7.0 Magnuson-Stevens Act Consistency

7.1 Compliance with the National Standards

Section 301 of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens 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]**
> (a) 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.

The following 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.

7.1.1 National Standard 1 -- Optimum Yield

> *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.*

Alternatives for a definition of overfishing and the specification of optimum yield (OY) are provided in Sections 3.5 and 3.6 of this FMP. OY is specified such that it cannot exceed MSY and will account, to the highest degree possible, for the relevant economic, social, and ecological factors.

All of the proposed measures and management alternatives developed for this FMP are intended to prevent overfishing in the directed red crab fishery and achieve OY on a continuing basis. Because this resource is not considered overfished, this FMP does not include a rebuilding plan or schedule.

7.1.2 National Standard 2 -- Scientific Information

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

Section 2.4 of this FMP identifies several issues to be resolved, including the status of the stock, the availability of data, and incidental catch and discards. Throughout the FMP document, note is made of the limited information on the biology, ecology, and population dynamics of the resource. It is also noted throughout the document that information on the fishery is somewhat limited and that landings data on red crabs were not required prior to the implementation of the emergency regulations. Compounding these information gaps is the lack of current comprehensive survey data on the stock.

Despite these limitations, however, the conservation and management measures proposed in this FMP are based on the best *available* scientific information. Baseline social and economic information was collected from representative members of the fishing industry (see Appendix B), and this information was utilized in the development of the FMP. Much, if not all, of the available scientific literature on the biology and ecology of the deep-sea red crab was utilized in the development of the FMP (see Appendix A). Historical information was also used where appropriate to characterize changes in fishing operations and to indicate trends. Landings information from the NMFS vessel trip report (VTR) and dealer weigh-out (WO) databases was used to the maximum extent possible and include data through 2000 as well as partial year data from 2001.

Implementation of the emergency regulations on May 17, 2001 included reporting requirements and these data were fully utilized in the development of the FMP. In some cases, however, data on fishing activity during the emergency period remain incomplete. For example, although the interactive voice response (IVR) data indicates 52 fishing trips were made during the first emergency period, the VTR database includes data on only 22 of these trips (as of January 3, 2001) and the WO database includes only 18 trips (also as of January 3, 2002).

7.1.3 National Standard 3 -- Management Unit

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.

For a discussion of the management unit and a description of the alternatives considered by the Council, see Section 3.2 of the FMP.

7.1.4 National Standard 4 -- Allocations

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

The measures and management alternatives proposed in this FMP do not discriminate between residents of different states. Specifically, the proposed controlled access qualification criteria are not based on state residency and the measures themselves do not change the way fishing privileges are allocated among red crab fishermen. However, fishermen in some areas may be affected by the management measures more than others, depending on their specific fishing operations (such as steaming time to the fishing grounds). Vessels based in the Gulf of Maine, for example, may be more affected by alternatives that utilize an allocation of days-at-sea, if they spend relatively more time traveling to and from the fishing grounds than vessels from other areas.

7.1.5 National Standard 5 -- Efficiency

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.

This FMP proposes to promote overall efficiency in the red crab fishery by constraining fishing effort to long term sustainable levels and preventing an increase in capitalization in the directed red crab fishery above the levels that existed prior to the control date. The Council considered efficiency in the utilization of fishery resources when developing the proposed management alternatives. The selection of a DAS program with a differential trip limit was specifically designed to account for potential differences in fishing efficiencies between vessels (see Sections 4.2.11 and 4.2.8). Although a trap limit is proposed to be implemented, the level selected is intended to prevent an *expansion* of gear rather than to constrain existing gear use, which could affect efficiency.

The proposed incidental catch limits may reduce the efficiency of some vessels accustomed to landing more than the limit of red crab. All of these vessels will be able to continue to land some amount of red crab, but the amount of red crab landed by non-controlled access vessels needed to be constrained in order to ensure adequate conservation for the resource and prevent overfishing.

