collect information critical for substantially improving knowledge of skate fisheries by species and for monitoring: (a) the status of skate fisheries, resources, and related markets and (b) the effectiveness of skate management approaches. Many of the measures proposed in this FMP are intended to improve the information base on which appropriate skate management approaches are dependent.

Data limitations and research needs are specifically discussed in Sections 2.0, 7.2.3, and 8.0 of this document, as well as throughout the remainder of the document. Despite current data limitations, the conservation and management measures proposed in this FMP are based on the best *available* scientific information. General fishery information was collected from representative members of the fishing industry by the Skate PDT and was utilized in the development of this FMP (see Section 7.3 and Volume II of this FMP). Much, if not all, of the available scientific literature on the biology and ecology of the skate species also was utilized in the development of this FMP (see Volumes II and III).

The Skate Plan Development Team includes technical experts from the NEFMC staff, NMFS Regional Office staff, the Northeast Fisheries Science Center, and the States of Massachusetts and Rhode Island. As more and better information becomes available, the PDT will update the information base on which this FMP is dependent.

(3) 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.

The management unit proposed in this FMP (the Northeast Region) is discussed in Section 4.1 (p. 8) and includes the species of concern, the identification of distinct stocks (if any), and the geographic area subject to management. The proposed management unit applies to all seven species in the Northeast skate complex.

Two of the skate species in the Northeast complex are distributed significantly farther south than the other species: clearnose and rosette skates. The ranges of these two species extend from the Southern New England area southward, well beyond the extent of the NEFSC trawl survey and into waters off the coast of Florida. The Council considered managing these species throughout the extent of their ranges, that is, from Maine – Florida. However, it seems neither practical nor prudent for the New England Council to attempt to manage skate resources as far south as Florida, and the ranges of none of the other five skate species extend as far south. Therefore, to ensure that all interrelated stocks of skates are managed in close coordination, the Council chose to retain clearnose and rosette skate in the proposed management unit.

(4) 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 manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges.

The management measures proposed in this FMP do not discriminate between residents of different states. Because there is no limited/controlled access program proposed at this time, access to the skate resources is open to vessels from all states. In addition, the management measures proposed in this FMP apply equally throughout the management unit (Northeast Region). However, fishermen in some areas may be affected by the management measures more than others, depending on their level of economic dependence on the skate resources. For example, the analysis indicates that fishermen from Massachusetts (New Bedford and Provincetown, specifically) will be more affected by the proposed possession limit on skate wings because they rely on skates for a larger proportion of their revenues than fishermen from other states.

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

The Council considered efficiency in the utilization of fisheries resources when developing the measures proposed in this FMP, and none of the proposed measures have economic allocation as their sole purpose. This FMP proposes to promote overall efficiency in fisheries that catch skates by constraining fishing effort on skates and establishing species-specific measures to protect and rebuild skates. The proposed prohibitions on barndoor, thorny, and smooth skates represent proactive steps towards protecting the skate resources and rebuilding them to long-term sustainable levels. The proposed possession limit for the skate wing fishery is intended to prevent an expansion of the wing fishery, which could affect efficiency. The utilization of fishery resources is more efficient when stocks are rebuilt, as landings and fishery yields are likely to increase from current levels under a rebuilt stock.

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

The Council accounted for variations in fisheries, fishery resources, and catches in several ways during the development of this FMP. First, the Council considered and analyzed a range of management options and alternatives in this FMP. Different permit and catch reporting options were considered specifically to improve the skate information base while accounting for variations in fishing practices. Different kinds of prohibitions (for barndoor, thorny, and smooth skates) were considered to account for variations in fishing practices and problems associated with species identification in high volume fisheries. A complete discussion of the non-preferred alternatives and the alternatives that the Council rejected can be found in Section 5.0 of this document (p. 101).

Second, this FMP accounts for variations among and contingencies in fisheries, fishery resources, and catches by acknowledging the overlap between skates and other fisheries like multispecies, monkfish, and scallops. Section 5.0 of the Skate SAFE Report (Volume II) discusses other FMPs that affect the skate resources. Much of this information was considered in developing the baseline of management measures in other fisheries that promote the rebuilding of the skate resources (see Section 4.16, p. 79). To the extent possible, this FMP will rely on management measures in other fisheries to continue to protect skates beyond the specific measures proposed in this FMP.

Third, this FMP establishes several processes to facilitate periodic review of conditions in the fishery and adjust the management measures according to such variations. Section 4.7 (p. 67) establishes a review and monitoring process for this FMP to ensure that all information is updated regularly and management adjustments are made as appropriate. For management adjustments, this FMP establishes a framework adjustment process (see Section 4.8, p. 67). In addition, the review process specified in Section 4.16.2 (p. 95) provides a mechanism to account for variations in other fisheries and their FMPs to ensure that skate rebuilding will continue as management measures in other fisheries are adjusted. Section 4.6.3 (p. 64) establishes a similar process to account for variations in the EFH components of this and other FMPs.

(7) Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication.

The Council considered the costs and benefits of a range of alternative to achieve the goals and objectives of this FMP. It considered the potential costs of management action to the industry relative to the costs associated with taking no action. Short-term costs associated with the proposed management action should be compensated by long-term economic gains.

The Council also considered administrative and enforcement costs associated with the management measures under consideration. For example, the proposed federal permit for skates (Section 4.9, p. 70) minimizes administrative costs associated with issuing a new federal permit by establishing only one permit category for all vessels. The proposed prohibitions on possession of barndoor, thorny, and smooth skates were selected, in part, because they are easier to enforce than the other prohibitions that were considered, and they should therefore minimize some of the enforcement costs associated with this FMP.

The reliance on the baseline of existing management measures in other fisheries (Section 4.16.1, p. 80) and the review process to consider changes to these baseline measures (Section 4.16.2, p. 95) clearly minimize costs and avoid unnecessary duplication by reducing the complexity of measures proposed in this FMP and recognizing the overlap of skates with other fisheries in the Northeast Region. To the extent that this FMP can rely on existing measures in other FMPs, additional necessary skate-specific measures are likely to remain relatively simple, avoiding redundancy and minimizing complexity in the myriad of fisheries regulations throughout the Northeast Region.

(8) Conservation and management measures shall, consistent with the conservation requirements of this 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.

The Council considered the importance of fishery (skate) resources to affected communities and provided those communities with continuing access to skate resources to the extent possible, but not at the expense of compromising the conservation objectives of this FMP. Many of the specific measures proposed in this FMP are intended to constrain effort on skates and prevent fishery expansion, while still providing access to the resources for the vessels and communities that are most dependent on skates.

Section 7.3 of this document characterizes skate fishing activity and dependence (defined as percentage of total fisheries revenues from skates) for most communities that are known to land skates in either the bait or wing fisheries. Details about the bait and wing fisheries are also provided in Section 7.3. Additional information about skate fisheries and communities is presented in the 2000 SAFE Report (Volume II). The social and community impact assessment for this FMP can be found in Section 6.6 (p. 245).

In general, the only communities with substantial involvement in and/or dependence on skate fishing are: Point Judith, RI; New Bedford, MA; Provincetown, MA; and eastern Rhode Island (Newport, Tiverton, Portsmouth, Jamestown, Middletown, and Little Compton). The vast

majority of skate fishing activity in RI ports, however, is in the skate bait fishery. Since none of the measures proposed in this FMP directly impact vessels participating in the skate bait fishery, the social and community impact assessment focuses on impacts to the communities of New Bedford and Provincetown.

Although the economic impacts of the measures proposed in this plan are expected to be relatively minor for both New Bedford and Provincetown, it is important to note the differences between the two communities and emphasize that, in terms of importance and dependence, special consideration should be given to Provincetown, and the impacts of future measures on Provincetown should be weighed carefully.

- Although the absolute numbers are far less in Provincetown than New Bedford, landings and revenues of skates are more economically important to vessels in Provincetown.
- Because of the relatively low commercial value of skates and high value of species like scallops, monkfish, and some flatfish, it is not likely that there are vessels in New Bedford that are substantially dependent on the skate fishery.
- Provincetown's geographic location and isolation as well as the nature of its fishing fleet make it more vulnerable to significant changes to management measures not only for skates, but also for other fisheries.

(9) 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.

Bycatch is an important consideration in this FMP, especially because of the incidental-catch nature of the skate wing fishery. Unfortunately, information about the absolute amount of skate bycatch occurring in fisheries like groundfish, monkfish, and scallops is lacking. Section 3.4 of the Skate SAFE Report (Volume II) presents preliminary discard estimates for skates from SAW 30, calculated from NEFSC Domestic Sea Sampling and Dealer Weighout data for 1989-1998. Generally, the estimates from SAW 30 ranged from high values between 50,000 and 70,000 mt in 1989-1990 to a low of 14,700 mt in 1994. Otter trawls and scallop dredges account for >90% of the total discards. Over the 1989-1998 period, the biomass of total discards are estimated to be two (1998) to eight times (1989) the reported total landings. The commercial fishery discard mortality rate of skates, and therefore the magnitude of total skate discard mortality, is unknown.

Without better information about skate bycatch, specific measures to address bycatch and bycatch mortality were difficult to develop at this time. This FMP attempts to minimize the mortality of bycatch through the proposed prohibitions on possession of barndoor, thorny, and smooth skates. Although the survival rate of discarded skates is unknown, it is believed that a greater percentage of skate discards survive as compared to finfish (cod, flounder, etc.). Available information suggests that skates may be heartier than finfish and may have lower discard mortality rates. It is therefore assumed that a significant proportion of skates returned to the water quickly will survive.

(10) *Conservation and management measures shall, to the extent practicable, promote the safety of human life at sea.*

Fishing is an inherently dangerous occupation; participants in the fishery must constantly balance the risks imposed by weather and other natural conditions against the potential economic benefits of taking a trip. A management plan should be designed so that it does not encourage dangerous behavior by the participants. Section 7.3.8 of this document (p. 374) summarizes updated information about the safety of fisheries of which skate is a component.

The social impact assessment of the measures proposed in this FMP (Section 6.6, p. 245) includes considerations of the effects of the proposed management measures on safety. The safety of fishermen and fishing operations at sea is an extremely important social impact factor, as decreased safety often increases stress at the individual and family level, which can exacerbate many family and societal problems. In addition, the impacts of fishing-related casualties can be felt throughout fishing communities, where close-knit groups have longstanding family and social networks.

