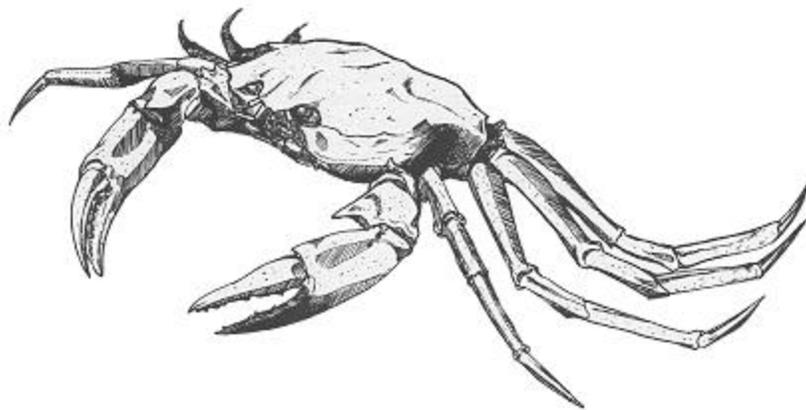

**Fishery Management Plan
for
Deep-Sea Red Crab
(*Chaceon quinquedens*)**

**Including an
Environmental Impact Statement, an
Initial Regulatory Flexibility Act Analysis, and a
Regulatory Impact Review**

Volume I



March 2002

**Prepared By
New England Fishery Management Council
50 Water Street, Mill 2
Newburyport, Massachusetts 01950**

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**Prepared by the
New England Fishery Management Council
50 Water Street, Mill 2
Newburyport, Massachusetts 01950
Phone: (978) 465-0492
Fax: (978) 465-3116**

**In consultation with the
National Marine Fisheries Service
Northeast Regional Office
One Blackburn Drive
Gloucester, Massachusetts 01930
Phone: (978) 281-9300**

**Draft EIS Submitted: November 13, 2001
Revised Draft EIS Submitted: November 17, 2001
Final EIS Submitted: March 19, 2002**

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Volume II

Appendices

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- Appendix B: Report on Social and Economic Baseline Information for the Atlantic Deep-Sea Red Crab Fishery
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Executive Summary

Background and Purpose

Background

On and off since the early 1970's, there has been a small directed fishery off the coast of New England and the Mid-Atlantic for the deep-sea red crab (*Chaceon quinque-dens*). The size and intensity of this fishery has varied somewhat over the years, but the fishery has always been small relative to the more prominent New England fisheries such as groundfish, sea scallops, and lobster. This fishery has never been regulated, either under federal or state jurisdiction. No management plan exists for the red crab fishery.

Faced with increasing landings and increased interest in the fishery from potential new entrants around the country, a group of fishermen approached the New England Fishery Management Council (Council) in late 1999 with a request that the Council manage red crab. In November 1999, the Council agreed to begin development of a new fishery management plan (FMP) for the deep-sea red crab fishery. In February 2000, the Council's Notice of Intent to Prepare an Environmental Impact Statement (EIS) was published in the *Federal Register*, officially beginning the Council's FMP scoping process (65 FR 4941). A control date was established for the red crab fishery by publication of the official notice in the *Federal Register* on March 1, 2000 (65 FR 11029). The control date allows the Council and NMFS to implement a controlled or limited entry system or some other program to differentiate historic participants from new entrants.

Faced with an increase in the number of vessels targeting the red crab resource, in January 2001, the Council requested that the Secretary of Commerce take emergency action to prevent overfishing in the red crab fishery while the Council continued to develop an FMP. On May 8, 2001, NMFS announced a set of emergency regulations designed to prevent overfishing, for a 180-day period effective May 18 - November 14, 2001 (66 FR 23182). The emergency regulations were extended for a second 180-day period, effective November 15, 2001 - May 14, 2002.

Statement of the Problem

This FMP is being developed in an attempt to address one primary problem and one secondary problem. All actions considered and proposed in this FMP are intended to be directly or indirectly related to solving one or both of these problems.

Overfishing the Red Crab Resource. The threat of overfishing the red crab resource is the primary problem needing management attention. Based on a comprehensive survey conducted when the fishable stock of this resource was considered to be in virgin condition, maximum sustainable yield (MSY) was originally estimated at 5.5 million pounds (Serchuk 1977). Commercial landings of red crab have exceeded this level several times since the development of the fishery.

Overcapitalization of the Red Crab Fishery. The potential for the directed red crab fishery to become overcapitalized is the secondary problem needing management attention. Determining the appropriate number and fishing power of the vessels in the directed red crab fishery is a problem that must take into account biological, economic, and social concerns.

Purpose and Need for Action

All the current information available on the deep-sea red crab and its fishery indicates that there is a limited MSY of approximately 6.24 million pounds and that four to six vessels fishing at existing levels of capacity represent the likely maximum amount of harvesting effort that can be sustained by the resource. The addition of new vessels, especially catcher-processor vessels with increased capacity, threatens not only the resource, but the viability of the established fishery. Even without any new entrants, overfishing is a potential threat. Anecdotal reports from the industry suggest that five vessels harvested more than seven million pounds of red crab in 2000, roughly 112% of the best current estimate of MSY.

Active management of this fishery is now needed to prevent overfishing and maintain a fishing fleet that is of an appropriate size and capacity for the resource. The New England Council has primary responsibility for managing this resource (NEFMC 1986). An FMP designed to address overfishing and fleet capacity will provide the Council and NMFS with the opportunity to manage this fishery in a sustainable manner that ensures a continuing and productive fishery for this unique resource.

Issues to be Resolved

Development and implementation of a management plan for the red crab fishery is intended to address a number of issues in addition to the problems previously identified.

- Status of the red crab stock
- Availability of data on the resource and the fishery
- Incidental catch and discards of red crabs in other fisheries
- Appropriate levels of fishing power
- Maintenance of consistent supply
- Compliance with marine mammal protection requirements
- Area of management jurisdiction
- Handling mortality

Fishery Management Program

Because this is a new FMP, there are many basic decisions to be made by the Council that affect the type and scope of the management program to be developed. These include decisions on the management unit for the FMP, the start of the regulatory

fishing year, considerations related to an estimate of commercial biomass and maximum sustainable yield, an overfishing definition, specification of optimum yield, the identification and description of essential fish habitat, and the extent of reporting requirements on the fishermen and seafood dealers. The Council is also considering establishing a framework adjustment process for this fishery to enable relatively rapid decision-making in response to changing conditions of the resource.

The only species included in the management unit for the Red Crab FMP will be the deep-sea red crab (*Chaceon quinque-dens*). Although the range of this species includes the South Atlantic and the Gulf of Mexico, the boundaries of the management unit, also called the management area, will be limited to the waters north of 35° 15.3' north latitude (the latitude of Cape Hatteras Light, North Carolina). The fishing year will start on March 1 of each year and end on the last day of February.