None of the proposed measures have economic allocation as its sole purpose. Economic considerations were incorporated into the assessment of the potential impacts associated with all proposed measures, but the primary rationale for selecting the proposed measures was to prevent overfishing and overcapitalization in the fishery.

7.1.6 National Standard 6 -- Variations and Contingencies

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

The Council accounted for variations in fisheries, fishery resources, and catches by developing a variety of management alternatives, measures, and options that may have been proposed in this FMP (see Section 4.0). Measures such as differentiated trip limits propose to allow vessels to fish under a trip limit most appropriate for their fishing operations, based on past levels of involvement in the red crab fishery. Measures such as the proposed trap limits include options for vessels to continue to fish the most efficient number of traps per string, while maintaining adequate enforcement of this measure. Other measures take similar differences in fishing operations and catches. This approach maximizes opportunities in the fishery and flexibility for the fleet while controlling overall fishing effort and landings. Changes in fisheries occur continuously, both as the result of human activity (for example, new technologies or shifting market demand) and natural variation (for example, oceanographic perturbations). With this FMP, the Council proposes to establish a process to facilitate periodic review of conditions in the fishery and adjust the management measures according to such variations.

7.1.7 National Standard 7 -- Costs and Benefits

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

The Council considered the costs and benefits of a range of alternatives to achieve the conservation goals of this FMP. It considered the potential costs of management action to the industry relative to the costs associated with maintaining the status quo. Short term costs associated with the management action will be compensated by long term sustainability of yield and revenue. The Council also considered administrative and enforcement costs associated with the management alternatives and chose what it believes to be the least complex alternative that achieves the objectives of the management plan with minimal costs to administration or enforcement.

7.1.8 National Standard 8 -- Communities

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.

National Standard 8 requires that impacts on fishing communities be taken into account to provide for these communities' sustained participation in fisheries and, to the extent practicable, minimize any adverse impacts on fishing communities. Fishing communities are defined as communities that are substantially dependent on or substantially engaged in the harvest or processing of fishery resources to meet social and/or economic needs. National Standard 8 includes consideration of vessel owners, operators, crew, and processors that are based in the community.

By creating a definition of a fishing community, National Standard 8 creates a distinction between communities that are substantially dependent or engaged in fishing or processing and those that are not. National Standard 8 does not, however, provide guidance on what it means to be "substantially" dependent or engaged nor does it provide guidance on what community is contemplated. NMFS guidance provides that community is to be a place-based concept but there remain open questions as to the spatial aspects or dimensions of "place." Clearly, both fishing and non-fishing social and economic activities that occur within the boundaries of a particular place are to be considered, but establishing the perimeter of the "place" can be problematic. In fact, recent work by Hall-Arber et al. (2001) proposed that fishing communities be considered in the context of a regional network of social and economic resource flows that link several geographically distinct locations together as a "natural resource region."

Definitional issues of community and measurement of substantial involvement in fisheries aside, practical data limitations for fisheries in general and red crab in particular make a formal designation of community involvement in fisheries difficult. Since the red

crab fishery has been an unregulated fishery until the emergency regulations implemented in 2001, vessels or processors were not required to have Federal fishing permits. Reporting for both Federally permitted dealers and vessels is not required unless the dealer or vessel holds at least one other permit for which mandatory reporting is required. However, through voluntary reporting and through a survey that was conducted of the red crab industry, we can attribute some proportion of red crab fishing activity to particular communities.

Another complicating factor in identifying fishing communities and assessing community engagement is the large geographic area over which the red crab fishery, and most Northeast region fisheries, take place. To date, the most comprehensive examinations of fishing communities have been undertaken by Hall-Arber et al. (2001) and McCay and Cieri (2000). The former study covered ports from Connecticut to Maine while the latter covered ports from New York to North Carolina. Of these studies, Hall-Arber provided detailed port profiles and preliminary assessments of fishing dependence for 38 communities. The McCay study was designed to develop detailed profiles of fishing involvement at the county level and focused on fisheries managed by the Mid-Atlantic Fishery Management Council. This means that the places selected for site visits may not reflect places of concern for red crabs.