- The proposed permitting and reporting requirements are not expected to compromise the safety of fishermen and/or fishing operations at sea. Nothing related to permitting and reporting requirements should create the need for fishermen to travel farther from shore to catch skates or to make adaptations that may compromise their safety.
- The proposed prohibitions on possession are not expected to compromise safety. It is unlikely that vessels will relocate to new fishing grounds or fish farther from shore as a consequence of the prohibitions. Also, it is unlikely that fishermen will need to make any adaptations to these prohibitions that could compromise their safety.
- The proposed possession limit for skate wings is not expected to compromise safety. It is unlikely that vessels will relocate to new fishing grounds or fish farther from shore as a consequence of the possession limit. It is possible that some vessels will opt to take additional trips to compensate for reductions from the possession limit, but the number of vessels doing this is expected to be small. This adaptation would only compromise safety if vessels increase the number of trips they are taking during times of less predictable and more extreme weather. The likelihood of this occurring cannot be predicted at this time.

9.2 OTHER REQUIRED PROVISIONS OF THE MSFCMA

Section 303 of the Magnuson-Stevens Fishery Conservation and Management Act contains 14 additional required provisions for FMPs, which are discussed below. Any FMP prepared by any Council, or by the Secretary, with respect to any fishery, shall:

(1) *contain the conservation and management measures, applicable to foreign fishing and fishing by vessels of the United States, which are-- (A) necessary and appropriate for the conservation and management of the fishery to prevent overfishing and rebuild overfished stocks, and to protect, restore, and promote the long-term health and stability of the fishery; (B) described in this subsection or subsection (b), or both; and (C) consistent with the National Standards, the other provisions of this Act, regulations implementing*

recommendations by international organizations in which the United States participates (including but not limited to closed areas, quotas, and size limits), and any other applicable law;

This new Fishery Management Plan for the Northeast skate complex contains all required elements of FMPs as specified in the MSFCMA. The measures that are necessary and appropriate for the conservation and management of the skate fisheries are described in Section 4.0 of this FMP (p. 8). The rebuilding program proposed for overfished skate species is specified in Section 4.5 (p. 30). A discussion of this FMP's consistency with the National Standards in the MSFCMA is provided in Section 9.1 (p. 382). Section 10.0 (p. 393) discusses this FMP's consistency with other applicable laws. None of the measures proposed in this FMP apply to foreign fishing vessels. In addition, no recommendations by international organizations in which the United States participates apply to this FMP.

(2) contain a description of the fishery, including, but not limited to, the number of vessels involved, the type and quantity of fishing gear used, the species of fish involved and their location, the cost likely to be incurred in management, actual and potential revenues from the fishery, any recreational interest in the fishery, and the nature and extent of foreign fishing and Indian treaty fishing rights, if any;

Section 7.0 (p. 259) of this document and the 2000 Skate SAFE Report (Volume II of this FMP) present all available fishery information, including information about the number of vessels involved, the quantity and type of fishing gear used, the species of fish involved and their location, and all other relevant issues. There are no foreign fishing and Indian treaty fishing rights that apply to this FMP.

(3) assess and specify the present and probable future condition of, and the maximum sustainable yield and optimum yield from, the fishery, and include a summary of the information utilized in making such specification;

Section 4.3 (p. 9) of this FMP assesses and specifies, to the extent possible, the maximum sustainable yield and optimum yield from the skate fisheries. These sections also include a summary of the information utilized in making determinations about MSY and OY.

(4) assess and specify-- (A) the capacity and the extent to which fishing vessels of the United States, on an annual basis, will harvest the optimum yield specified under paragraph (3); (B) the portion of such optimum yield which, on an annual basis, will not be harvested by fishing vessels of the United States and can be made available for foreign fishing; and (C) the capacity and extent to which United States fish processors, on an annual basis, will process that portion of such optimum yield that will be harvested by fishing vessels of the United States;

This assessment is included in Section 4.3 (p. 9) of this FMP. All of the OY for skates is anticipated to be harvested by fishing vessels of the United States.

(5) *specify the pertinent data which shall be submitted to the Secretary with respect to commercial, recreational, and charter fishing in the fishery, including, but not limited to, information regarding the type and quantity of fishing gear used, catch by species in numbers of fish or weight thereof, areas in which fishing was engaged in, time of fishing, number of hauls, and the estimated processing capacity of, and the actual processing capacity utilized by, United States fish processors;*

Section 4.10 of this FMP (p. 72) describes the skate-specific reporting requirements proposed in this FMP. Data considerations relative to this FMP are discussed in Section 8.0 (p. 379).

(6) *consider and provide for temporary adjustments, after consultation with the Coast Guard and persons utilizing the fishery, regarding access to the fishery for vessels otherwise prevented from harvesting because of weather or other ocean conditions affecting the safe conduct of the fishery; except that the adjustment shall not adversely affect conservation efforts in other fisheries or discriminate among participants in the affected fishery;*

The proposed framework adjustment process is intended to allow for temporary and/or real-time adjustments to management measures to address these issues as they arise. Section 4.8 (p. 67) describes the proposed framework adjustment process and identifies the types of management measures that may be implemented through a framework adjustment to the Skate FMP.

(7) *describe and identify essential fish habitat for the fishery based on the guidelines established by the Secretary under section 305(b)(1)(A), minimize to the extent practicable adverse effects on such habitat caused by fishing, and identify other actions to encourage the conservation and enhancement of such habitat;*

Section 4.6 (p. 37) of this document identifies and describes Essential Fish Habitat for each of the seven species in the Northeast skate complex. Section 7.2.1 (p. 296) describes the effects of the skate fisheries on EFH and the effects of other fisheries on the EFH of skate species. Section 7.2.2 (p. 318) identifies skate conservation recommendations suggested by the Council.

The majority of skate fishing occurs as part of other fisheries in the Northeast Region, like groundfish, monkfish, and scallops. Many EFH considerations, therefore, have been addressed in the FMPs for these other fisheries. The conservation recommendations offered by the Council in the Omnibus EFH Amendment (NEFMC 1998) are incorporated into the Skate FMP by reference. Due to the limited nature of the directed skate bait fishery and the fact that the majority of skate landings are landed as incidental catch in other fisheries, the Council offers no additional conservation recommendations at this time.

(8) *in the case of a fishery management plan that, after January 1, 1991, is submitted to the Secretary for review under section 304(a) (including any plan for which an amendment is submitted to the Secretary for such review) or is prepared by the Secretary, assess and specify the nature and extent of scientific data which is needed for effective implementation of the plan;*

Adequate and comprehensive scientific information (both biological and socioeconomic) about the species and fisheries proposed to be managed under the Skate FMP is currently lacking. This information is critical to managing the Northeast Region's skate complex consistent with the

MSFCMA. Without this information, uncertainty in the scientific data will constrain the ability of the Council to take appropriate management actions. In addition, effective monitoring and appropriate recommendations for management adjustments, especially for fisheries in which skates are caught incidentally, hinge on the availability of more comprehensive scientific information about these species.

One of the primary objectives of this FMP is to collect information critical for substantially improving knowledge of skate fisheries by species and for monitoring: (a) the status of skate fisheries, resources, and related markets and (b) the effectiveness of skate management approaches. To achieve this objective, the Council is proposing to implement a comprehensive permit and catch reporting program. Such a program addresses many of the data and research needs discussed below, but much additional research will be necessary to obtain the necessary biological and ecological information about the individual species in the complex.

Section 2.0 (p. 3) identifies some important management issues related to the need for scientific information to ensure the effectiveness of this FMP. Section 8.0 (p. 379) identifies data and research needs specific to the Skate FMP.

(9) include a fishery impact statement for the plan or amendment (in the case of a plan or amendment thereto submitted to or prepared by the Secretary after October 1, 1990) which shall assess, specify, and describe the likely effects, if any, of the conservation and management measures on-- (A) participants in the fisheries and fishing communities affected by the plan or amendment; and (B) participants in the fisheries conducted in adjacent areas under the authority of another Council, after consultation with such Council and representatives of those participants;

The analyses contained in Section 6.0 (p. 163) of this document assess the potential biological impacts of the proposed management measures as well as the potential economic and social impacts on the human environment. This includes the impacts of this FMP on current fishery participants, participants in other fisheries, small commercial fishing entities (vessels), seafood dealers, and fishing communities. The fishery impact statement, which discusses the potential impacts of the measures proposed in this FMP on other fisheries, is provided in Section 6.3 (p. 215).

(10) specify objective and measurable criteria for identifying when the fishery to which the plan applies is overfished (with an analysis of how the criteria were determined and the relationship of the criteria to the reproductive potential of stocks of fish in that fishery) and, in the case of a fishery which the Council or the Secretary has determined is approaching an overfished condition or is overfished, contain conservation and management measures to prevent overfishing or end overfishing and rebuild the fishery;

Section 4.4.3 of this document (p. 21) proposes overfishing definitions for each of the skate species managed under this FMP. Consistent with the National Standard Guidelines (NSGs), the overfishing definitions include biomass-based and fishing mortality-based reference points to evaluate when a skate species is in an overfished condition and when overfishing may be occurring. Because information is currently not available to accurately estimate fishing mortality rates for the skate species, the proposed overfishing definitions include proxy reference points for fishing mortality that are based on trends in the NEFSC trawl survey. Section 4.4.3 also

includes discussion of how the criteria were determined. Since the biomass reference points were developed at SAW 30, the Skate SAFE Report (Volume II) can be referenced for more detailed information about the assessments conducted as part of SAW 30.

Section 4.5 of this FMP (p. 30) describes the rebuilding program that is proposed for overfished skate species. Additional species-specific management measures are proposed to prevent overfishing and rebuild the fisheries; these measures are described throughout Section 4.0 of this document.

(11) establish a standardized reporting methodology to assess the amount and type of bycatch occurring in the fishery, and include conservation and management measures that, to the extent practicable and in the following priority-- (A) minimize bycatch; and (B) minimize the mortality of bycatch which cannot be avoided;

For a discussion of the reporting requirements proposed in this FMP, including requirements to report bycatch using the VTR forms as well as sea sampling and study fleets, see Section 4.10 of this document (p. 72).

This FMP attempts to minimize the mortality of bycatch through the proposed prohibitions on possession of barndoor, thorny, and smooth skates. Although the survival rate of discarded skates is unknown, it is believed that a greater percentage of skate discards survive as compared to finfish (cod, flounder, etc.). Available information suggests that skates may be heartier than finfish and may have lower discard mortality rates. It is therefore assumed that a significant proportion of skates returned to the water quickly will survive.

(12) 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;

This FMP proposes no recreational fishery management measures. In general, skates have little to no recreational value and are not intentionally pursued in any recreational fisheries.