Maximum sustainable yield (MSY) for the portion of the red crab resource within the boundaries of the New England Council's management unit is estimated to be 6.24 million pounds. Consistent with the Magnuson-Stevens Act and the National Standard Guidelines, the overfishing definition for red crab will be as follows: (1) overfishing is defined as any rate of exploitation such that the ratio of current exploitation to an idealized exploitation under MSY conditions exceeds a value of 1.0; and (2) the red crab stock will be considered to be in an overfished condition if one of three conditions are met. Optimum yield (OY) is to be specified based on adjustments to MSY, and currently would be set at 95% of MSY, or 5.928 million pounds. The setting of OY at this level is intended to account for some degree of uncertainty associated with the calculation of MSY and the susceptibility of the resource to overfishing.

The 1996 amendments to the Magnuson-Stevens Fishery Conservation and Management Act, known as the Sustainable Fisheries Act (SFA), changed the focus of the Magnuson-Stevens Act by emphasizing the importance of habitat protection to healthy fisheries and by strengthening the ability of the National Marine Fisheries Service (NMFS) and the Councils to protect and conserve the habitat of marine, estuarine, and anadromous finfish, mollusks, and crustaceans. This habitat is termed "essential fish habitat" and is broadly defined to include "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." To comply with these provisions of the Magnuson-Stevens Act, the Council must, for each existing and new FMP, identify and describe the essential fish habitat (EFH) for each species managed under its jurisdiction. In addition to a text description of EFH for each major life stage of red crab, the spatial extent of EFH will be designated for each life stage based on known depth zone affinities. There are no habitat areas of particular concern (HAPCs) proposed for red crab at this time.

Federal permits will be required for all vessels who catch, possess, and/or land red crab in the Northeast U.S. EEZ. Two types of permits will be issued: (1) controlled access permits for vessels and operators qualified to participate in the controlled access directed fishery; and (2) open access incidental catch permits for all other vessels and operators who wish to land red crabs up to 500 pounds per fishing trip. Federal permits will also be required for all dealers who purchase red crab product from any vessel.

Reporting requirements will be implemented as follows: (1) interactive voice response (IVR) and vessel trip reports (VTR) will be required of all vessels participating in the controlled access directed fishery; (2) VTRs will be required of all vessels with an incidental catch permit; and (3) dealer weighout reports will be required of all dealers who obtain a Federal dealer permit. Vessel landings must be reported in whole weight of red crab, or its equivalent, utilizing the more appropriate of the two recovery rate conversion formulas if the crab is not landed whole. Dealer weighout reports must report red crab landings in the most appropriate market category. In addition to the required reporting, there will also be a voluntary sub-sampling program for vessels authorized to participate in the controlled access directed red crab fishery.

An annual specifications process for OY, TAC, DAS, etc., will be implemented for this FMP, as well as a framework adjustment process for certain adjustments to the management plan. Stock Assessments and Fishery Evaluation (SAFE) reports will be prepared by the PDT on a biennial basis. The PDT will review the most recent landings and effort data on an annual basis in order to provide the information necessary for the Council to recommend the specifications for the following fishing year.

Description of the Management Measures

The Council developed a range of management measures and alternatives intended to represent the most feasible measures and alternatives that could reasonably be expected to resolve the stated problems and achieve the FMP goals and objectives. Some measures, determined to be impracticable or to not meet the goals and objectives of the FMP, were removed from further consideration and not analyzed in this document. The “no action” alternative is considered to include no management action (i.e., the equivalent of having no FMP for this fishery). The “status quo” alternative is considered to include the management measures implemented through the emergency regulations. The management alternatives under consideration by the Council and described below were developed from a list of potential management measures. The full list of management measures proposed by the Council are identified below.

An incidental catch limit of 500 pounds per trip, in whole weight equivalent, will be implemented for all vessels holding an open access incidental catch permit. There will be a zero possession limit for any fishing vessel that does not have an open access incidental catch permit. There will be no minimum size regulated for this fishery at this time, although the Council reserves the right to implement a minimum size at any point in the future via a framework adjustment to the FMP. The retention and landing of female red crabs will be prohibited in the controlled access directed red crab fishery. For vessels fishing under the controlled access program there will be a small allowance for the incidental retention of female crabs. The allowance for females will be an amount not to exceed one standard U.S. fish tote per vessel per trip.

The FMP will prohibit the full processing of red crabs at sea by catcher-processor vessels, but allow butchering and partial processing at sea. Red crabs may only be landed whole or in half sections with the claws and legs attached. This prohibition will apply to all vessels that land red crab, either through the controlled access fishery or as incidental

catch. All vessels with a controlled access permit to fish for red crab will be subject to a pot limit of 600 red crab pots. The FMP will include the following restrictions and requirements for the fishing gear used in the red crab fishery: (1) the maximum allowable size of all traps used in the controlled access red crab fishery will be 18 cubic feet; (2) all buoys used at the end of each red crab trap trawl will be required to be marked as directed in the FMP; the use of parlor traps in the red crab fishery is prohibited; and all non-trap/pot gear will be prohibited in the controlled access red crab fishery.

Each fishing year, the landings in the red crab fishery will be counted against a target total allowable catch (TAC). The target TAC will be set annually through the annual specification process, equal to the most current estimate of optimum yield (OY) for the fishery, and may be readjusted based on any projected overage or underage expected for the current fishing year. All vessels holding a controlled access red crab permit fishing in the directed fishery will be subject to a possession/trip limit of red crab. The baseline possession limit for all controlled access vessels will be 75,000 pounds of whole red crab or their equivalent. If a vessel can show documented proof of a higher trip during the controlled access qualification period, then that vessel will qualify for a trip limit equal to the larger trip, rounded to the nearest 5,000 pounds.

Implementation of the Red Crab FMP will include a controlled access program for vessels that wish to participate in the directed red crab fishery and retain more than the incidental catch limit described above. In order to qualify for the controlled access program and receive a controlled access red crab fishing permit, vessels must demonstrate that their average annual landings of red crabs during the three years prior to the control date (March 1, 1997 - February 29, 2000) were greater than 250,000 pounds. Only red crabs harvested from and landed in the Red Crab FMP management unit will qualify for the controlled access program. Vessel transfer and upgrading restrictions will be implemented consistent with the Council's other FMPs.

Days-at-sea (DAS) will be allocated equally to all vessels authorized to participate in the controlled access fishery, based on the total number of DAS available to the fleet divided by the number of vessels with controlled access permits that have indicated their intent to participate in the fishery for the fishing year. All vessels authorized to receive a controlled access red crab permit must, on an annual basis, declare their intent to participate or not in the directed fishery for the next fishing year at least six months prior to the start of the fishing year. Any DAS allocated to a vessel in one fishing year could be carried over to the next fishing year, up to a maximum of 10 DAS or 10% of the total allocated DAS, whichever is less.