Due to the small size of the red crab fishery, there is a limited number of participants that have been involved in this fishery, and consequently a limited number of communities that may be affected. These two studies, mentioned above, provide some information about the social and economic importance of fishing to the locations that can be identified as related to the red crab fishery.

Procedures

The focus of an assessment of the communities affected by the proposed FMP will be primarily on locations where red crab are landed, or where industry participants define as their home or principal port.

Given the difficulties in defining communities and establishing engagement in fishing, no attempt is made here to distinguish between locations on the basis of dependence on fishing in general or the red crab fishery in particular. Rather, all locations where there is some level of engagement in the red crab fishery are identified. From among these locations, available information is reported to characterize the level of engagement in red crab harvesting as compared to other Federal fisheries in the Northeast region.

To the extent that certain vessels may not qualify for future participation in the red crab fishery, these vessels and the communities they are based in would be affected. For this reason, the ensuing analysis attempts to identify whether and where specific locations have vessels that will not qualify under any of the alternatives. Of particular interest is what alternative fisheries may be available to the non-qualifiers.

Data

The data on the red crab fishery are unique in some ways. First, because there were no regulations prior to the emergency action in 2001, there was no mandatory reporting of data prior to that time. Second, there are a small number of participants who are very involved in the management aspects of red crab. Because of this, it was possible to conduct a social and economic survey to gather baseline information on the operations of the fishery and on the people involved in the harvesting, processing, and marketing of red crabs. The survey is believed to represent a significant portion of the industry. It should be noted that while the information reflects a significant portion of the industry, it reports only on those in the directed red crab fleet. This is an important distinction. It also is believed to include all known processors dealing with product from the New England-based red crab fishery. For the non-directed segment of the red crab fleet, we have to rely on NMFS databases.

The survey also provided the only data available on red crab vessel crew, such as how many are working in the red crab fishery. The survey was unable to address where the crew live. This is an important consideration as historical participation affects more than vessel owners. In many cases, crew will live and work out of the same communities or ports as the owner, but this is not always the case. The number of crew employed on each vessel ranges from six to almost twenty, with an average of just over eight crew per vessel.

Much of the information from the survey is summarized in a report on social and economic baseline information for the deep-sea red crab fishery. This report is provided in its entirety as Appendix B. Much of what is discussed here in regards to communities is provided only as a summary of the information provided in the report

NMFS data were used to supplement what we have found out from the industry surveys. NMFS dealer data were used to identify locations where red crab are landed. Total value of landings of red crab and all other species combined for calendar year 2000 are reported as is the number of vessels contributing to landings. As discussed previously, these data may underestimate the level of engagement in fishing for any given location.

NMFS permit application data for permit year 2000 were used to identify the home port, primary port and mailing address locations for those vessels which landed red crab. Data from permit applications are recorded essentially as provided by the applicant. Even though vessels landing red crab do not require a permit, we think most vessels landing red crab have a permit to fish in other fisheries. If there are vessels landing red crab who do not report voluntarily, and who do not have a permit, we would not be able to know anything about their fishing community.

Communities where owners and operators live

The vessel owners and operators participating in the survey identified ten communities in which they live, including Windsor Locks, CT; Fall River, Gloucester,

Hamilton, New Bedford, and South Dartmouth, MA; Westport, ME; Adamsville and Tiverton, RI; and Seattle, WA. Red crab fishermen have lived in these communities for over 17 years, on average, and some fishermen have lived in their communities for as long as 44 years.

When asked whether they considered these communities to be fishing communities, it was interesting to find that the majority do not consider them to be fishing communities and even fewer consider them to be significantly dependent on commercial fishing. Only three vessel owners or operators consider their communities to be significantly dependent on fishing. Those reporting that their towns were not fishing communities suggested this was due to few fishermen living there, the town being located inshore, or the town being a bedroom community. Of those who consider their towns to be fishing communities, they suggested this was due to the amount of fishing activities based there.