(13) 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 resource by the commercial, recreational, and charter fishing sectors;

Section 7.3.2 of this document (p. 326) and Section 3.2 of the Skate SAFE Report (Volume II) describe the various sectors of the industry that participate in the skate fisheries. Recognizing that fishery information is considered incomplete, these sections identify any trends evident in the available landings data for skates.

(14) 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 the commercial, recreational, and charter fishing sectors in the fishery.

There are no known recreational or charter fishing enterprises involved in the skate fisheries. The commercial sector is the only sector involved in the fisheries. Therefore, all allocations,

restrictions, and/or benefits are anticipated to be borne solely by the commercial sector. If it becomes necessary in the future, the Council may develop management measures to address the recreational sector and/or charter fishing sectors of the fisheries, should these sectors develop.

10.0 RELATIONSHIP TO OTHER APPLICABLE LAW

While this document has been prepared primarily in response to the requirements of the Magnuson-Stevens Fishery Conservation and Management Act, it also addresses other applicable laws and administrative orders that the Council must consider in developing an FMP. These laws and administrative orders are addressed in the subsections below.

10.1 EXISTING APPLICABLE LAWS

There are four types of existing laws and policies which may be applicable to this FMP and the measures proposed by the Council. These laws and policies are addressed in the subsections below.

10.1.1 Fishery Management Plans

There are many FMPs implemented in the U.S. EEZ within the same general geographic area as the Council's proposed management area for the Skate FMP. The following list identifies all known approved FMPs developed for the U.S. EEZ along the Atlantic Coast:

- New England Council:** Atlantic Herring FMP; Atlantic Salmon FMP; Monkfish FMP; Northeast Multispecies FMP; Sea Scallop FMP; Red Crab FMP.
- Mid-Atlantic Council:** Atlantic Mackerel, Squid and Butterfish FMP; Bluefish FMP; Dogfish FMP; Summer Flounder, Scup and Black Sea Bass FMP; Surfclam and Ocean Quahog FMP; Tilefish FMP.
- South Atlantic Council:** Atlantic Coast Red Drum FMP; Coastal Migratory Pelagics FMP; Coral, Coral Reef and Live/Hard Bottom Habitats FMP; Golden Crab FMP; Shrimp FMP; Snapper Grouper FMP; Spiny Lobster FMP.
- Secretarial Plans (NMFS):** American Lobster FMP; Atlantic Billfish FMP; Atlantic Tunas, Swordfish and Sharks FMP.

As previously discussed, there are several fisheries and FMPs that overlap and interact with skates considerably. The most notable of these FMPs are those for multispecies, monkfish, sea scallops, and lobsters. These FMPs and their interactions with skates are discussed in Section 4.16 of this document.

10.1.2 Treaties and International Agreements

Foreign fishing is prohibited within the U.S. EEZ for anadromous species and continental shelf fishery resources beyond the EEZ out to the limit of U.S. jurisdiction under the Convention of the Continental Shelf, unless authorized by an international agreement existing prior to passage of the Magnuson-Stevens Act and still in force or authorized by a Governing International Fishery Agreement issued subsequent to the Magnuson-Stevens Act. There are no pre- or post-Magnuson-Stevens Act agreements affecting the Northeast skate complex.

10.1.3 Federal Laws and Policies

All applicable federal laws and policies, including the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), and the Marine Mammal Protection Act (MMPA) are identified and discussed in Section 10.0 of this document.

10.1.4 State and Local Laws and Policies

There are no state or local laws, regulations, or policies that apply to the skate fishery.

10.2 ADMINISTRATIVE PROCEDURES ACT

Sections 551-553 of the Federal Administrative Procedures Act establish procedural requirements applicable to informal rulemaking by federal agencies. The purpose is to ensure public access to the federal rulemaking process, and to give the public notice and opportunity to comment before the agency promulgates new regulations.

Development of the Skate FMP provided many opportunities for public review, input, and access to the rulemaking process. Section 15.0 of this document (p. 442) lists all public meetings at which the measures proposed in the Skate FMP were discussed. In addition to entertaining public comments throughout the FMP development process, the Council notified the public of two formal review and comment periods, one associated with FMP scoping, and one associated with the NEPA-required 45-day comment period on the Draft FMP/EIS.

10.3 COASTAL ZONE MANAGEMENT ACT

Section 307(c)(1) of the Federal Coastal Zone Management Act of 1972 (CZMA) requires that all federal activities which directly affect the coastal zone be consistent with approved state coastal zone management programs to the maximum extent practicable. The coastal zone management programs for the following states were reviewed to determine the consistency of the proposed Skate FMP with the state programs: Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, and Florida. The Draft FMP/EIS was provided to all affected states listed above. In addition, the Final FMP/EIS and all supporting documents were provided to all affected states listed above, along with a letter stating the Council's initial CZMA consistency determination.

No state letters of concurrence with the Council's determination have been received at the time of the submission of this FMP. Copies of the consistency letters to the states as well as the states' responses will be on file and can be obtained by contacting the Council office.

10.4 ENDANGERED SPECIES ACT

Section 7 of the Endangered Species Act requires federal agencies conducting, authorizing or funding activities that affect threatened or endangered species to ensure that those effects do not jeopardize the continued existence of listed species. The Council has concluded, at this writing, that the proposed Skate FMP and the prosecution of the skate fishery is not likely to jeopardize any ESA-listed species or alter or modify any critical habitat, based on the discussion of impacts in this document. The Council is seeking the concurrence of the National Marine Fisheries Service in this matter. For further information on the potential impacts of the fishery and the proposed management action on listed species, see Section 6.4 of this document (p. 215).

10.5 EXECUTIVE ORDER 12612 (FEDERALISM)

The Executive Order on Federalism established nine fundamental federalism principles to which Executive agencies must adhere in formulating and implementing policies having federalism implications. The E.O. also lists a series of policy making criteria to which agencies must adhere when formulating and implementing policies that have federalism implications. However, no federalism issues or implications have been identified relative to the actions proposed in this FMP and its associated regulations.

This FMP does not contain policies with federalism implications sufficient to warrant preparation of an assessment under E.O. 12612. The affected states have been closely involved in the development of the proposed management measures through their involvement in the Regional Fishery Management Council process (i.e., all affected states are represented as voting members on at least one Council). This FMP was developed with the full participation and cooperation of the state representatives of the New England Council, and the Draft FMP/EIS was provided to the Mid-Atlantic Council for their review and consideration. No comments were received from any state officials relative to any federalism implications of the proposed Skate FMP.

10.6 EXECUTIVE ORDER 12866 (REGULATORY REVIEW)

The requirements of E.O. 12866 are addressed in Section 10.10.1 of this document (p. 397).

10.7 EXECUTIVE ORDER 13158 (MARINE PROTECTED AREAS)

The Executive Order on Marine Protected Areas requires each federal agency whose actions affect the natural or cultural resources that are protected by an MPA to identify such actions, and, to the extent permitted by law and to the maximum extent practicable, in taking such actions, avoid harm to the natural and cultural resources that are protected by an MPA.

The E.O. directs federal agencies to refer to the MPAs identified in a list of MPAs that meet the definition of MPA for the purposes of the Order. The E.O. requires that the Departments of Commerce and the Interior jointly publish and maintain such a list of MPAs. As of the date of submission of this FMP, the list of MPA sites has not been developed by the departments. No further guidance related to this Executive Order is available at this time.

10.8 MARINE MAMMAL PROTECTION ACT

The NEFMC has reviewed the impacts of the Skate FMP on marine mammals and has concluded that the management actions proposed are consistent with the provisions of the MMPA, and will not alter existing measures to protect the species likely to inhabit the skate management unit. For further information on the potential impacts of the fishery and the proposed management measures, please see Section 6.4 of this document (p. 215).

10.9 PAPERWORK REDUCTION ACT

The purpose of the Paperwork Reduction Act (PRA) is to control paperwork requirements imposed on the public by the federal government. The authority to manage information and record-keeping requirements is vested with the Director of the Office of Management and Budget (OMB). This authority encompasses establishment of guidelines and policies, approval of information collection requests, and reduction of paperwork burdens and duplications.

This Skate FMP contains collection of information requirements subject to the PRA, including new federal permits for skates (vessels, dealers, and operators), catch reporting requirements for vessels and dealers, and a letter of authorization for bait-only vessels. The PRA package prepared in support of this FMP and the information collection identified above, including the required 83-I forms and supporting statements, has been submitted to OMB for approval under separate cover. Copies of supporting PRA documents can be obtained by contacting the Council office.

10.10 EXECUTIVE ORDER 12866 AND THE REGULATORY FLEXIBILITY ACT (RFA)

This Fishery Management Plan has been prepared primarily in response to the requirements of the Magnuson-Stevens Fishery Conservation and Management Act. This integrated Skate FMP document includes all elements of the FMP and EIS as well as the following Regulatory Impact Review (RIR) and Initial Regulatory Flexibility Act Analysis (IRFAA). This chapter addresses the components of the RIR and IRFAA. Many components of the RIR and IRFAA are discussed in the body of the FMP and are not repeated in the following subsections. Section and page references are provided throughout the discussion below to aid reviewers in referencing the appropriate sections of this integrated document.

10.10.1 E.O. 12866

The Regulatory Impact Review (RIR) provides an assessment of the costs and benefits of proposed action and other alternatives in accordance with the guidelines established by Executive Order (E.O.) 12866. The regulatory philosophy of E.O. 12866 stresses that, in deciding whether and how to regulate, agencies should assess all costs and benefits of all regulatory alternatives and choose those approaches that maximize net benefits to the society. The RIR also serves as a basis for determining whether any proposed regulations are a “significant regulatory action” under the criteria provided in E.O. 12866 and whether the proposed regulations will have a significant economic impact on a substantial number of small entities in compliance with the Regulatory Flexibility Act of 1980 (RFA), as amended in 1996.