In the first year of FMP implementation (through February 28, 2003), each vessel authorized to participate in the controlled access directed fishery will be allocated a percentage of 130 DAS. For the first full fishing year, March 1, 2003 - February 29, 2004, each vessel authorized to participate in the controlled access directed fishery will be allocated 156 DAS, unless this allocation is changed under the FMP specification process. The target TAC for the first full fishing year will be 5,928,000 pounds of whole red crab or their equivalent. It is the intent of the FMP that DAS will be counted as a whole day (24 hours). Any portion of a day on which a vessel is out of port will count as a full DAS.

Description of the Impacts of the Management Alternatives

Impacts of the Preferred Alternative

Direct and Indirect Impacts

This alternative would implement many of the same measures as other alternatives but the principle mechanism to control effort in the fishery would be the use of vessel days-at-sea (DAS). The objective of the alternative would be to allow the appropriate number of DAS to harvest, but not exceed, the target TAC. The effectiveness of this alternative is not directly dependent on the number of vessels participating, but on the calculation of the total number of days that would allow for the target catch to be landed. If the additional measures (especially trap limits) were not used as limiting factors, this alternative has potential to have one of the higher levels of net benefits, since it allows for the market to control production. As long as other measures are not introduced to effect the behavior of vessels, they will be able to maximize their outputs from a given level of inputs, assuming the biomass increases over time.

Incidental catch limits will prevent excessive red crab landings by vessels from other fisheries. Trap limits can limit catch rates and gear restrictions can allow small red crabs to escape from traps. A target TAC with reporting requirements for each trip will reduce the probability of overfishing. Reporting requirements will also support monitoring and enforcement.

Controlled access will limit the number of vessels harvesting red crab and make it easier to monitor total landings. A trip limit and a limit on days-at-sea per vessel can serve along with the target TAC to control fishing effort, catch per trip, and annual catch. These will tend to spread out the effort, because each vessel in the fishery will be assured of a certain amount of time to fish (days-at-sea) and, assuming the trip limit is low enough, numerous trips will be necessary to land the target TAC. Spreading out the catch over time is probably less of a disturbance to the red crab population, especially to the mating system. From society's point of view, this means there is a reduction in the accumulation of excess capital and lower costs. Those other resources (who are not in the fishery) can be directed elsewhere. This alternative allows greater continuity of effort and supplies to the market and avoids negative responses to short term fluctuations. Historic participants may be able to remain in the fishery, even if they have to operate in a less efficient manner.

Because the calculation of days-at-sea is indirect, the realized catch after one year using all the days-at-sea might over- or under-shoot the target TAC. This is different from a hard TAC, where the fishery closes as soon as the hard TAC is taken. It is expected that if both a target TAC and days-at-sea are implemented, the target TAC will have to be adjusted each year to account for the previous year's difference between the realized and target catch. Choosing the appropriate number of days-at-sea to achieve the target TAC will be more difficult if there are changes over time in fishing gear, hold capacity, or other fishing regulations (e.g., trip limits).

This alternative would prevent a derby fishery if the initial allocation of DAS is set correctly. The continuous annual adjustment in target TAC enables management of the resource to respond to changes in stock condition without a costly and timely management process. A high degree of flexibility is afforded to participants in the fishery concerning when and how long to fish. Processors will be assured of a steady supply of fresh product.

Butchering/processing restrictions are expected to have positive social impacts on the fishermen involved in the directed red crab fishery unless the most restrictive option, a total prohibition on all butchering and processing at sea, is selected. The gear requirement options offer potential social benefits, resulting from the proposed prohibition on all fishing gear other than traps. A controlled access system will provide positive social impacts on the vessels authorized to participate in the directed red crab fishery. Days-at-sea (DAS) limits are expected to provide positive social benefits to the fishermen involved in the directed red crab fishery by preventing a derby fishery and allowing them more flexibility and stability, while reducing uncertainty. Overall, implementing a management program for the red crab fishery that reduces the probability of overfishing and reduces the likelihood of the fishery becoming overcapitalized will have an overall positive effect on the social and cultural aspects of the fishery.

The Council has 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 in part chosen because they minimize the potential for adverse effects in the future. If 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.

The only management measures under consideration with any potential relevance to impacts to the EFH of any managed species that may be associated with the directed red crab fishery are the proposed trap limits and the proposed gear restrictions. Both of these measures are proposed in this alternative as well as in Alternative 1, the emergency action baseline. Thus, there are no expected differences between this management alternative and the first baseline. The no action alternative, Alternative 10, by definition would not include any type of trap limit or gear restrictions. This alternative is less likely to result in any impacts to EFH than is the no action alternative, thus this alternative is expected to have a more positive effect on the EFH of managed species than would the no action baseline.

Cumulative Impacts

There are no adverse cumulative impacts to the red crab resource, the directed red crab fishery, or any other fisheries expected as a result of the actions proposed in this FMP. Implementing a management program for the red crab fishery that reduces the probability of overfishing and reduces the likelihood of the fishery becoming

overcapitalized will have an overall positive effect on the economic, social and cultural aspects of the fishery, as well as on the resource.

Magnuson-Stevens Act Consistency

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

Description of the Resource and the Affected Environment

This section of the Red Crab FMP provides a description of the life history characteristics, distribution, abundance, and ecological relationships of the species for which this management plan is being developed, the deep-sea red crab. This section also describes the habitat of the species, including the physical environment, habitat condition, threats to habitat, and habitat conservation recommendations to protect red crab habitat.

In addition to the biological and physical descriptions identified above, this section of the FMP includes a description of the fishery, including the history of exploitation, the fishing gear, and domestic and foreign fishing activities. The FMP identifies and characterizes the baseline conditions of the social and cultural entities involved in the fishery, including vessel owners/operators, vessel crew, processors, fishery-dependent service industries, and fishing communities. This section of the FMP also describes the baseline economic characteristics of the fishery, including that of the harvesting sector, the processing sector, the wholesale and retail sector, fishery-dependent service industries, and the markets for red crab.

This section of the FMP also identifies and describes the protected species (under the Endangered Species Act and the Marine Mammal Protection Act) that may be affected by either the red crab fishery or actions taken under this FMP.

Social Impact Assessment

Consideration of social impacts is a growing concern as fisheries experience increased participation and/or declines in stocks. With an increasing need for management action, the consequences of such changes need to be examined in order to mitigate the negative impacts experienced by the populations concerned. The social impact analysis and assessment conducted for the Red Crab FMP employed the use of specific social impact factors that were evaluated for each management measure and alternative under consideration. The social impact factors were developed based upon identified issues that affect fishermen and their communities (NEFMC 2000a), and included (1) changes in occupational opportunities; (2) changes in community infrastructure; (3) safety; (4) support for the management program; and (5) flexibility, stability, and uncertainty. Overall, implementing any management program for the red crab fishery that reduces the probability of overfishing and reduces the likelihood of the fishery becoming overcapitalized will have a positive effect on the social and cultural

aspects of the fishery.