The permit database identified additional communities where owners may live, particularly those who did not participate in the survey or those who are not part of the directed red crab fleet. These communities are Edgartown and Nantucket, MA; Deer Isle, Stonington, and Harpswell, ME; and Lakewood, NJ.

Communities engaged in red crab harvesting

A community may be said to be engaged in the red crab fishery by virtue of the exchange of red crabs between a vessel and a dealer; if it is a place where harvesters moor their vessel; or if it is a place where harvesters live. To determine which Northeast region communities may be engaged in the red crab fishery, the dealer and permit application data bases were queried to identify places/ports of landings or where red crab harvesters reside. Specifically, port of landing from the 2000 dealer data, and designated home port, principal port, and home mailing address from the fishing year 2000 permit application data were all used to identify communities that may be engaged in one way or another in the red crab fishery. These queries resulted in a total of 19 different named places where an individual may have either landed red crab, tied up his/her vessel, lived in, or received mail (Table 25).

The survey completed by those in the red crab industry was considered as well. The fishing vessels currently operating in the commercial red crab fishery come from a variety of areas and fishing ports in New England and the Mid-Atlantic. The places identified in the survey as serving as the primary ports of operation and mooring for red crab vessels were Fall River, Gloucester, and New Bedford, MA; Bristol, ME; Portsmouth and Tiverton, RI; and Norfolk, VA. Massachusetts had the largest number of locations with three, while Rhode Island, Virginia and Maine were also listed.

Locations that were profiled in the Hall-Arber et al. study and are included here are New Bedford and Gloucester, MA and Tiverton, RI. None of these locations were visited in the McCay and Cieri study.

Boston, MA	Cundys Harbor, ME	Lakewood, NJ	Portsmouth, RI
Chilmark, MA	Deer Isle, ME	Point Pleasant, NJ	Tiverton, RI
Edgartown, MA	Harpswell, ME		
Fairhaven, MA	Portland, ME		
Fall River, MA	Stonington, ME		
Gloucester, MA	Westport, ME		
Hamilton, MA			
Nantucket, MA			
New Bedford, MA			

Table 25: Places where an individual may have landed red crab, or called their homeport, primary port, or address.

Communities engaged in red crab processing

The small size of the harvesting sector of this fishery is carried over to the processing sector which is also relatively small. There are four wholesale and/or processing entities reportedly involved with the red crab fishery. The surveys described above that were completed by the vessel owners and operators were also completed by the owners and/or presidents of the four wholesale and/or processing companies. These companies are based in New Bedford and Fall River, MA; Portland, ME; and Warren, RI.

None of the respondents identified as processors report processing red crab exclusively. Other commercial fishery products processed include: clams, dogfish, Jonah crab, lobster, monkfish, mussels, rock crab, scallops, skates, snow crab, and squid. Processors report that they obtain red crab product from vessels from a variety of ports, including Fall River and New Bedford, Massachusetts, as well as other ports in Massachusetts and Rhode Island. The processors report obtaining red crab product from between one and four vessels each, with an average of two vessels per processor. One respondent indicates that they purchase the red crabs from the vessels and then contract with a third party to actually process red crab, although they do process other fishery-related products.

The number of employees currently employed by the processors varies significantly, from 5 to 1000 with an average of over 300 employees per processor. According to the respondents, the majority of these employees are seasonal in nature, with an average of 146.5 year-round employees per processor. As would be expected given the responses summarized above, most processing employees work either on other fishery-related products or at least do not work exclusively on red crab. On average, less than 13% of processing employees work exclusively on red crab.