This RIR summarizes the effects of the proposed action and other options considered in this framework adjustment. This framework document contains all of the elements of the RIR/RFA. NOAA’s “Guidelines for Economic Analysis of Fishery Management Actions” (August 2000) states that if elements of the RIR are included in another section of the document, the appropriate section must be referenced within the RIR. The following RIR elements are referenced accordingly:

Statement of the Problem and Need for Action –	Section 2.2, p. 5
Skate FMP Goals and Objectives –	Section 3.0, p. 7
Proposed Action –	Section 4.0, p. 8
Alternatives to the Proposed Action –	Section 5.0, p. 101
Biological Impacts –	Section 6.1, p. 163
Economic Impacts –	Section 6.5, p. 227
Measures with No Direct Economic Impacts –	Section 6.5.2, p. 228
Distribution of Impacts –	Section 6.5.4.2, p. 239
Social Impacts –	Section 6.6, p. 245

Executive Order 12866 defines a “significant regulatory action” as one that is likely to result in:

- (1) an annual effect on the economy of \$100 million or more or one which adversely affects in a material way the economy, a sector of the economy, productivity, jobs, the environment, public health or safety, or state, local, or tribal governments or communities;
- (2) a serious inconsistency or interference with an action taken or planned by another agency;
- (3) alteration of the budgetary impact of entitlement, grants, user fees, or loan programs, or the rights and obligations of recipients thereof; or
- (4) novel legal or policy issues arising out of legal mandates, the President’s priorities, or the principles set forth in the Executive Order.

A comprehensive RIR with a bioeconomic model and formal benefit-cost and a risk assessment was compromised by poor landings and market data and by the fact that skates destined for the wings market are part of mixed species catches in the multispecies groundfish fishery. From a cumulative impact standpoint, the proposed restrictions on possession of skates have a negligible impact on the fishing industry when compared to the proposed reductions in fishing effort and EFH measures in the groundfish fishery. Nonetheless, this plan only concerns skate management.

Most measures in this FMP do not have direct economic impacts on the fishing industry or economy because they are more administrative in nature and relate to the collection of better skate-specific fishery information. See Section 6.5.2 for a list of the measures that are not expected to result in any direct economic impacts. The quantitative economic impact analysis was therefore restricted to the proposed possession limits.

The economic impact analysis of the proposed action suggests that the expected impacts will fall nowhere near an annual effect on the economy greater than \$100 million. The proposed possession limit for the skate wing fishery represents a combination of Options 1 and 2 that were considered during the development of this FMP. The economic impact analysis presented in Section 6.5 of this document (p. 227) indicates that the proposed possession limit would most likely have a minor impact on fishermen and the economy resulting from a small amount of discarding and a small number of groundfish trips that would end early due to the limits.

The 20,000-pound per trip limit on skate wings results in an average annual loss of about \$144,000 in producer surplus, assuming the years 1995-2000 are indicative of activity in the near future (Table 27, p. 237). Over a five-year period, the net present value of these average losses would amount to about \$629,000 (7% discount rate; Table 28, p. 238). The two possession limit options that the Council rejected likewise had small losses over five years: \$1.515 million with a 10,000-pound limit, and \$268,000 with 30,000-pound limit. The 30,000-pound possession limit was rejected because it most likely would not conserve winter skates.

As practically all skate wings are exported, consumer surplus in the United States was not part of the benefit-cost analysis. Further, dockside wings prices are not responsive to landings, possibly because the US provides only a small amount of the global supply.

The proposed action also includes a 10,000-pound limit on skate wing landings for one-day trips. This measure will most likely have a negligible affect on the fishing industry because it will rarely apply. For example, in 2000, three vessels landed more than 10,000 pounds of skate wings on five trips that lasted one day or less. The excess amounted to 10,520 pounds, and was only a small fraction of their skate and annual fish landings. Skate wings tend to be landed while fishing under groundfish days-at-sea allocations. Steaming time makes one-day trips a wasteful use of days-at-sea.

Available data and comment from industry suggest that barndoor skates, thorny skates, and smooth skates in the Gulf of Maine are not important to the wing market at this time. Hence, the impacts of the zero possession limit of these species is also expected to be minor.

Skate harvest rights policies which would create incentives among fishermen to conserve skates are complicated by the fact that skates for the wing market are typically caught by druggers and, to an extent, gillnetters on groundfish trips. The groundfish fishery – and other fisheries that land small amounts of skate wings (e.g., scallop, monkfish) – are already subject to limited entry and effort quotas. Skate harvest rights would have to be integrated with harvest rights for other species caught jointly.

The second criterion specified in E.O. 12866 is whether the proposed action would create a serious inconsistency or otherwise interfere with actions taken or planned by another agency. The activity proposed under this action involves commercial fishing for skates in the federal waters of the U.S. EEZ. NOAA Fisheries, in consultation with the Council, is the sole agency responsible for regulating this activity; therefore, there is no interference with actions taken by another agency. This proposed action would create no inconsistencies in the management and regulation of commercial fisheries in the Northeast Region. This FMP takes extra steps to ensure that skate management is fully integrated with the management of other fisheries resources in the region, as Section 4.16 (p. 79) establishes a link between management measures in other fisheries and skate resources. Thus, this proposed action would not be considered to be significant under the second criterion specified in E.O. 12866.

The third criterion for significance is whether the action would materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients. The proposed action is to establish regulations governing the skate fisheries in the Northeast Region. This action is unrelated to any entitlements, grants, user fees, or loan programs, and therefore cannot be considered to be significant under the third criterion specified in E.O. 12866.

The fourth criterion specified in E.O. 12866 is whether the proposed action would raise any novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the E.O. The proposed action establishes a management program for the Northeast skate complex in accordance with the Magnuson-Stevens Fishery Conservation and

Management Act. Much of the FMP addresses administrative and technical requirements of the M-S Act. Precedent has clearly been set for this action through the development of similar Fishery Management Plans throughout the nation. The proposed action, therefore, would not be considered significant under the fourth and final criterion specified in E.O. 12866.

10.10.2 Initial Regulatory Flexibility Act Analysis (IRFAA)

The purpose of the Regulatory Flexibility Act (RFA) is to reduce the impacts of burdensome regulations and record-keeping requirements on small businesses. To achieve this goal, the RFA requires government agencies to describe and analyze the effects of regulations and possible alternatives on small business entities. On the basis of this information, the Initial Regulatory Flexibility Act Analysis (IRFAA) determines whether the proposed action would have a “significant economic impact on a substantial number of small entities.” Note that the term “substantial number” has no specific statutory definition and the criterion does not lend itself to objective standards. A determination of substantial depends on the context of the proposed action, the problem to be addressed, and the structure of the regulated industry. Standards for determining significance are discussed below.

The RFA applies to any rule or regulation that must undergo “notice and comment” under the Administrative Procedures Act (APA), specifically those rules published as *proposed rules*. When the RFA applies, the Council must assess the impacts of the regulations to determine if they will have a significant economic impact on a substantial number of small entities. During the development of the Skate Fishery Management Plan, the Council carefully considered the potential impacts of the proposed action on small entities, alternatives to the proposed action (and their potential impacts), as well as how to minimize negative impacts on affected small entities.

- The statement of the problem/need for management action is discussed in Section 2.2 of this document (p.5).
- The objectives of this Fishery Management Plan are described in Section 3.0 of this document (p. 7).
- The proposed action is described in Section 4.0 of this document (p. 8).
- Alternatives to the proposed action are described in Section 5.0 of this document (p. 101).
- The economic analysis of the proposed action is presented in Section 6.5 of this document (p. 227). The economic analysis focuses on the effects of the proposed action versus the effects of the “status quo” or “no action.” Relevant subsections of the economic analysis are as follows:
 - Measures with No Direct Economic Impacts – Section 6.5.2, p. 228
 - Impacts of Proposed Prohibitions for Barndoor, Thorny, and Smooth Skates – Section 6.5.3, p. 229
 - Impacts of Proposed Possession Limit for the Wing Fishery – Section 6.5.4, p. 230
 - Distribution of Impacts – Section 6.5.4.2, p. 239
 - Port and Gear Impacts – Section 6.5.4.2.1, p. 239
 - Small Businesses – Vessel Impacts – Section 6.5.4.2.2, p. 239

- Small Businesses – Dealer Impacts – Section 6.5.4.2.3, p. 244

A brief summary of the Affected Human Environment (the small entities to which this rule applies) is provided in Section 7.3 of this document (p. 319). The human environment encompasses a variety of characteristics of the fishing industry and fishing communities along the Atlantic coast, including the cultural composition of communities, employment history, education, regulatory restrictions on fishing, and economic constraints on community development. The Affected Human Environment section of this document discusses these characteristics so as to give the reader enough background information to adequately assess the impacts of the management alternatives presented in this document. In addition to the information presented in Section 7.3, the Skate SAFE Report (Volume II) should be referenced for information about the affected small entities. Together, this FMP and the SAFE Report include all available information about the small entities engaged in skate fisheries and affected by the action proposed in this FMP.

NMFS' guidelines for RFA analysis suggests two criteria to consider in determining the significance of regulatory impacts, namely disproportionality and profitability.

- Disproportionality – Do the regulations place a substantial number of small entities at a significant competitive disadvantage to large entities?
- Profitability – Do the regulations significantly reduce profit for a substantial number of small entities?

According to SBA standards, 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 of not in excess of \$3.5 million. All entities affected by the proposed action meet the criteria for “small entities,” so issues related to disproportionality do not apply. Issues related to profitability are discussed within the context of the economic impacts of the proposed action on small entities (Section 6.5) and are summarized in the subsections below.

10.10.2.1 Issues Raised During Public Comment Period

Section E.12.0 of this document summarizes the issues raised during the 45-day public comment period required by NEPA and the Skate FMP public hearings conducted by the Council. This section should be referenced for further information. No issues specific to the RFA were raised during the public comment period.

10.10.2.2 Impacts on Small Entities

This rule applies to vessels in the multispecies groundfish fishery and, to a much less extent, scallop and monkfish fishermen who land skate wings for the overseas market. Likewise, processors of skate wings for export are potentially impacted by the possession regulations. Vessels in the nearshore skate bait fishery and the lobster fishery which uses skate bait should not be impacted economically from the proposed action.

Section 6.5.4 of this document (p. 230) presents information on the number of vessels and dealers/processors potentially affected by this rule. Because information is lacking, no method could be devised to predict future landings or the future number of impacted vessels. Therefore, the experience during 1995-2001 was used to frame what could happen in the near future.

Between 1995-2000, the number of vessels that landed skate wings declined from 933 to 771, and the number of trips reporting skate wing landings ranged from 13,589 in 2000 to 15,152 in 1998 (Table 26, p. 232). Although not available when the trip limit analysis was done for this FMP, year 2001 data show a reduction in effort: 735 vessels and 12,040 trips.

Only a small number of vessels might be impacted by the 20,000-pound overall trip limit on skate wings. During the same years, between four (4) and 32 vessels landed above this limit. In 2000, 18 out of 771 vessels (2.3 %) exceeded the limit on one or more trips. In 2001, 14 out of 735 vessels (1.9 %) landed skate wings above the 20,000-pound limit.