Regulatory Impact Review and Initial Regulatory Flexibility Act Analysis

Uncertainty about the status of the red crab stock, as well as the uncertainty inherent in the data has limited the probability with which we can predict the potential outcomes of the various alternatives. One of the most positive outcomes from this FMP will be the collection of data that will reduce the uncertainty about the future of the resource and its management. The preferred alternative is ranked above most others given that the selection must end likely increases in overcapacity, deal with a control date, have a transition period prior to the implementation of the regulations, and provide an operating environment similar to what has gone on historically.

Relationship to Applicable Law

This draft fishery management plan has been prepared primarily in response to the requirements of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). It also addresses requirements of the Marine Mammal Protection Act and the Endangered Species Act. However, these are not the only laws and administrative orders that the Council must consider in developing an FMP. In preparing a fishery management plan, the Council must comply with requirements of the National Environmental Policy Act (NEPA), the Regulatory Flexibility Act (RFA), the Administrative Procedures Act (APA), the Paperwork Reduction Act (PRA), the Coastal Zone Management Act, and Executive Orders 12612 (Federalism), 12630 (Property Rights), 12866 (Regulatory Planning), and 13158 (Marine Protected Areas). These other applicable laws and administrative orders help ensure that, in developing an FMP, the Council considers the full range of alternative actions and their expected impacts on the marine environment, living marine resources, and the human communities that could be affected.

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1.0 Introduction

This fishery management plan (FMP) initiates a management program for the deep-sea red crab fishery located off the coast of the Northeast United States by the New England Fishery Management Council (Council), in partnership with the National Marine Fisheries Service (NMFS). This FMP is being developed according to the Magnuson-Stevens Fishery Conservation and Management Act, the primary domestic legislation governing management of the nation's marine fisheries and resources. In 1996, Congress passed the Sustainable Fisheries Act, which amended and reauthorized the Magnuson-Stevens Act and included a new emphasis on precautionary management in U.S. fishery management policy. New provisions of the Magnuson-Stevens Act require managers to stop overfishing and rebuild overfished fisheries; to minimize bycatch and bycatch mortality to the extent practicable; and to identify and protect essential fish habitat (EFH).

Although this draft fishery management plan has been prepared primarily in response to the requirements of the Magnuson-Stevens Act, it also addresses requirements of the Marine Mammal Protection Act and the Endangered Species Act. However, these are not the only laws and administrative orders that the Council must consider in developing an FMP. In preparing a fishery management plan, the Council must comply with requirements of the National Environmental Policy Act (NEPA), the Regulatory Flexibility Act (RFA), the Administrative Procedures Act (APA), the Paperwork Reduction Act (PRA), the Coastal Zone Management Act, and Executive Orders 12612 (Federalism), 12630 (Property Rights), 12866 (Regulatory Planning), and 13158 (Marine Protected Areas). These other applicable laws and administrative orders help ensure that, in developing an FMP, the Council considers the full range of alternative actions and their expected impacts on the marine environment, living marine resources, and the human communities that could be affected. This integrated Red Crab FMP document contains all elements of the Fishery Management Plan and the Environmental Impact Statement (EIS) (which is required by NEPA).

1.1 Proposed Management Measures

The Council has proposed that the following management measures be implemented for the Red Crab FMP:

1.1.1 Fishery Management Program

- a. The only species included in the management unit for the Red Crab FMP will be the deep-sea red crab (*Chaceon quinque-dens*). Although the range of this species includes the South Atlantic and the Gulf of Mexico, the boundaries of the management unit, also called the management area, will be limited to the waters north of 35° 15.3' north latitude (the latitude of Cape Hatteras Light, North Carolina), bounded by the coastline of the continental United States in the west and north and the Hague Line and seaward extent of the U.S. exclusive economic zone (EEZ) in the east.

Rationale: This is a single-species fishery with little to no interaction and/or bycatch of other managed or non-managed species; therefore only the target species need be included in the management unit. The proposed boundaries reflect the traditional extent of the red crab fishery in the Northeast U.S., are consistent with prior action taken by the Secretary of Commerce (the Emergency Regulations), incorporate a well-known biogeographic boundary (Cape Hatteras, NC), and are consistent with other New England Council FMPs. The other options considered by the Council would have arbitrarily split the traditional fishing area into a managed area and an area subject to no management.

It would not be practicable to manage this resource throughout its entire range, which would overlap not only the jurisdiction of the South Atlantic Fishery Management Council, but the Gulf of Mexico Council as well. Since what we are actually managing with this FMP is the red crab *fishery*, which in the Northeast is limited to the area north of Cape Hatteras, NC, this is the most appropriate boundary for the management unit. The Gulf of Mexico Council is developing an FMP to manage deep-water crabs including red crab, but this fishery is economically and geographically distinct from the red crab fishery in the Northeast. Red crab is not a major component of the South Atlantic Council's golden crab fishery.

- b. The fishing year will start on March 1 of each year and end on the last day of February.

Rationale: The proposed start of the fishing year reflects traditional fishing practices and is prior to times of relatively higher effort and landings. The timing of the fishing year is anticipated to reduce the margin of error associated with projections made about future fishing years, and is consistent with other Council FMPs (e.g., Sea Scallop FMP) which reduces the administrative burden on NMFS. Although a somewhat arbitrary decision, of all the possible fishing year start dates, March 1 makes the most sense. It is the same start date as for another Council FMP and it reflects the time after which the cumulative landings for the first six months of the fishery are expected to be the highest.

- c. Maximum sustainable yield (MSY) for the portion of the red crab resource within the boundaries of the New England Council's management unit is estimated to be 6.24 million pounds, based on the following conditions:
 - (a) The biomass of male crabs only was considered in the estimation of MSY.
 - (b) Adult red crabs are assumed to recruit to the fishery when they reach 4" in carapace width.
 - (c) For the purpose of calculating MSY, the natural mortality rate is assumed to be 0.15.

Rationale: The red crab fishery traditionally targets, retains, and lands only relatively large male crabs. The Red Crab FMP will prohibit the retention and

landing of female crabs in the directed fishery operating under the controlled access program. The traditional fishery only retains and lands large crabs and market constraints limit the acceptance of small crabs. A four inch carapace width is considered to be the smallest crab that would be retained by a vessel and accepted by the market. Although there is very little information on the natural mortality rate of red crabs, scientific information on similar species suggests that 0.15 is a satisfactory estimation. This estimate of MSY reflects the best available information on the biology of this resource species.