Although we have reported four wholesale and/or processing entities, based on the survey and on what we know from contact with industry, we cannot substantiate that from dealer data. For calendar year 2000, there are four dealers that appear in the weighout reports, but they account for only 12% of the pounds and 15% of the revenue from red crabs. The remaining 88% of the pounds and 85% of the revenue is listed in the data as unknown dealer. Thus, there is a possibility that there are additional unpermitted dealers that are buying red crab. Since there is not mandatory reporting for lobster dealers (if that is the only permit they have), dealers that specialize in shellfish may also be buying red crab.

Communities engaged in fishery-dependent services

There is no information available directly on any fishery-dependent service industries that may be involved with the red crab fishery. The types of service industries used by the red crab fishery and their general locations were reported by some vessel owners and operators. The types of services used include fuel, ice, food and groceries, bait, gear, oil/lubrication, water, hull maintenance, engine maintenance, electronics, insurance, accounting, legal advice, and dockage.

The communities identified as providing fishing-related support services include Lower Mid-Coast Maine, Gloucester and the Massachusetts North Shore, Boston and the Massachusetts South Shore, Cape Cod and the Islands, the New Bedford, MA area, Rhode Island, some non-coastal areas of New England, and some areas outside of New England. Of these, the fishery-related service industries in the New Bedford, MA area provide more support to the red crab fishery than the other locations combined.

Communities where products were sold

The people and businesses that sell red crab product at the wholesale or retail level are an important component of the fishing industry and of fishing communities. These people and businesses may also be affected by regulations or by changing conditions in the fishery. The questions in this section of the survey were an attempt to collect information on the dependence on the red crab fishery of the people and businesses in this sector of the industry. These questions focused on the dependence of wholesalers and retailers on the red crab fishery, their employment, and the products they sell.

The only information available on the communities which buy red crab product from wholesalers and retailers was provided in the survey. Three respondents report selling between 60 and 100% of their red crab product to companies in the U.S. but not in New England; three report selling between 5 and 100% of their red crab product to companies in New England; and two report selling between 10 and 15% or their red crab product to foreign enterprises.

Red crab landings

According to NMFS dealer and VTR data, there were a total of twelve different ports where red crab were landed in calendar year 2000 where unique vessels were identified. Activity data for any port where the number of vessels was less than three are

confidential. Since there were no ports where greater than three vessels landed, there are no port level data that can be revealed. It is interesting to note that the increase in vessel activity suspected in 2001 is spread out to additional ports, as the preliminary data indicates a greater number of different ports where red crab was landed. Of the twelve vessels that we know landed red crab in 2000, eleven had permits to land additional species. Of the seven vessels that directed on red crab under the emergency action in 2001, five had permits to land other species in the Northeast region.

The use of mailing addresses may have a tendency to disperse fishing activity. All subsequent analysis will be based on either home port or principal port designations since they are assumed to be a more reliable indicator of locations where fishing activity may be based.

Communities with vessels that may qualify

Several different qualification criteria were considered for the Red Crab FMP. The number of vessels which may qualify for fishing under the limited access portion of the FMP varies depending on the criteria used. Table 17 reports the minimum number of fishing vessels that would be expected to qualify for a red crab controlled access program based on the range of options developed by the Council for the period prior to the control date. This minimum number varies from three to eight. Table 18 reports the minimum number of fishing vessels that would be expected to qualify for a red crab controlled access program based on the range of options developed by the Council for the one year following the control date. This number varies from four to seven. The potential number of communities that may be affected by this FMP in one manner or another is based on an upper and lower bound estimate of the number of qualifiers and non-qualifiers.

Although it seems likely that the Council will allow at least five vessels to qualify, the lower limit as listed in Table 17 is for three vessels. Based on the lower bound estimate of qualifiers, a total of three vessels would qualify. Only one of these vessels had a Northeast region permit and had filled out a 2000 permit application. Thus, there were no ports with at least four qualifiers by home or principal port, so the results cannot be shown.