The Council also proposes a 10,000-pound limit on skate wing landings on trips lasting a day (24 hours) or less. In 2000, this limit would have affected only five trips by three vessels.

Impacts on annual vessel revenues are likely to be even smaller than these incidence data might suggest once the landings of other species on the same trips and in other fisheries are considered (see Section 6.5.4.1). For example, the potential revenue loss for the 18 vessels which landed more than 20,000 pounds of skate wings on at least one trip during 2000 was less than 5% of total annual revenues for each vessel; the impact was less than 1% for 14 of these vessels.

The results are similar for the approximately 130 dealers/processors (depending on year) who purchased skate wings from fishermen during 1995-2001, primarily in New Bedford and Provincetown, MA. For example, in 2000, eight (8) out of 124 dealers would have been impacted by a 20,000-pound trip limit, but by 1% or less of total seafood purchases. In 2001, five (5) out of 121 dealers bought skate wings from fishermen who landed trips with more than 20,000 pounds; less than 4 % of each of their total fish purchases was comprised of skate wings in excess of the 20,000-pound limit.

The impacts of the prohibitions on possession of barndoor skate, thorny skate, and smooth skate in the Gulf of Maine can not be quantified, but the status of these resources and information provided by industry suggest little if any impact on fishermen or dealer/processors.

10.10.2.3 Compliance Requirements

Proposed reporting requirements are discussed in Section 4.10 of this document. One of the objectives of the FMP is to have fishermen and dealers report landings by species and product form to improve available fishery information. Fishermen and dealers already report skate landings as “unclassified”. There is no extra reporting requirement per se - just new categories. However, entities could be challenged to learn how to identify skates to the species level with the identification guides that will be provided. The “unclassified” category is retained, though, as for other managed species.

10.10.2.4 Steps Taken to Minimize Significant Impacts

Section 5.0 discusses alternatives to the proposed action, including those considered by the Council but rejected. The potential impacts of several alternatives were mitigated by the Council's decisions.

- The zero possession limit on smooth skates was restricted to the Gulf of Maine in order to avoid overlap and species identification problems with little skate in the southern New England bait fishery which supplies bait to lobster fishermen.
- The Council combined Options 1 and 2 for possession limits in skate wing fishery. The 10,000 pound limit applies to short (1-day or less) trips where it will be much less likely to constrain fishermen from an economic perspective.
- Requirements to land skates whole for identification purposes would create significant amounts of shoreside waste for processors. The cost would reduce dockside prices for fishermen.
- The Council decided against limiting the bait fishery to little skates in order to protect small winter skates because it is difficult to tell the two species apart. The bait fishery is a high-volume fishery which would be difficult to prosecute with the identification order.
- Possession limits in the bait fishery were rejected due to likely impacts on the lobster fishery where skate bait is utilized.
- Area closures for skates were rejected because it would exacerbate an already complex area closure system in the Northeast Region.
- The proposal to require heavier twine in sink gillnet fisheries to reduce incidental catches of skates was rejected because gillnet fishermen land only about 20 percent of total skates and the added costs to gillnet fisheries were perceived to be out of proportion.

10.11 NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

This section addresses the requirements of the National Environmental Policy Act (NEPA) and includes additional required components of the Final Environmental Impact Statement for the Skate FMP.

FISHERY MANAGEMENT PLAN FOR THE NORTHEAST SKATE COMPLEX

Proposed Actions: Measures to implement the FMP for skates in the Northeast Region, which include permitting specifications; catch reporting requirements; other administrative requirements; a rebuilding program for overfished skate species; prohibitions on the possession of certain skate species; possession limits for the skate wing fishery; and a monitoring and framework adjustment process. A baseline of specific management measures in other FMPs that impact the skate resources are also identified, and a process for reviewing significant changes to this baseline of measures is established.

Type of Statement: Final Environmental Impact Statement (FEIS)

Lead Agency: New England Fishery Management Council

Cooperating Agencies: National Marine Fisheries Service

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Abstract: The New England Fishery Management Council proposes management measures to implement a new Fishery Management Plan (FMP) for the Northeast Region's skate complex. The proposed action addresses the requirements of the Magnuson-Stevens Fishery Conservation and Management Act and all other applicable laws.

The proposed action is described in Section 4.0 of this integrated document (p. 8). Alternatives to the proposed action, including the no action alternative, non-preferred alternatives, and alternatives considered but rejected, are described in Section 5.0 of this document (p.101). All required biological, economic, and social analyses are also included in this integrated document.

10.11.1 Environmental Impact Statement

NEPA requires preparation of an Environmental Impact Statement (EIS) for major federal actions that significantly affect the quality of the environment. The Council published a Notice of Intent (NOI) to prepare this EIS in the *Federal Register* on January 2, 2001, which was followed by four scoping meetings throughout the potentially-affected region. The Council prepared a scoping document that outlined some of the major issues and types of management measures that the Council might consider during the development of the Skate FMP. The Council invited discussion on the scoping document and any other issues of concern at the scoping meetings as well as suggestions for appropriate management measures to implement in various skate fisheries.

During preparation of the Draft FMP/EIS, the Council held seven meetings of its Skate Oversight Committee, and four of those meetings were held in conjunction with the Skate Advisory Panel. Five public hearings on the Draft Skate FMP/EIS were conducted in New Bedford, MA; Narragansett, RI; Provincetown, MA; Portsmouth, NH; and Wilmington, DE. Additional meetings of the Skate Committee and Council were held after public hearings to select final management measures for this FMP. All of these meetings, as well as numerous Plan Development Team meetings, were open to the public.

The following Table of Contents for the EIS is provided to aid reviewers in referencing the appropriate corresponding sections of this integrated document.

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E.1.0 EXECUTIVE SUMMARY

Please see the Executive Summary at the beginning of this integrated FMP/EIS document.

E.2.0 BACKGROUND AND PURPOSE

E.2.1 BACKGROUND

For a description of the background for this EIS, please see Section 2.1 of this integrated FMP/EIS document (p. 3).

E.2.2 STATEMENT OF THE PROBLEM

For a statement of the problem associated with the Northeast skate complex and its associated fisheries, please see Section 2.2 of this integrated FMP/EIS document (p. 5).

E.2.3 PURPOSE AND NEED FOR ACTION

For a description of the purpose and need for the action associated with this EIS, please see Section 2.2 of this integrated FMP/EIS document (p. 5).

E.2.4 MANAGEMENT GOALS AND OBJECTIVES

For a description of the management goals and objectives associated with this EIS, please see Section 3.0 of this integrated FMP/EIS document (p. 7).

E.2.5 SCOPING PROCESS

Through several meetings, the Council, its Skate Oversight Committee, and Skate Advisory Panel held preliminary public discussions on the issues to be addressed in this FMP while the Skate PDT collected necessary information and developed the Skate SAFE Report. At this time, the Council gathered information and input from the public during a scoping process to help them identify management issues and develop a range of effective management alternatives to be considered in the Draft EIS and public hearing document. Four scoping meetings were held between January 23, 2001 and February 12, 2001. During these public meetings, representatives from the fishing industry, environmental groups, and other interested parties discussed their concerns and provided input on the proposed management measures.

The need for more scientific and fishery information was frequently discussed during the scoping process. Some concern was expressed about the source and credibility of survey data used to examine the condition of the skate complex. In addition, the suggestion was made to create an observer program which would enhance the accuracy of trip reporting and incorporate more detail, including species composition of catches, into landings data. Others showed support for an observer program and the establishment of cooperative research projects for surveying the northeast skate complex. Specifically, it was suggested that efforts be made to examine skate discard mortality, potential advancements in bycatch reduction and gear selectivity, and skate life history.

Other issues discussed during the scoping process included the challenges of skate species identification, goal-setting and adherence to a specific timeline for implementation of management measures, consideration of closed areas for skate management, methods of developing overfishing definitions, and possible complications resulting from permit requirements for the skate fishery. To the extent possible, the Council considered and addressed these concerns and issues during the development of the measures proposed in this FMP.

E.3.0 SUMMARY OF THE EIS

E.3.1 ISSUES TO BE RESOLVED

For a description of the issues to be resolved associated with this EIS, please see Section 2.3 of this integrated FMP/EIS document (p. 6).

E.3.2 MAJOR CONCLUSIONS

This EIS concludes that the action proposed in the Skate Fishery Management Plan will have positive impacts on the related physical, biological, and human environments. Analyses of the impacts of the proposed management action are presented in Section 6.0 of this integrated document (p. 163).

E.3.3 AREAS OF CONTROVERSY

NOAA Administrative Order 216-6 defines “controversial” as referring to a substantial dispute which may concern the nature, size, or environmental effects, but not the propriety, of a proposed action.

The fundamental need for the Skate FMP and its associated measures was more controversial during the development of this FMP than the specific management measures themselves. Many people felt that creating a Skate FMP was redundant, as skates are indirectly managed through measures in the Multispecies, Monkfish, and Scallop FMPs. This, in combination with significant concerns about species identification difficulties and an obvious lack of information, created controversy during the initial stages of development of this FMP. These concerns are evident in the summaries of the scoping meetings held in 2001 and even in the public hearing summaries during the comment period for the Draft FMP. This controversy, however, represents dispute concerning the propriety of the proposed action, not the nature, size or environmental effects of the proposed action.

One area of controversy relates to species identification difficulties and potential problems with prohibitions on possession of certain skate species and requirements to report landings and discards by individual species. A few of the seven species of skates in the northeast complex are very difficult to distinguish from one another, making the reporting of landings and discards by species a significant challenge. For example, in a high volume fishery like the bait fishery, it may not be reasonable to expect that fishermen will be able to examine each skate individually to determine the species since it is almost impossible to distinguish a little skate from a juvenile winter skate. This problem is complicated due to the co-occurrence of these species within geographic areas. Successful identification of these skates to the species level requires additional knowledge of their anatomy and other physical characteristics. Some of the small-sized skate species are also difficult to differentiate (clearnose, little, smooth, rosette), as are some of the large-sized species (thorny and winter; barndoor skates can be more easily identified).

During the comment period on the Draft FMP/EIS, many comments expressed concern about species identification and the potential problems associated with some of the proposed measures that rely on the ability of fishermen, dealers, and enforcement agents to accurately distinguish

different species of skates. The industry feared that mistakes made by honest fishermen trying to identify skates would result in violations, especially in high-volume fisheries. In selecting the final management measures, the Council tried to balance the need to obtain species-specific fishery data with the controversy surrounding the realities of skate species identification. The proposed catch reporting requirements reflect this balance by requiring landings to be reported by individual species, but utilizing general size categories for the reporting of discards. The prohibitions for certain species were adopted because of the necessity to provide additional protection to the three species most in need of conservation.