- d. The overfishing definition for red crab will be as follows:
- (a) Overfishing is defined as any rate of exploitation such that the ratio of current exploitation to an idealized exploitation under MSY conditions exceeds a value of 1.0. The actual measure of exploitation used will be determined by the availability of suitable data (CPUE data, landings, etc.).
 - (b) The red crab stock will be considered to be in an overfished condition if one of the following three conditions are met:
 - Condition 1 -- The current biomass of red crab is below $\frac{1}{2} B_{msy}$ in the New England Council's management area.
 - Condition 2 -- The annual fleet average CPUE, measured as marketable crabs landed per trap haul, continues to decline below a baseline level for three or more consecutive years.
 - Condition 3 -- The annual fleet average CPUE, measured as marketable crabs landed per trap haul, falls below a minimum threshold level in any single year.

Rationale: This overfishing definition allows for the collection of different types of information which may then be used for status determinations (fishery landings, fishing effort and CPUE, survey data, etc.) depending the best information available at the time. The proposed overfishing definition offers the most flexibility to the Council and NMFS and guarantees that some information will be available with which to make a status determination. This overfishing definition incorporates the recommendation of the Council's SSC.

- e. Optimum yield (OY) is to be specified based on adjustments to MSY, and currently would be set at 95% of MSY, or 5.928 million pounds. The setting of OY at this level is intended to account for some degree of uncertainty associated with the calculation of MSY and the susceptibility of the resource to overfishing.

Rationale: This alternative was the most representative of the intent of OY as described in the Magnuson-Stevens Act and theoretically accounts for all factors required by the Act. This alternative provides flexibility to the Council to change the specification of OY as new information becomes available, but also accounts for some uncertainty associated with the available information.

- f. In addition to a text description of essential fish habitat (EFH) for each major life

stage of red crab, the spatial extent of EFH will be designated for each life stage based on known depth zone affinities, as follows:

- (1) Egg EFH = the known depth range of egg-bearing adult female red crabs
- (2) Larval EFH = the total known depth range for all life stages of red crabs
- (3) Juvenile EFH = the known depth range of juvenile red crabs
- (4) Adult EFH = the known depth range of adult red crabs

Rationale: The text description of EFH is based on the best available scientific information about the species, as required in the NMFS EFH guidelines (67 FR 2343). The use of depth zone affinities as the principal method of designating EFH incorporates the best available information about the species, in light of the near complete absence of relative abundance data from the NMFS trawl survey (the typical data source for EFH designations). This method can be used to differentiate among the life stages. No habitat areas of particular concern (HAPC) have been proposed for this species. The information currently available to the Council suggests no areas or habitat types identified as EFH for red crabs meet any of the criteria for an HAPC.

- g. Federal permits will be required for all vessels who catch, possess, and/or land red crab in the Northeast U.S. EEZ. Two types of permits will be issued:
 - (a) controlled access permits for vessels and operators qualified to participate in the controlled access directed fishery; and
 - (b) open access incidental catch permits for all other vessels and operators who wish to land red crabs up to 500 pounds per fishing trip.

Federal permits will also be required for all dealers who purchase red crab product from any vessel. All vessels who qualify and are authorized to participate in the controlled access directed fishery will also be allowed to fish under the open access incidental catch rules when they are not fishing on a directed red crab trip (i.e., on a red crab DAS). All vessels authorized to receive a controlled access red crab permit must, on an annual basis, declare their intent to participate or not in the directed fishery for the next fishing year at least six months prior to the start of the fishing year. The initial issuance of a controlled access permit assumes the intent to fish in the first year; the declaration requirement will only apply to permit renewals. Vessels and operators will have 180 days from the effective date of the regulations to apply for their initial controlled access permits. Vessels who fail to renew their permit for a fishing year will be ineligible to renew their permits in subsequent years.

Rationale: Permits provide a necessary mechanism to track fishery participants, ensure compliance with regulations, and monitor fishing activity. Permits are necessary for the controlled access program to ensure that only those vessels so qualified are engaging in this fishery at more than incidental catch levels. Permits are necessary for the incidental catch fishery to monitor overall effort levels and

numbers of participants, and to ensure compliance with reporting requirements. Permits are necessary for dealers to ensure compliance with reporting requirements.

The requirement for vessels to renew their permits on an annual basis or be prohibited from renewing in the future is an important restriction for two reasons. First, all other limited access fisheries are constructed with this requirement and, to be consistent, the red crab fishery should include this as well. Second, strictly speaking, this is intended to be a “controlled access” system, whereby the Council may consider allowing additional or new vessels entry into the fishery at some point in the future. One mechanism for the Council to determine that a new vessel may be allowed into the fishery is if one vessel with a controlled access permit exits the fishery. If a vessel fails to renew their controlled access permit, this would be interpreted by the Council as a signal that they have exited the fishery. The Council would then initiate a process to allow a new vessel into the fishery, but this can only work if the Council is assured that the exiting vessel would not be able to renew their permit at some point in the future when they decide to re-enter the fishery.

The requirement for vessels to declare their intent prior to each fishing year allows the Council, working with NMFS, to adjust the annual allocation of DAS based on the expected number of vessels that will actually participate in the fishery. This is an important consideration due to the small number of vessels that will be involved in this fishery. Because only five vessels may qualify for controlled access permits, each vessel would be allocated 20% of the total available fleet DAS. If one vessel declares out of the fishery for a year, that increases the DAS allocated to each remaining vessel by 25% (e.g., if each of 5 vessels gets would allocated 200 DAS of a total 1000 fleet DAS, and 1 vessel declares out, each of the remaining 4 vessels would get an additional 50 DAS, or 25% of their initial 200 DAS allocation). Although this type of declaration requirement is not standard with other DAS programs, it is important in this fishery in order to achieve OY on a continuing basis.

- h. Reporting requirements will be implemented as follows:
- (a) Interactive voice response (IVR) and vessel trip reports (VTR) will be required of all vessels participating in the controlled access directed fishery.
 - (b) VTRs will be required of all vessels with an incidental catch permit.
 - (c) Dealer weighout reports will be required of all dealers who obtain a Federal dealer permit.

Vessels participating in the controlled access fishery will be required to utilize the IVR call-in system to report their total landings within 24 hours of the termination of each fishing trip during which they land any amount of red crab. Both controlled access vessels and open access incidental catch vessels will be required to complete and submit one or more VTRs for each fishing trip, regardless of

whether they land any red crab on that trip. VTRs may be submitted on a monthly basis, postmarked not later than 15 days after the end of each reporting month. All dealers with a red crab dealer permit will be required to complete and submit a weekly dealer report. VTRs and dealer reports must be submitted on forms provided by or approved by the NMFS Regional Administrator. If authorized in writing by the Regional Administrator, the form(s) may be submitted electronically or through other media.

Vessel landings must be reported in whole weight of red crab, or its equivalent, utilizing the more appropriate of the two recovery rate conversion formulas if the crab is not landed whole:

- (1) 58% of whole to butchered crab, or 1.72 to 1, for fully cleaned crab sections that have had the gills and other detritus removed; or
- (2) 64% of whole to butchered crab, or 1.56 to 1, for crab sections with all or the majority of the gills retained.