An upper bound of 17 vessels has been estimated to qualify for participation in the red crab fishery, since that is the number that applied for a LOA under the emergency action. These vessels listed 12 different home ports and different principal ports on their 2000 permit application. Again, there were no ports with at least four qualifiers by home or principal port, so the results cannot be shown. Compared to the lower bound estimate of three vessels, an total of 11 additional home or principal ports may have at least one qualifying vessel.

Communities with vessels that may not qualify

The number of potential vessels which may qualify to fish for red crab under this FMP range from three to more than 17. Clearly, it is quite possible that some of those vessels who would like to fish for red crab may not be able to under the proposed

regulations. The upper bound number includes vessels which have recently entered the fishery, and also, perhaps, those that indicated an interest in possibly entering the fishery. Given that, the community impacts realized by these newer entrants or possible future entrants would be limited to changes that have been made to the community in the most recent past. The lower bound estimate of qualifiers provides an upper bound or "worst-case" assessment of potential non-qualifiers and the associated port or community impacts. For this reason, the analysis of impacts will be based on the lower bound estimate of qualifiers.

Based on the lower bound estimate of qualifiers, there would be 12 ports with a number of non-qualifiers. There are three out of the 17 vessels for which we have no homeport information. Again, activity data for any port where the number of vessels is less than three is confidential.

These 12 ports with vessels that may not qualify include New Bedford, Nantucket, Westport, Boston, Sandwich, and Swampscott, MA; Lubec, and Tenants Harbor, ME; Tangier, Norfolk and Posquoson, VA; and Seattle, WA.

Some of the ports with non-qualifiers were profiled in either McCay and Cieri (2000) or Hall-Arber et al. (2001). The following provides a brief summary of the importance of fishing in general and red crab fishing in particular.

New Bedford, MA

New Bedford, MA is important to the fishing industry and is consistently numbered among the top ports in the U.S. for the value of its commercial fishing landings. This is a community that is characterized by its involvement in the fishing industry. Since it is such a large fishing community, the importance of red crab relative to other fisheries is negligible.

Nantucket, MA

An island off New England, the local catch of fish and shellfish is quite diverse. While summer is a boom time for seafood production due to the tourist industry, the resident population maintains demand throughout the year. The importance of red crab relative to other fisheries is very minimal.

Westport, MA

Westport is a small estuarine port in southeastern Massachusetts. It is bordered by Fall River on the north and west, Dartmouth on the east, the Atlantic Ocean on the south, and Tiverton and Little Compton, RI, on the west. The town is home to approximately 30 fishing vessels, all of them being lobster vessels, who may supplement their income by dredging clams and quahogs. The importance of red crab to the town of Westport relative to other fisheries is very minimal.

Boston, MA

Boston, MA is an essential provider of fishing-related support services. Boston has a large number of seafood brokers as well as large seafood companies with fleets of trucks and major facilities. The fishing related business of red crab would be dwarfed by some of the other fishing activity that occurs in Boston. The importance of red crab relative to other fisheries is very minimal.

Sandwich, MA

A small fleet of commercial fishermen follow a long tradition of small-scale pursuit of lobster, shellfish, and finfish in Sandwich. Sandwich has a long history of fishing, due in part to the proximity of the Cape Cod canal which allows boats to bring in fish caught off the Cape to be processed and shipped to New Bedford, or sold in nearby fish markets. The importance of red crab relative to other fisheries is very minimal.

Swampscott, MA

Swampscott is located near Gloucester, MA, a major fishing port in the Northeast. There is no evidence that fishing is that important to the town of Swampscott, or that red crab has any significance to the town.

Lubec, ME

Lubec is the easternmost town in the United States. The most common species landed are scallops, sea urchins and lobster. According to state records, Lubec shows 53 lobster/crab licenses, 57 commercial shellfish licenses in addition to 43 scallop permits, 32 commercial fishing licenses, 42 urchin licenses, and a few minor species. Lobster fishing is a year-round fishery here, but is slower and more difficult in winter. The importance of red crab relative to other fisheries is very minimal.