E.4.0 DESCRIPTION OF THE MANAGEMENT ALTERNATIVES

E.4.1 PROPOSED ACTION

For a description of the action proposed in the Skate FMP, please see Section 4.0, p. 8 of this integrated FMP/EIS document.

E.4.2 ALTERNATIVES TO THE PROPOSED ACTION

For a description of the alternatives to the proposed action, please see Section 5.0, p. 101 of this integrated FMP/EIS document. The alternatives to the proposed action are separated into the no action alternative (Section 5.1), non-preferred alternatives (Section 5.2), and rejected alternatives (Section 5.3).

E.5.0 DESCRIPTION OF THE AFFECTED ENVIRONMENT

E.5.1 INTRODUCTION

A full description of the affected environment, including a description of the resource species, the habitat, fishing activities, economic characteristics, and social characteristics of those likely to be affected by the actions under consideration and proposed in this EIS can be found in Section 7.0 of this integrated FMP document. Additional background material can be found in Volumes II and III of this FMP. Volume II is the 2000 Skate SAFE Report, which summarizes all stock assessment and fishery evaluation information available at that time. Volume III includes all supporting materials for skate essential fish habitat (EFH).

The description of the affected environment is intended to present sufficient background information on the various resources and entities likely to be affected by the actions proposed and/or under consideration in this EIS. This section presents relevant information on the resource components of the existing environment. It summarizes the available information on the physical, biological and ecological, and human components of the environment involved in the skate fisheries. Please refer to Section 7.0 of this document for additional information (p. 259).

E.5.2 PHYSICAL ENVIRONMENT

For a description of the physical environment affected by this FMP/EIS, please see Section 7.2 of this document (p. 296). Much of the information in Section 7.2 is incorporated by reference and is actually presented in Volume III of this document (EFH supporting materials).

E.5.3 BIOLOGICAL ENVIRONMENT

E.5.3.1 General Biological Information

Available biological information about the species in the Northeast Region skate complex is presented in Section 7.1 of this document (p. 259). References to additional information presented in Volumes II and III of this FMP are noted where appropriate.

E.5.3.2 Abundance and Present Stock Condition

Information about recent survey abundance indices for each of the seven skate species is presented in Section 7.1.2 of this document (p. 260). Section 7.1.2 also updates current stock conditions based on the reference points developed at SAW 30. Historical survey abundance indices can be found in the Skate SAFE Report (Volume II).

E.5.3.3 Ecological Relationships

This information can be found in the EFH Source Documents for the seven species in the skate complex. Please see Volume III, Appendix A of this document for the EFH Source Documents.

E.5.4 HUMAN ACTIVITIES

For a description of the human activities affected by this FMP/EIS, please see Section 7.3 of this integrated document (p. 319).

E.6.0 ENVIRONMENTAL IMPACTS

The impacts of the management measures proposed in this FMP have been analyzed to the extent possible with current information. The assessment of impacts can be found in Section 6.0 of this document. The following list provides references to important impact assessments for this EIS:

Biological Impacts – Please see Section 6.1 of this integrated FMP/EIS document (p. 163).

Ecological Impacts On Other Species – Please see Section 6.3 of this integrated FMP/EIS document (p. 215).

Impacts To EFH – Please see Section 6.2 of this integrated FMP/EIS document (p. 210).

Economic Impacts – Please see Section 6.5 of this integrated FMP/EIS document (p. 227).

Social And Community Impacts – Please see Section 6.6 of this integrated FMP/EIS document (p. 245).

Impacts On Marine Mammals And Protected Species – Please see Section 6.4 of this integrated FMP/EIS document (p. 215).

E.7.0 CUMULATIVE EFFECTS

Cumulative effects result from the proposed action's incremental impacts when these impacts are added to the impacts of other past, present, and reasonably foreseeable future actions.

In 1997, the Council on Environmental Quality (CEQ) published a handbook entitled, *Considering Cumulative Effects Under the National Environmental Policy Act*. The CEQ identified the following eight principles of cumulative effects analysis, which will be considered in the discussion of the cumulative effects of this proposed action:

1. Cumulative effects are caused by the aggregate of past, present, and reasonably foreseeable future actions.
2. Cumulative effects are the total effect, including both direct and indirect effects, on a given resource, ecosystem, and human community of all actions taken, no matter who (federal, non-federal, or private) has taken the actions.
3. Cumulative effects need to be analyzed in terms of the specific resource, ecosystem, and human community being affected.
4. It is not practical to analyze the cumulative effects of an action on the universe; the list of environmental effects must focus on those that are truly meaningful.
5. Cumulative effects on a given resource, ecosystem, and human community are rarely aligned with political or administrative boundaries.
6. Cumulative effects may result from the accumulation of similar effects or the synergistic interaction of different effects.
7. Cumulative effects may last for many years beyond the life of the action that caused the effects.
8. Each affected resource, ecosystem, and human community must be analyzed in terms of its capacity to accumulate additional effects, based on its own time and space parameters.

This Skate FMP represents the first management program developed specifically for the northeast skate complex. There are no past actions associated specifically with skates to consider in a cumulative effects analysis for this fishery, except for past management measures in other fisheries that have impacted skates, which are identified and discussed in many sections of this document (see additional discussion below). The present actions associated specifically with skates are identified, discussed, and analyzed to the extent possible in this integrated FMP/EIS document. Impact analyses of the proposed management measures begin in Section 6.0 (p.163) of this document.

Since it is not practical to analyze the cumulative effects of an action on the universe, the most meaningful and relevant considerations for the Skate FMP include:

1. the direct effects of the proposed skate measures on the skate resources;
2. the indirect effects of the proposed skate measures on other fishery resources; and
3. the and indirect effects of management measures in other fisheries on the skate resources.

The analyses presented in Section 6.0 of this integrated document suggest that there are not likely to be any indirect effects of the proposed skate management measures on other fishery resources, so the cumulative effects assessment focuses on points #1 and #3 above.

The most significant direct effects of the proposed action are reductions in fishing mortality for wing skates, rebuilding of the currently overfished skate species, and the acquisition of species-specific fishery information critical to effectively managing these fisheries in the future. The effects of the no action alternative would be to continue the prosecution of the skate fisheries as they are prosecuted today, that is, indirectly managed through the multispecies regulations and largely under-documented. The no action alternative and its impacts are discussed in Section 5.1 (p. 101) of this document.

In addition to the direct and indirect effects on the resource, its ecosystem, and the participants in the fishery, there can be cumulative effects as a result of similar or synergistic management actions. This is most often apparent in multispecies fisheries where single-species regulations combine to result in more significant effects on the participants and the fishery than would occur from the regulations for one species alone. This is the core of the cumulative effects issue as it relates to skates, groundfish, monkfish, scallops, and other fisheries in the region.

The Skate FMP is unique in that cumulative effects, in a sense, are considered to be one of its cornerstones. The Council is relying on the cumulative effects of management measures in other FMPs to further promote skate rebuilding now and in the future, so this concept is integrated into almost every aspect of this FMP. Specifically, issues related to cumulative effects are addressed in several sections of this integrated FMP/EIS document.

Section 3.0, Skate FMP Goals and Objectives, p. 7: The goals and objectives of the proposed Skate FMP recognize the impacts of other management actions on the skate resources and the significant overlap of skate fishing activity and multispecies, monkfish, scallop, and other fishing activity.

Section 4.2, Fishing Year, p. 9: The proposed fishing year recognizes the overlap of skate fishing activity and multispecies fishing activity by establishing the skate fishing year based on the multispecies fishing year.

Section 4.3, Specification of MSY/OY, p. 9: The proposed specification of MSY and OY recognizes that future skate yields may be affected by management measures in other fisheries, particularly the multispecies fishery.

Section 4.16, Management Measures in Other Fisheries, p. 79: This section emphasizes issues related to cumulative effects by identifying specific management measures in other

fisheries that impact the skate resources. This section also describes, to the extent possible, foreseeable changes to these management measures and the impacts that these changes may have on the skate resources and fisheries. These measures include, but are not limited to, multispecies management measures like closed areas and DAS; gear restrictions for the multispecies, monkfish, and scallop fisheries; measures in the Lobster FMP that may affect future demand for skate bait; and marine mammal regulations throughout the region. It also includes a discussion of the potential impacts of Multispecies Amendment 13 and Scallop Amendment 10, two significant management actions that may be implemented in the foreseeable future. The foundation of the Skate FMP is the interconnectivity of skate fisheries with other fisheries in the region, and this section serves to tie these issues together and relate them to the cumulative effects of present and future management actions.

Section 6.1.6, Impacts of Closed Areas, p. 193: This section characterizes the benefits of the existing groundfish year-round closed areas for each species in the skate complex. It describes past and present benefits afforded to skates by these closed areas and again recognizes the interconnected nature of these fisheries.

Section 6.1.7, Impacts of Other Groundfish Management Measures, p. 210: This section provides a brief discussion of the impacts of other groundfish management measures on skates, such as present and future Multispecies DAS reductions and gear restrictions.

Section 6.2, Impacts on Habitat, p. 210: This section provides a discussion of the potential impacts on habitat of changes to the management measures in other fisheries that have been identified as beneficial to skates.

Section 6.3, Impacts on Other Species (Fishery Impacts), p. 215: This section again focuses on the overlap of skate fishing with other fishing activity in the area. The premise of this discussion is that the skate-specific management measures are expected to have far less impact on other species than the management measures for other species will have on skates.

E.8.0 DETERMINATION OF SIGNIFICANCE

Section 6.02 of the NOAA Administrative Order 216-6, Environmental Review Procedures for Implementing the National Environmental Policy Act, provides specific guidance on determining the significance of fishery management actions. The nine criteria to be addressed are as follows:

1. May the proposed action be reasonably expected to jeopardize the sustainability of any target species that may be affected by the action?
2. May the proposed action be reasonably expected to jeopardize the sustainability of any non-target species?
3. May the proposed action be reasonably expected to cause substantial damage to the ocean and coastal habitats and/or essential fish habitat as defined under the Magnuson-Stevens Act and identified in FMPs?
4. May the proposed action be reasonably expected to have a substantial adverse impact on public health or safety?

5. May the proposed action be reasonably expected to adversely affect endangered or threatened species, marine mammals, or critical habitats of these species?
6. May the proposed action be reasonably expected to result in cumulative adverse effects that could have a substantial effect on the target species or non-target species?
7. May the proposed action be reasonably expected to have a substantial impact on biodiversity and ecosystem function within the affected area?
8. Are significant social or economic impacts interrelated with significant natural or physical environmental effects?
9. What is the degree to which the effects on the quality of the human environment are likely to be highly controversial?