Recovery rate #1 applies to red crab that is partially processed at sea, as defined in the FMP, and recovery rate #2 applies to red crab that is butchered at sea, as defined in the FMP. Dealer weighout reports must report red crab landings in the most appropriate market category. The market categories will be as follows:

- (1) Whole Red Crab -- red crab is landed whole, either live, on ice, or frozen;
- (2) Butchered Red Crab -- red crab is landed in half sections, with the claws and legs retained, with all or the majority of the gills intact; or
- (3) Partially Processed Red Crab -- red crab is landed in half sections, with the claws and legs retained, cleaned with the gills removed, and one or more of the following: cooked, frozen, or glazed.

In addition to the required reporting noted above, there will also be a voluntary sub-sampling program for vessels authorized to participate in the controlled access directed red crab fishery. Red crab vessels which choose to participate in the sub-sampling data collection program will be asked to count and record the complete catch, including juveniles of both sexes, of at least one trap per trap trawl hauled on a fishing trip in which they are participating in the voluntary program.

Rationale: Timely reporting of landings is necessary to monitor the fishing effort and the effectiveness of the management measures. The IVR system will be used to track near-real time landings in the fishery to ensure that the Council and NMFS always have the most complete and current data available on the fishery. The VTRs required of the controlled access participants will be used to monitor catch-per-unit-effort (CPUE), monitor areas fished, bycatch and discards, and other information necessary to adequately monitor the effectiveness of the management measures. The VTRs required of the incidental catch fishery participants will be used to monitor this segment of red crab landings. The dealer

reports are necessary to verify landings reports. The voluntary sub-sampling program offers the opportunity to collect important information on the overall red crab population and other relevant information about the red crab fishery.

- i. An annual specifications process for OY, TAC, DAS, etc., will be implemented for this FMP, as well as a framework adjustment process for certain adjustments to the management plan. Stock Assessments and Fishery Evaluation (SAFE) reports will be prepared by the PDT on a biennial basis. The PDT will review the most recent landings and effort data on an annual basis in order to provide the information necessary for the Council to recommend the specifications for the following fishing year.

Rationale: The annual specifications process provides the most streamlined and efficient mechanism to make relatively minor adjustments to certain aspects of the management program, specifically the amount of target TAC available to the fishery and the number of DAS to be allocated to each vessel authorized to participate in the controlled access fishery. More significant, but still relatively minor, changes to the management program, such as implementing a minimum size, changing the incidental catch limit, adjusting trap limits or gear requirements, among others as specified in the FMP, can be implemented via a framework adjustment to the FMP. SAFE reports prepared biennially by the Council's Red Crab PDT with the assistance of NMFS will be used by the Council and NMFS to monitor the effectiveness of the FMP and changes in the fishery and its participants that result from the management measures.

1.1.2 Specific Management Measures

- a. An incidental catch limit of 500 pounds per trip, in whole weight equivalent, will be implemented for all vessels holding an open access incidental catch permit. There will be a zero possession limit for any fishing vessel that does not have an open access incidental catch permit.

Rationale: One of the Council's goals for the Red Crab FMP was to allow "all fishermen the continued opportunity to land appropriate amounts of red crab as bycatch." This measure would enable all fishermen who so choose to obtain an open access incidental catch permit and retain up to 500 pounds of red crabs per fishing trip. While this measure may affect some fishermen who occasionally retained more than 500 pounds, this level allows a larger than average incidental catch (the average incidental catch was approximately 400 pounds per trip), and would not have affected nearly 75% of the trips taken during 1998 - 2000. This measure is necessary to ensure that the amount of red crab that may be harvested by an uncontrolled number of incidental catch vessels making an uncontrolled number of fishing trips does not exceed an amount that can be absorbed by the resource while sustaining a directed fishery.

- b. The retention and landing of female red crabs will be prohibited in the controlled access directed red crab fishery. For vessels fishing under the controlled access

program there will be a small allowance for the incidental retention of female crabs. The allowance for females will be an amount not to exceed one standard U.S. fish tote per vessel per trip.

Rationale: Prohibiting the retention and landing of female crabs in the directed fishery puts into regulation what has been a common fishing practice and is, in fact, already a market requirement. This measure would protect the reproductive capacity of female red crabs. This measure only affects the directed red crab fishery because they have the capability to quickly sort red crabs harvested in their traps and to return female crabs to the water almost immediately. The measure does not affect the incidental catch vessels because the Council does not want to provide any incentive to these fishermen to seek any more than the first 500 pounds of red crab that they harvest. The allowance for the incidental retention of female crabs by the controlled access vessels allows these fishermen to continue current fishing practices and represents a very small fraction of the total crabs retained and landed on each fishing trip (i.e., one standard U.S. fish tote is estimated to equate to roughly 100 pounds, which would be approximately 0.13% of the 75,000 pound trip limit).

- c. There will be no minimum size regulated for this fishery at this time, although the Council reserves the right to implement a minimum size at any point in the future via a framework adjustment to the FMP.

Rationale: The minimum size of crabs currently harvested is approximately 4” carapace width and this size is maintained by market constraints. Implementing a regulated minimum size of 4” carapace width at this time would be redundant with existing market constraints and would significantly complicate enforcement and increase the administrative burden both on NMFS and the fishing industry. The Council intends to monitor the size of crabs landed via a requested port sampling program and retains the ability to implement a minimum size via a framework adjustment if the average size of landed crabs begins to decline and/or if the number of crabs smaller than 4” carapace width increases.

- d. The FMP will prohibit the full processing of red crabs at sea by catcher-processor vessels, but allow butchering and partial processing at sea. These are defined as follows:

(1) *Processing, or to process*, with respect to the Atlantic deep-sea red crab fishery, means:

- (a) For full processing, the removal of meat from the body and/or legs of a red crab and any preparation of the meat that follows, including but not limited to cleaning, freezing, cooking, and/or glazing. (This is prohibited.)
- (b) For partial processing, the splitting or cutting of crabs in half along the length of the carapace, removal of the carapace, and any preparation of the crab that follows, including but not limited to cleaning, freezing,

cooking, and/or glazing. (This is allowed.)

- (2) *Butchering*, with respect to the Atlantic deep-sea red crab fishery, means the splitting or cutting of crabs in half along the length of the carapace, removal of the carapace, and storing of the crab sections on ice.

Red crabs may only be landed whole or in half sections with the claws and legs attached. This prohibition will apply to all vessels that land red crab, either through the controlled access fishery or as incidental catch. Vessels with an incidental catch of red crabs must have no more than two claws and eight legs per crab on-board their vessel. The maximum allowance for red crab claws and legs separate from crab bodies for vessels participating in the controlled access fishery will be equal to the amount necessary to fill one standard U.S. fish tote per vessel per trip. This is expected to be roughly 100 pounds. This allowance only applies to the controlled access fishery and is only intended to account for incidental and unintended loss of claws and legs during normal fishing and handling operations.