Tenants Harbor, ME

Tenants Harbor is in Knox County, Maine. Lobster and herring are the dominant fisheries now, supplemented by shrimping, scalloping and urchin fishing in the winter. The importance of red crab relative to other fisheries is very minimal.

Tangier, VA

There is no information available on Tangier, VA.

Norfolk, VA

The commercial fishery of Norfolk, VA is a small inshore and bay fishery. Principal gears used are crab pots (55% of value), crab dredges (10%), clam tongs and rakes (4%), handlines (10%) and sink gill-nets (12%). Blue crabs make up nearly two-thirds of the value of Norfolk's catch (64%). Because red crab is a deep water, offshore species, it contributes little to this inshore fishing community.

Posquoson, VA

There is no information available on Posquoson, VA.

Seattle, WA

Since Seattle is not in the Northeast region, we have no information on the importance of fishing to this port in general. Because red crab is a species not found in the Northwest region, the importance of red crab fishing in particular to Seattle would be minimal.

These non-qualifiers had a total of 160 alternative permits. Lobster was the most frequent permit issued, with 22 permits issued. Bear in mind that any one vessel may have several different categories of lobster permits, such as trap area 1, trap area 2, or trap area 3. They also had permits for squid mackerel and butterfish, multispecies, dogfish, ocean quahog, sea scallop, herring, surf clam, bluefish, monkfish, black sea bass, summer flounder, tilefish, scup, and limited access scallop in decreasing order of magnitude.

Summary

There were a total of 19 names of places where some evidence of engagement in the red crab fishery was found. Unfortunately, due to a lack of mandatory reporting, it is not possible to reliably determine the level of engagement of these locations with respect to fishing in general or the red crab fishery in particular.

The controlled assess portion of the FMP may, due to the criteria established, exclude anyone that would like to enter the fishery in the future as well as exclude current participants that may not meet the qualification criteria. Non-qualifiers will not be able to land red crab in this region above the levels allowed under the proposed incidental catch limit, but may be able to fish for red crab in other regions of the country. Excluded vessels and the communities within which they are based may be affected by this restriction.

7.1.9 National Standard 9 -- Bycatch

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

Based on reports from members of the fishing industry, there is little bycatch of other species in the directed red crab fishery due to the nature of the fishing gear and operations of the directed fishery. The fishery operates in very deep water, distinct from the fishing grounds of most other managed species, is prosecuted using only selective red crab pots (these traps have the opening on the top and do not provide any barriers to egress by animals that enter the trap), and the catch is quickly sorted on the deck of the vessel, with all unwanted catch immediately returned to the sea with minimal handling. The Council intends to monitor any bycatch associated with the directed red crab fishery

and will consider management action to address bycatch if, at any time in the future, available information indicates that such action is warranted.

This FMP proposes to establish controls on the amount of red crab that can be landed as incidental catch by participants of other fisheries. The amount of allowable incidental catch is not currently believed to be significant, but the Council will monitor these landings and may adjust the incidental catch limit in the future if necessary. The Council also intends to monitor the bycatch of red crabs in other fisheries, most notably the deep-water monkfish fishery, to determine whether bycatch of red crabs and the associated bycatch mortality is significant. Depending on the amount and significance of red crab bycatch in other fisheries, the Council may consider taking appropriate actions to minimize this bycatch.

7.1.10 National Standard 10 -- Safety of Life at Sea

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

To the extent possible, this FMP is intended to minimize the dangers to human life at sea while achieving the conservation and management objectives of the plan. Fishing is an inherently dangerous occupation; participants must constantly balance the risks imposed by weather and other natural conditions against the potential economic benefits. A management plan should be designed to that it does not encourage dangerous behavior by the participants. Certain measures, such as the hard TAC, that could result in a "race to fish" (a derby-type fishery), could have had an adverse effect on the safety of human life at sea but were not selected by the Council, which decided instead to use a target TAC approach. Other measures proposed in this FMP, such as trip limits, trap limits, and DAS, are intended to reduce the potential for a derby-type fishery and, thus promote the safety of human life at sea. The potential impacts to the safety of human life at sea are discussed as part of the social impacts of each proposed management measure and alternative in Sections 5.3 and 5.4 of this FMP.