The Council has reviewed the nine criteria relative to the action proposed in this Skate FMP. Based on these criteria and since this is a new Fishery Management Plan, the Council has determined that the proposed action represents a significant action and has prepared an EIS in accordance with the National Environmental Policy Act.

E.9.0 OTHER REQUIRED CONSIDERATIONS

E.9.1 UNAVOIDABLE ADVERSE EFFECTS

Section 6.0 of this document discusses the likely effects of the proposed management measures and alternatives that were considered by the Council during the development of this FMP. This includes analyses and discussion of the potential biological, ecological, economic, and social impacts to the skate resources, their environment, and the associated fisheries. There are no unavoidable adverse effects identified in this FMP. Overall, the proposed action is expected to have significant positive effects on the skate resources relative to the no action alternative.

E.9.2 RELATIONSHIP BETWEEN SHORT-TERM USES AND LONG-TERM PRODUCTIVITY

The development and implementation of this FMP for the northeast skate complex is intended to ensure the long-term productivity and sustainability of the skate resources and associated fisheries. In order to ensure the long-term productivity of the resources and their fisheries, the necessary management measures may cause some short-term adverse economic and social impacts to some current participants in the fishery. Without these management measures, the short-term use of the skate resources could have adverse impacts on the long-term productivity of the resources and the sustainability of their associated fisheries. Overall, the proposed action is expected to have significant positive effects on the skate resources relative to the no action alternative.

E.9.3 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

There are no known irreversible or irretrievable commitments of resources associated with this FMP and the proposed action. Under the no action alternative, while there are unlikely to be any irreversible commitments of resources, there may be irretrievable losses if the skate resources in question become overexploited to a level that takes a long time for the populations to recover. The risks of irretrievable losses are difficult to measure. On one hand, they may be higher in this fishery than in many others in the northeast due to the relatively slow growth and low fecundity of some of the skate species. On the other hand, they may not be as high due to the relatively low commercial value of some of the skate resources.

E.10.0 LIST OF PREPARERS

The list of individuals involved in preparation of this integrated FMP/EIS document is provided in Section 11.0 of this document.

E.11.0 LIST OF PERSONS RECEIVING COPIES OF THE DEIS

Initially, the Council distributed the Draft FMP/EIS to members of the Skate PDT and Skate Advisory Panel. These individuals include:

Tom Nies, NEFMC Staff
Thomas Warren and Martin Jaffe, NMFS Northeast Regional Office
Kathy Sosebee and Mark Terceiro, NEFSC (Population Dynamics)
Steve Edwards, NEFSC Social Sciences
April Valliere, RI Division of Fish and Wildlife
Jeremy King, MA Division of Marine Fisheries
David Wallace, Chairman, Cambridge, MD
Chuck Casella, Medford, MA
Sonja Fordham, Ocean Conservancy, Washington DC
James Gutowski, Barnegat Light, NJ
Andrea Incollingo, Kingston, RI
Louis Julliard, Southboro, MA
David Marciano, Beverly, MA
John Pappalardo, Chatham, MA
William Phoel, PhD, Tom's River, NJ
James Sulikowski, Durham, NH
Robert Westcott, Wakefield, RI

As part of the review process for consistency with applicable laws such as the CZMA and the ESA, the Council distributed the Draft FMP/EIS to the following individuals:

Ms. Kathleen Leydon, Maine Coastal Program
Mr. David Hartman, New Hampshire Coastal Program
Mr. Tom Skinner, Massachusetts Coastal Zone Management

Mr. Grover Fugate, Rhode Island Coastal Resources Council
Mr. Tom Oullette, Connecticut Office of Long Island Sound Programs
Mr. George Stafford, New York Division of Coastal Resources
Mr. Lawrence Torok, New Jersey Division of Coastal Resources
Mr. Nicholas Di Pasquale, Delaware DNREC
Ms. Gwynne Schultz, Maryland Coastal Zone Management Division
Ms. Laura McKay, Virginia Coastal Resources Management Program
Ms. Donna Moffitt, North Carolina Division of Coastal Management
Mr. E. James Tabor, Pennsylvania Department of Environmental Protection
Mr. Chris Brooks, South Carolina Ocean and Coastal Resources Management
Mr. Daniel Furlong, Mid-Atlantic Fishery Management Council
Mr. Robert Mahood, South Atlantic Fishery Management Council
Captain Vincent O'Shea, Atlantic States Marine Fisheries Commission

In addition, the Council prepared a notice to its "Interested Party" list for skates that announced the availability of the DEIS and public hearing document and announced the schedule for public hearings. A Notice of Availability of the DEIS was also published in the *Federal Register* on August 30, 2002. At that time, anyone on the "Interested Party" list or any other member of the public was able to call the Council office and request a copy of the DEIS for their review. There are approximately 222 individuals on the "Interested Party" mailing list for skates. The Council also made the Draft FMP/EIS available for downloading through its website (www.nefmc.org).

E.12.0 SUMMARY OF PUBLIC COMMENTS ON DRAFT SKATE FMP/EIS

Appendix I-A of Volume I includes summaries from the five public hearings that the Council conducted for the Draft Skate FMP/EIS as well as copies of written comments received during the NEPA 45-day comment period on the Draft FMP/EIS. The following paragraphs summarize the major issues discussed and comments received during the 45-day public comment period. Not every public comment received is summarized in the paragraphs below. For this reason, Appendix I-A should be referenced for more detailed information.

Scientific Information

Several commenters noted the paucity of scientific and fishery data on which the Skate FMP is based and questioned the validity of the existing data. Some people felt that there was insufficient data to develop this FMP at this time. Many of those who questioned the validity of existing data pointed to recent problems that have been identified with the NMFS survey gear aboard the R/V Albatross. They noted that skate overfishing definitions and rebuilding programs rely entirely on trawl survey data. One commenter suggested species like skates and flatfish will be most affected by the problems with the trawl survey gear. In contrast, another commenter remarked that declines in some of the skate surveys began long before problems with the gear were identified.

Response: Once a stock is identified as being in an overfished condition, the Magnuson-Stevens Act requires the Council to develop a Fishery Management Plan to end overfishing and rebuild the stock as quickly as possible. Information from SAW 30 indicated that three species of skates

were in an overfished condition (now, only two species remain in an overfished condition), which resulted in a legal requirement for the Council to develop this FMP. Once the Council begins development of a Fishery Management Plan, it must rely on the best available scientific information (National Standard 2).

The Council recognizes that biological and fishery information is lacking for skates, but it still must rely on the best *available* information to develop this FMP. For this reason, many of the measures proposed in the FMP are focused most on collecting better information. In addition, one of the primary objectives of this FMP is to collect information critical for substantially improving knowledge of skate fisheries by species and for monitoring: (a) the status of skate fisheries, resources, and related markets and (b) the effectiveness of skate management approaches. As more and better information becomes available, the Council will update the information base for this FMP and make management adjustments as appropriate.

Overfishing Definitions and Rebuilding Programs

The majority of commenters supported Overfishing Definition Option 2, which utilizes biomass reference points developed at SAW 30 and proxy fishing mortality reference points based on percentage declines in the three-year moving average of the trawl survey. Some commenters supported Rebuilding Option 1 because it would be less disruptive to more important commercial fisheries (i.e., it would lead to fewer “false triggers”) and it would provide the Council and Skate PDT with more discretion and flexibility in this data-poor situation. Others supported Rebuilding Option 2, which includes triggers and requires that overfished skate populations continue to increase over time. One commenter favored Rebuilding Option 4 because it includes triggers for management action and specified targets for population growth and therefore offers the best assurances that skate populations will increase significantly under the rebuilding plans.

Response: The Council considered all of these comments when selecting the proposed overfishing definitions and rebuilding program. The Council selected the overfishing definitions and rebuilding program that are the most scientifically justifiable in the face of significant uncertainty and data limitations. Flexibility is a critical factor in the application of both the overfishing definitions and the proposed rebuilding program.

The overfishing definitions incorporate the Council’s Scientific and Statistical Committee’s recommendation to not use the fishing mortality reference points proposed in SAW 30, but it does utilize the SAW 30 biomass reference points (targets and thresholds). The proxies for fishing mortality reference points in the proposed overfishing definitions are based on an observed decline in the survey biomass index for each species. This approach is intended to address the question of how much change in the biomass index is necessary for the trend to be declared “real.” While it is important to not overreact to annual variability in the survey indices, it is also important to not miss a true signal of overfishing.

The Council ultimately selected a slightly-modified version of Rebuilding Option 2, which was most supported by the public. The slight modification relates to how the three-year averages are calculated for comparison; this approach minimizes the occurrence of “false triggers.” The advantage to the proposed rebuilding program is that it takes a proactive approach by requiring

that the survey average must be increasing over time to ensure rebuilding. Nevertheless, it will be important to allow for maximum flexibility and discretion while evaluating progress towards rebuilding.

Permits

- Some commenters felt that a separate skate permit is unnecessary and redundant.
- Several commenters suggested that multispecies permits be used for skate permits as well, since much of the skate fishery already occurs under Multispecies DAS and the other multispecies regulations.
- Some commenters supported Permit Option 2, which created separate “directed” and “incidental catch” permits. One commenter noted that this terminology can potentially cause confusion in that the skate fishery is largely a bycatch fishery, and most skates, landed or not, are caught incidentally.

Response: A separate federal skate permit improves enforcement of the Skate FMP management measures and is consistent with permitting in other federal fisheries in the Northeast Region. It establishes a database of potentially affected entities and provides a mechanism for NMFS to notify the industry of regulatory changes and other important skate developments. It also establishes a potential parameter or criterion for a future limited access program. For example, if limited access is adopted for the skate fishery in the future, the qualification criteria could be based on possession of a federal skate permit combined with some level of skate landings and/or other criteria. This may provide an incentive for some skate vessels fishing only in state waters to obtain the federal permit now (in hopes of obtaining a limited access permit in the future, should one be established with qualification criteria based on previous possession of the federal permit). Any state waters vessels that can be incorporated into the federal permit database with the implementation of the Skate FMP will improve the accuracy of skate fishery data, as these vessels also would be required to submit logbooks once they obtain the federal permit.