Rationale: These restrictions would allow the current practices of vessels involved in the red crab fishery to continue, while prohibiting any expansion of processing at sea activities. Vessels currently outfitted to butcher and/or partially process crabs at sea would not have to change their fishing practices. This measure should have no impact on the red crab industry, and will allow the male-only restriction to be administered and enforced. The sex of the crabs can be discerned either by the shape of the tail flap on whole crabs, or by the outline of the tail flap on crabs that have been butchered and/or partially processed. The requirement to land crabs either whole or in half sections with the legs and claws intact is intended to remove any incentive and prevent the harvesting of red crab for their claws and/or legs alone. The proposed allowance for the controlled access vessels recognizes that accidental claw and/or leg loss may occur during normal fishing operations and handling.

- e. All vessels with a controlled access permit to fish for red crab will be subject to a pot limit of 600 red crab pots. This measure will be managed and enforced via a requirement for each vessel to declare, on their annual permit application, the maximum number of traps they use per string and the maximum number of strings they employ in their fishing operations, such that the product of the maximum number of traps per string and the maximum number of strings declared by the vessel is no more than 600 traps. If on a red crab trip (on a red crab DAS and more than the incidental catch limit of red crab on board) no vessel may haul any fishing gear other than red crab gear, marked as required according to the gear marking requirements.

Rationale: A limit of 600 traps per vessel reflects current fishing practices and is consistent with the NMFS emergency regulations, so this measure should have no impacts to red crab fishing vessels involved in the directed fishery. This measure is intended to prevent an increase in the number of traps used in the red crab fishery. Because the fishery will be managed via effort controls (principally through DAS limits), any method by which a vessel can increase their efficiency

per day of fishing has the potential to subvert the effort controls intended to ensure a sustainable fishery. Increasing the number of traps used is one technique that could be used to increase a vessel's efficiency; this measure, in conjunction with the maximum trap size described below, maintains the relative fishing power of all vessels to be roughly equivalent to existing levels. It is not the intent of the Council to limit the ability of red crab vessels to participate in other fisheries; thus, the trap limit is only intended to constrain the gear used in the red crab fishery.

- f. The FMP will include the following restrictions and requirements for the fishing gear used in the red crab fishery:
- (1) Escape vent. There will be no requirement for an escape vent required at this time. If scientific information is provided indicating that an escape vent is warranted, and sufficient information is available to determine the appropriate size for an escape vent, either the Council or the NMFS Regional Administrator may implement measures to require a specified escape vent.
Rationale: The intent of a requirement for an escape vent in a trap fishery is to reduce the probability of undersized crabs being retained in the traps and subject to increased mortality due to handling during fishing operations. Although the Council intends to implement an escape vent requirement for all fishing gear used in the directed red crab fishery, there is not sufficient information available at this time to determine the specific size and dimensions that the escape vent should be. There is also not sufficient information for the Council to determine the need for an escape vent in this fishery. The design of the traps currently used in the fishery may reduce or eliminate the need for an escape vent.
 - (2) Maximum trap size. The maximum allowable size of all traps used in the controlled access red crab fishery will be 18 cubic feet. All traps used in the controlled access fishery must be either rectangular/trapezoidal or conical, but new trap designs may be approved by the Regional Administrator provided the volume of the new trap design does not exceed the maximum limit established by the Council.
Rationale: Restricting traps used in the red crab fishery to a maximum size prevents any future increase in trap size, constraining trap efficiency to current levels. Eighteen cubic feet was selected as the maximum allowable volume to allow for some margin of error in the traps currently being used and was based on rounding the larger of the two calculated trap volumes to the nearest cubic foot. This measure, in conjunction with the trap limit described above, serves to prevent a potential increase in the per day efficiency of fishing vessels fishing under a DAS limit program.
 - (3) Gear markings. The following will be required on all buoys used at the end of each red crab trap trawl:
 - (a) "RC" should be painted on the top of each buoy to clearly indicate red crab fishing gear;

- (b) the vessel's permit number should be painted on the side of each buoy to clearly indicate the vessel and to allow for verification that it is authorized to participate in the controlled access fishery;
- (c) the number of the trap trawl relative to the total number used by the vessel (i.e., "3 of 6") should be painted on the side of each buoy as well;
- (d) all letters and numbers painted on buoys should be at least three inches in height to be clearly visible by U.S. Coast Guard and other vessels; and
- (e) high flyers and radar reflectors will be required on each trap trawl.

Rationale: Gear markings are necessary to identify fishing gear being used in the red crab fishery. The proposed gear markings would allow the administration and enforcement of the trap limit. These proposed gear marking requirements are consistent with current marking practices in the red crab fishery.

- (4) Parlor traps. The use of parlor traps in the red crab fishery is prohibited. A parlor trap is a trap with two or more compartments within the trap that are intended to make it more difficult for animals to escape from the trap. A red crab trap must therefore have only one compartment within the trap and that compartment must not be divided into sections with barriers that impede the free movement of crabs within the trap. A red crab pot is not to have any form of chamber or partition in the pot which is capable of containing red crabs other than that formed by the external frame of the pot.

Rationale: Parlor traps improve the ability of traps to retain crabs over a longer time. Thus the use of parlor traps could increase fishing effort, particularly if accompanied by a change in fishing strategy, such as longer soak times. Parlor traps would likely increase the productivity of traps when they are left on the fishing grounds between trips. Because the current traps do not prevent the escape of crabs from the trap, many of the crabs that might enter the traps during the period between trips are gone before the vessel returns to haul the traps on the next trip. Parlor traps would create a concern about "ghost" fishing if traps are lost. Lost traps do not present a ghost fishing problem at present because the crabs can escape from the traps. Parlor traps would be more likely to cause handling damage to crabs. This would lower product quality for the marketable crabs that were kept and increase mortality for the crabs that are released alive.

- (5) Non-trap gear. All non-trap/pot gear will be prohibited in the controlled access red crab fishery, such that any vessel holding a controlled access red crab permit may only utilize crab pots, subject to the restrictions and requirements identified above, to fish for red crab or on any trip during which they are fishing on a red crab DAS. Vessels holding an open access red crab incidental catch permit may use any type of fishing gear they choose.

Rationale: Prohibiting non-trap fishing gear (principally otter trawl and dredge gear) in the controlled access directed red crab fishery will protect the resource and its habitat from more damaging fishing gear, minimizing the potential for any adverse impacts to red crab EFH. This measure will reduce the potential for increased discard mortality associated with other gear types. This prohibition will also reduce potential gear conflicts between red crab fishermen.

- g. Each fishing year, the landings in the red crab fishery will be counted against a target total allowable catch (TAC). The target TAC will be set annually through the annual specification process, equal to the most current estimate of optimum yield (OY) for the fishery, and may be readjusted based on any projected overage or underage expected for the current fishing year.