The conclusion of this analysis is that the management measures do not pose additional safety risks. No specific comments were received during public hearings on this issue, and no written comments were received that identified concern for the impact of the proposed measures on vessel safety.

7.2 Other Required Provisions

Section 303 of the Magnuson-Stevens 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, must comply with these provisions.

(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.

For a description of the proposed measures and management alternatives intended to conserve and manage the red crab fishery, including the prevention of overfishing, please see Section 4.0. Because this resource is not considered overfished, this FMP does not include a rebuilding plan or schedule. For a discussion of consistency with the National Standards, please see Section 7.1. For a discussion of the consistency of this FMP with other applicable law, please see Section 12.0.

(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.

For a description of the fishery, including the number and type of fishing vessels involved in the fishery, the type and quantity of fishing gear used, the resource species and its location and environment, and the other relevant issues, please see Section 8.3.

(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.

For a discussion of the maximum sustainable yield and optimum yield for this fishery, please see Sections 3.4 and 3.6. For a discussion of the probable future condition of the fishery, please see Section 8.1.5.

(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.

For a discussion of the capacity and extent to which U.S. fishing vessels are likely to harvest the annual optimum yield, the potential for foreign fishing to harvest a portion of OY, and the capacity of U.S. fishing processors to process OY, please see Section 8.3.3.

(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.

For a discussion of the reporting requirements proposed in the FMP, see Section 3.8.

(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 3.10 describes the proposed framework adjustment process and identifies the types of management measures that may be implemented through a framework adjustment to the Red Crab 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 3.7 describes the alternatives considered by the Council to identify essential fish habitat (EFH) for the red crab fishery. Section 8.2.3 describes the effects of the red crab fishery on EFH and the effects of other fisheries on the EFH of deep-sea red crab. Section 8.2.4 identifies red crab habitat conservation recommendations suggested by the Council. The Council did not developed management alternatives specifically to minimize any adverse effects of fishing on red crab EFH primarily because there are no known adverse effects at this time, and also because at least two of the management measures selected as part of the preferred alternative (trap limits and prohibitions on non-trap gear in the directed red crab fishery) were chosen in part because they minimize the potential for adverse effects in the future. If additional information is obtained in the future that suggests there are adverse effects on any EFH from the red crab fishery, then the Council will develop and consider management alternatives for minimizing, mitigating, or avoiding these adverse effects.

(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.

Section 2.4 identifies several important management issues related to the need for scientific data with which to effectively implement and monitor the effectiveness of the FMP. Section 9.0 identifies several specific research and information needs which would improve the Council's and NMFS' ability to effectively manage the red crab fishery and

ensure the sustainability of the resource.

(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 the Environmental Impact Statement 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 impacts on current fishery participants, impacts participants in other fisheries, impacts on small commercial fishing entities, impacts on seafood dealers, and impacts on relevant fishing ports. The fishery impact statement is included in Section 6.0 of this combined FMP document.

(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.

For a discussion of the proposed overfishing definitions and the criteria for identifying when the red crab fishery is overfished, see Section 3.5.

(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 the FMP, including requirements to report bycatch using the VTR forms and a proposed subsampling program, see Section 3.8.

(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 amendment proposes no recreational fishery management measures. There is no recreational fishery for deep-sea red crabs due to the depth of the water (greater than 320 meters) where red crabs occur and the gear necessary to harvest red crabs (e.g., red crab pots and large hydraulic pot haulers).

(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.

Sections 8.3 and 8.4 describe the various sectors which participate in the red crab fishery. Where possible, these sections also identify any trends evident in the landings of red crab by the fishery.

(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 red crab fishery. The commercial sector is the only sector involved in this fishery, 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 and/or charter fishing sectors of the fishery, should these sectors develop.