For the purposes of public hearings, the Council selected Permit Option 2 as its preferred option, but ultimately selected Permit Option 1. The Council selected Option 1 because it recognized that little, if any, additional fishery data would be obtained under Permit Option 2. There are no incentives in the Skate FMP for vessels to obtain the proposed “incidental catch” permit instead of the “directed” permit, so it was assumed that most, if not all vessels would obtain the “directed” permit in order to leave themselves more options in the future. For this reason, the Council elected to simplify the permit process and require only one general, open access permit for skates at this time.

Reporting Requirements and Species Identification Issues

Many comments were received regarding the proposed reporting requirements. The vast majority of comments expressed concern about the proposed requirements because of species identification difficulties.

- A few commenters recommended that bycatch (discard) reporting requirements be as simple as possible in order to minimize bycatch mortality and ensure compliance.

- Many commenters expressed concern over the possibility of violations being issued for honest mistakes, especially in high-volume fisheries.
- One commenter suggested that the Council develop clear and simple methods of species identification for skates.
- Several commenters recognized the need for better fishery data and supported requirements to report landings of skates by individual species. However, they did not support species-specific bycatch reporting because of concerns related to the potential to increase bycatch mortality.

Response: The Council clearly recognizes problems associated with species-specific reporting requirements. The proposed action represents the most realistic way to collect better fishery data through vessel and dealer reporting. Mandating the reporting of skate landings by individual species represents a significant step towards improving fishery information and achieving the objectives of the Skate FMP. The Council recognizes that mandating the reporting of discards by individual species may not be practical and may actually increase discard mortality for some species of skates. It is likely that unwanted skates would stay on the deck of a fishing vessel longer if the crew is required to sort the bycatch and differentiate the species that are being discarded. For this reason, the Council is requiring that discards be reported only by size category.

The Council will rely on data from sea sampling trips and study fleets to obtain species-specific discard information. To the extent possible, the Skate PDT will use these data to characterize the species composition of skate discards in the various fisheries of which skates are a component. The Council urges sea samplers to make species-specific skate data collection a higher priority. The Council also recommends that training programs be established for sea samplers and fishermen participating in study fleets to improve skate identification by species.

Because species-specific information is critical to the long-term success of this FMP, the Council is working closely with NMFS and the NEFSC to develop a species identification guide for skate vessels and dealers as well as enforcement agents, sea samplers, and port agents. Draft copies of this guide were made available at the skate public hearings for review and comment. Final copies of the guide are expected to be distributed prior to implementation of the Skate FMP.

Prohibitions on Possession/Landing/Sale

- Many commenters supported the proposed prohibitions on barndoor and thorny skates because they recognized the need to protect these two species as much as possible.
- One commenter supported prohibitions on landing instead of possession because of the potential to issue violations on high-volume trips with unsorted catch on the deck. This individual observed that once a vessel lands the fish, possession of any species is intentional, and possession of prohibited species should be considered a violation once the boat returns to the dock to sell the catch.
- One commenter noted that while a prohibition on the possession of smooth skates may not be very helpful, the smooth skate resource is far from rebuilt and requires additional management attention.

Response: The Council recognizes the need to take proactive steps to continue to rebuild barndoor, thorny, and smooth skates. As a result, the Council selected prohibitions on possession, the most conservative prohibitions under consideration, for all three of these species. For the purposes of public hearings, the no action option was preferred for smooth skates (i.e., no prohibition). Based on public comments received, the Council reconsidered this issue and agreed that the smooth skate resource is in need of management attention in addition to the protection it is afforded under the Multispecies and other FMPs.

The Council selected prohibitions on possession instead of landing and/or sale because: (1) prohibitions on possession are most conservative and offer the greatest deal of protection to the resource and (2) prohibitions on landing and sale are difficult from the enforcement and compliance perspectives. A prohibition on landing and/or sale completely eliminates opportunity for at-sea enforcement and can complicate dockside enforcement. In addition, discard mortality is likely to increase with increased time that the prohibited species spends on deck. Under such a prohibition, vessels that catch skates incidentally may choose to set their skate catch aside until other species have been sorted since there is no legal requirement for them to return any skates to the water as quickly as possible. This compromises the objective of the management measure.

Possession Limits for the Wing Fishery

- Some commenters supported no possession limits for skate wings because the skate wing fishery is already regulated through the Multispecies FMP, as skate wing fishing occurs under Multispecies DAS.
- Some commenters supported a 10,000-pound possession limit for skate wings. They felt that this limit would be adequate for the majority of vessels that target or catch skate wings incidentally and would help to stabilize the market price for wings. Another commenter supported the 10,000-pound possession limit because it was the most conservative limit proposed for the wing fishery at this time.

Response: The Council ultimately selected a possession limit of 10,000 pounds per day and 20,000 pounds per trip as a way to constrain effort in the skate wing fishery without disproportionately impacting one sector of the industry, especially given the limited fishery information on which these limits are based. The 10,000-lb limit alone would disproportionately impact larger vessels that make multi-day trips, and these are the vessels that tend to target skate wings and depend on them for revenues more so than the smaller vessels that make shorter trips. The analysis found that a 20,000-lb trip limit would impact the larger vessels to some extent, thus providing some conservation benefit. Options 1 and 2, when combined, could result in up to a 14 percent reduction in landings and yet provide income for both nearshore and offshore fishermen.

By discouraging large-scale directed fishing for skate wings, the possession limit is expected to reduce fishing mortality on winter skates. The benefits of a wing possession limit include not only fishing mortality reductions for winter skate, but also long-term benefits to the wing species if the possession limit can discourage expansion of the fishery and/or an influx of new entrants into the fishery. Possession limits at the level which the Council is recommending should reduce landings of skate wings and will eliminate large-scale directed fishing for skate wings.

Baseline Measures in Other Fisheries and Baseline Review Process

Most commenters generally supported the proposed baseline of management measures in other fisheries and the process for reviewing changes to those measures. Two commenters suggested that Multispecies, Monkfish, and Scallop DAS may not be appropriate baseline measures and recommended that the Council instead consider fishing mortality targets and reference points from other FMPs as baseline measures. They also suggested that what is required of a baseline measure is some form of strategic limit on the extent of the area swept by the gears of other fisheries. In addition, they focused on the potential administrative burdens of the proposed baseline review process and the possibility that the process could result in a never-ending cycle of management adjustments. They recommended that any compensatory restrictions required to meet limits on acceptable incidental catches of skates be included in the same management action as that which is “relaxing” the baseline measure.

Response: The baseline approach establishes a concrete link between skates and management measures in other fisheries that impact skates. The philosophy behind this approach is to establish a formal process for considering management strategies as regulations in other fisheries that impact skates are adjusted. The Skate FMP contains precautionary skate management measures and triggers/criteria to determine when additional action may be necessary. However, the long-term impacts of these measures and the acquisition of data necessary to better manage and assess these species will be slow to materialize. In the meantime, this baseline approach serves as another mechanism to ensure that skate rebuilding concerns continue to be addressed.

The comments related to using fishing mortality targets as baseline measures and recommendations for reducing the administrative burdens of this process were received by the Council very late in the process and could not be fully addressed following public hearings. During the development of the Draft FMP/EIS, the Council did not consider using fishing mortality targets from other FMPs as a baseline measure and therefore could not incorporate this approach into the document following public hearings. The Council referred this issue to its Skate Plan Development Team for further consideration and may re-visit this issue in the future through a framework adjustment to the Skate FMP.

The Council did respond to concerns about the administrative burdens associated with this process by streamlining the process and modifying the timeline for response by the Skate PDT. The Council recognizes that the approach, as proposed, was somewhat cumbersome and could result in protracted exchanges between the Council’s Committees and the various needs of different fisheries managed through other FMPs. This potential outcome may be mitigated if the Skate PDT conducts the baseline review(s) holistically and in conjunction with the technical group (a species PDT, for example) that is developing the analyses to support the changes to the baseline measures. It may be that adjustments to the baseline measures can be developed in such a way that the action itself addresses and mitigates potential impacts on skates, thereby eliminating the need to initiate a skate-specific action immediately following the action to change the baseline measure. This is the intent of the baseline review process as it is proposed in the Final Skate FMP.

Habitat and EFH Issues

Many fishermen provided interesting information about the ocean habitats in which they tend to catch the majority of their skates. Many commenters noted that skates appear to prefer sandy bottoms that do not contain diverse, complex, or fragile substrates. One commenter felt that the sandy bottoms were quite fluid and responded not only to fishing, but also to strong storms and currents, resulting in very little growth along these bottoms. Another commenter expressed disappointment that consideration of area closures to protect skate habitat was ruled out early in the process.

Response: The comments from fishermen related to skate habitats were very interesting and helpful. At this time, Skate EFH is defined by NMFS survey data. However, in the future, consideration may be given to identifying EFH based on physical characteristics like those described by fishermen during the comment period. This information will be retained for future actions related to Skate EFH.

Currently, there are more than 8,000 square miles of ocean bottom closed to gear capable of catching multispecies (and therefore skates). The Council rejected options to establish additional area closures for skates at this time for several reasons:

- Skates are already benefiting significantly from the numerous area closures implemented in other fisheries. For additional discussion, please see Section 6.1.6 of this document.
- Lack of information precludes an accurate analysis of the biological impacts of any skate-specific closures on the species in need of management attention.
- Lack of information precludes a comprehensive and accurate analysis of the impacts of any skate-specific area closures on skate vessels as well as vessels engaged in other fisheries in the areas proposed for closure.
- Some ports in the Northeast Region are already disproportionately impacted by the numerous groundfish area closures (year-round and seasonal), and the Council does not want to exacerbate difficulties these communities are experiencing as they try to maintain access to some fisheries for some part of the year.

Consideration may be given to skate-specific area closures in the future, as necessary.

Skates as Lobster Bait

Skates are known to be a very important lobster bait, especially in Southern New England. Little skate is the primary species targeted for lobster bait. One commenter was concerned about his ability to continue to fish for skates for his own lobster bait and some local lobster vessels in his community. Another commenter said that he would no longer be able to fish for skates for lobster bait because his DAS have been reduced to the point that fishing for skates is no longer a viable option for using DAS. Another person noted the apparent healthy condition of the little skate resource.

Response: The Council recognizes that the little skate resource is considered to be rebuilt, abundant, and continuing to increase. The measures proposed in this FMP that apply to fishing for skates for lobster bait are more administrative in nature and are intended to collect fishery

information rather than restrict the skate bait fishery. No measures proposed in this FMP should compromise fishermen's ability to catch little skates for lobster bait at this time. This FMP establishes processes for evaluating the status of the little skate resource and managing the skate bait fishery in the future, if it becomes necessary.

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