Rationale: Setting the annual target TAC based on OY reflects the intent of the OY provisions of the Magnuson-Stevens Act and provides a conservative approach to setting the annual TAC. Since the principal control on the fishery will be an effort-based control on days-at-sea, use of a hard TAC (where the fishery shuts down when the TAC is reached) is not an appropriate mechanism. Any type of hard TAC, in conjunction with a DAS program, would encourage vessels to use as many of their DAS as possible as soon as possible in the fishing year before the hard TAC is reached. This would be inconsistent with the goals and objectives of the FMP, which include maintaining, to the greatest extent possible, a twelve-month fishery and minimizing the potential for a derby fishery.

- h. All vessels holding a controlled access red crab permit fishing in the directed fishery will be subject to a possession/trip limit of red crab. The baseline possession limit for all controlled access vessels will be 75,000 pounds of whole red crab or their equivalent. If a vessel can show documented proof of a higher trip during the controlled access qualification period, then that vessel will qualify for a trip limit equal to the larger trip, rounded to the nearest 5,000 pounds. Vessels that butcher and/or partially process the red crabs they harvest (subject to the butchering and processing at sea restrictions identified above) must apply the more appropriate of two recovery rate formulas to their catch in order to determine whether they are within the possession limit. The recovery rate conversion ratios are as follows:
 - (1) 58% of whole to partially-processed red crab, or 1.72 to 1, for fully cleaned crab sections that have had the gills and other detritus removed; and
 - (2) 64% of whole to butchered red crab, or 1.56 to 1, for crab sections with all or the majority of the gills retained.

Recovery rate #1 applies to red crab that is partially processed at sea, as defined in the FMP, and recovery rate #2 applies to red crab that is butchered at sea, as defined in the FMP. All persons are prohibited from transferring at sea, either directly or indirectly, or attempting to transfer at sea to any vessel, any red crab,

or its equivalent as specified at § 648.13, taken in or from the red crab management unit.

Rationale: The differential trip limit maintains the approximate capacity of fishing vessels as it was prior to the control date, increases the potential for fishing vessels to operate efficiently, and recognizes some of the inherent differences among the fishing operations and capacities of the vessels operating in the fishery prior to the control date. The baseline trip limit of 75,000 pounds serves to establish for any new vessels that qualify to enter the fishery a trip limit equal to the approximate average capacity of vessels engaged in the fishery prior to the control date. The overall intent of the trip limit measure is to maintain the overall capacity of the red crab fleet to be approximately equal what it was prior to the control date, prevent an overall increase or a creep in the capacity of the red crab fleet, and to prevent one or more vessels from subverting the constraints of the DAS program by extending their fishing trips and making fewer but much larger fishing trips. The recovery ratios are necessary to administer the trip limits in the face of different types of fishing operations.

- i. Implementation of the Red Crab FMP will include a controlled access program for vessels that wish to participate in the directed red crab fishery and retain more than the incidental catch limit described above. In order to qualify for the controlled access program and receive a controlled access red crab fishing permit, vessels must demonstrate that their average annual landings of red crabs during the three years prior to the control date (March 1, 1997 - February 29, 2000) were greater than 250,000 pounds. Only red crabs harvested from and landed in the Red Crab FMP management unit will qualify for the controlled access program. Vessel transfer and upgrading restrictions will be implemented consistent with the Council's other FMPs.

Rationale: The proposed qualification criteria for the controlled access program utilize the March 1, 2000 red crab control date, as was intended by the Council, and are consistent with the goals and objectives of the Red Crab FMP. The proposed criteria allow vessels with an established history in this fishery to continue, while preventing an increase in capacity above recent historic levels. This measure is intended to prevent overcapacity in the fishery. The proposed vessel transfer and upgrading restrictions maintain consistency of fleet capacity with current conditions and maintain a consistent basis for the calculation of DAS projections and allocations. This measure also protects the capacity of the fleet for the future, should other controls such as trap limits and trip limits change.

- j. Days-at-sea (DAS) will be allocated equally to all vessels authorized to participate in the controlled access fishery, based on the total number of DAS available to the fleet divided by the number of vessels with controlled access permits that have indicated their intent to participate in the fishery for the fishing year. All vessels authorized to receive a controlled access red crab permit must, on an annual basis, declare their intent to participate or not in the directed fishery for the next fishing year at least six months prior to the start of the fishing year.

Any DAS allocated to a vessel in one fishing year could be carried over to the next fishing year, up to a maximum of 10 DAS or 10% of the total allocated DAS, whichever is less.

In the first year of FMP implementation (through February 28, 2003), each vessel authorized to participate in the controlled access directed fishery will be allocated a percentage of 130 DAS. 130 DAS is the baseline allocation for all vessels in the first year of FMP implementation, but this baseline will be adjusted to account for estimated landings that occur between May 15, 2002 and the date the red crab controlled access program is implemented. For the first full fishing year, March 1, 2003 - February 29, 2004, each vessel authorized to participate in the controlled access directed fishery will be allocated 156 DAS, unless this allocation is changed under the FMP specification process. The target TAC for the first full fishing year will be 5,928,000 pounds of whole red crab or their equivalent. The target TAC of 5,928,000 pounds and an allocation of 156 DAS per controlled access vessel will remain the baseline until these amounts are modified through the specification process.

It is the intent of the FMP that DAS will be counted as a whole day (24 hours). Any portion of a day on which a vessel is out of port will count as a full DAS. For example, if a vessel embarks on a fishing trip at 11:00 PM on June 1, then that counts as one DAS. If they return from the trip at 1:00 AM on June 10, that also counts as one DAS, and they would have used 10 DAS on the fishing trip (not the 8.0833 DAS that would be counted if an hourly clock is used).

Rationale: The equal allocation of available DAS treats all vessels authorized to participate in the controlled access red crab fishery equally, regardless of their prior level of effort in the fishery. The requirement for vessels to declare their intent prior to each fishing year allows the Council, working with NMFS, to adjust the annual allocation of DAS based on the expected number of vessels that will actually participate in the fishery. This is an important consideration due to the small number of vessels that will be involved in this fishery. Because only five vessels will likely qualify for controlled access permits, each vessel will be allocated 20% of the total available fleet DAS. If one vessel declares out of the fishery for a year, that increases the DAS allocated to each remaining vessel by 25% (e.g., if each of 5 vessels gets would allocated 200 DAS of a total 1000 fleet DAS, and 1 vessel declares out, each of the remaining 4 vessels would get an additional 50 DAS, or 25% of their initial 200 DAS allocation). Although this type of declaration requirement is not standard with other DAS programs, it is important in this fishery in order to achieve OY on a continuing basis. The partial end of the year DAS carry-over is intended to ensure that at least some unused fishing effort is not wasted, while providing no incentive to hoard DAS. This measure also limits the potential annual fishing capacity to roughly 10% above the baseline.