

**AMENDMENT #10 TO THE
FISHERY MANAGEMENT PLAN
FOR ATLANTIC SURFCLAM AND OCEAN QUAHOG FISHERIES**

December 1997

**Mid-Atlantic Fishery Management Council
in cooperation with the
National Marine Fisheries Service,
the
New England Fishery Management Council
and the
Maine Dept. of Marine Resources**

Draft adopted by MAFMC: 29 October 1997
Final adopted by MAFMC: 16 December 1997
Final approved by NOAA: *4 May 1998*

16 December 1997





UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
NORTHEAST REGION
One Blackburn Drive
Gloucester, MA 01930-2298

MAY - 4 1998

Dr. James Gilford
Mid-Atlantic Fishery Management Council
Room 2115 Federal Building
300 South New Street
Dover, Delaware 19901-6790

Dear Jim:

I have approved Amendment 10 (Amendment) to the Fishery Management Plan for Atlantic Surf Clams and Ocean Quahogs.

Consistent with authority granted to me under Amendment 10, I have determined, based on advice from NMFS Law Enforcement, that notification requirements are not necessary for this fishery and, therefore, have suspended them. However, if a future analysis concludes that there are enforcement benefits from imposing notification requirements in this fishery I will rescind the suspension.

I remain concerned with the provision regarding future replacement of a vessel issued a Maine mahogany quahog permit. The measure is inconsistent with similar measures in other FMPs in the region, including recent plans enacted by the Council for the black sea bass and summer flounder fisheries. However, because the New England and Mid-Atlantic Fishery Management Councils have expressed their intent to address this issue in upcoming amendments, I have approved this measure as proposed by the Council with the understanding that this issue will be resolved in the near future.

Sincerely,

Andrew A. Rosenberg, Ph.D.
Regional Administrator





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2. SUMMARY

The purpose of Amendment 10 to the Surfclam and Ocean Quahog Fishery Management Plan (FMP) is to provide management measures for the small artisanal fishery for ocean quahogs off the northeast coast of Maine which has been operating as an experimental fishery since 1990. As Individual Transferrable Quota (ITQ) management, through Amendment 8 in 1990, was implemented for surfclams and ocean quahogs, it was discovered that the Maine inshore ocean quahog, or "mahogany quahog," fishery that occurred on the same species (*Arctica islandica*) was moving out of state waters into the Exclusive Economic Zone (EEZ). This created a problem, in that the Magnuson-Stevens Fishery Management and Conservation Act mandates that "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" (National Standard 3). The small-scale eastern Maine ocean quahog fishery differs profoundly from the large-scale industrial EEZ ocean quahog fishery that occurs south of Georges Bank in numerous respects. The management tools developed during the first twenty years of federal management for surfclams and ocean quahogs do not fit the Maine fishery well. In 1990, the Regional Administrator granted experimental status to the eastern Maine ocean quahog fishery in order to avoid the potential adverse impacts which would have resulted from the imposition of regulations which were not designed for a small artisanal fishery. The experimental fishery status was granted to the Maine ocean quahog fishery until a better and more permanent solution could be found.

Amendment 10 is intended to provide that solution and fully integrate the historical Maine fishery into the Surfclam and Ocean Quahog FMP since the expiration of the experimental fishery on 30 September 1997. There is little known about the extent and abundance of the portion of the ocean quahog resource off of the coast of Maine, and because of this lack of knowledge this Amendment establishes an initial maximum quota for ocean quahogs caught in a zone of both state and federal waters off the eastern coast of Maine north of 43° 50' north latitude. This initial maximum quota for this zone is not to exceed 100,000 Maine bushels, where 1 Maine bushel = 1.2445 cubic feet. Adjustments to the quota can be made in subsequent years within the range of 100,000 and 17,000 Maine bushels as part of the annual quota setting process. Once a survey and assessment has determined a long-term, biologically-sustainable quota for this zone, the FMP will be modified to reflect this new quota. This Amendment establishes a moratorium on entry to the Maine EEZ fishery zone. The moratorium is to be maintained until it is eliminated or replaced with an alternative management program in a subsequent Amendment. It is the Council's intention that such a change would preferably be made in concert with a new assessment-based quota. The Amendment establishes criteria for continued participation in this zone (north of 43° 50' north latitude) which requires that a vessel must have reported harvesting at least one bushel of ocean quahogs from this zone while participating at least once in the experimental fishery (October 1990 through September 1997). Vessels which have not participated in the experimental fishery or which have not landed at least one bushel of ocean quahogs from this zone during the past seven years, are eligible to fish in the State of Maine waters only or may use their ITQ allocation. Existing ITQ holders are permitted to fish within the EEZ portion of this zone as long as they use their ITQ allocation. All landings from moratorium

permitted vessels and State of Maine only permitted vessels will count against the initial maximum quota. Landings of ITQ allocation will not count against the initial maximum quota. All State of Maine only permitted vessels and all moratorium permitted vessels must land in Maine and comply with all the State of Maine landing laws. This Amendment provides for the protection of public health by restricting harvesting of ocean quahogs in this zone to only those areas surveyed and certified to be free of the organisms which cause PSP. An ITQ vessel may land in Maine (and thus must comply with Maine laws) or may land outside of Maine, but must have the catch certified safe for human consumption through testing at facilities with a NMFS/FDA/state approved dockside Paralytic Shellfish Poisoning (PSP) testing protocol. The Amendment also establishes a Maine Ocean Quahog Advisory Panel to the MAFMC Surfclam and Ocean Quahog Committee. The principal intent of the Amendment is to allow the artisanal nature of this fishery to continue while promoting appropriate conservation and management of the resource.

2.1. The overall objectives of the Atlantic Surfclam and Ocean Quahog Fishery Management Plan (FMP) are:

1. Conserve and rebuild Atlantic surfclam and ocean quahog resources by stabilizing annual harvest rates throughout the management unit in a way that minimizes short term economic dislocations.
2. Simplify to the maximum extent the regulatory requirement of clam and quahog management to minimize the government and private cost of administering and complying with regulatory, reporting, enforcement, and research requirements of clam and quahog management.
3. Provide the opportunity for industry to operate efficiently, consistent with the conservation of clam and quahog resources, which will bring harvesting capacity in balance with processing and biological capacity and allow industry participants to achieve economic efficiency including efficient utilization of capital resources by the industry.
4. Provide a management regime and regulatory framework which is flexible and adaptive to unanticipated short term events or circumstances and consistent with overall plan objectives and long term industry planning and investment needs.

2.1.1. The additional objectives specifically for Amendment 10 to the Atlantic Surfclam and Ocean Quahog Fishery Management Plan (FMP) are:

1. Protect the public health and safety by the continuation of the State of Maine's PSP monitoring program for ocean quahogs harvested from the historical eastern Maine fishery.
2. Conserve the historical eastern Maine portion of the ocean quahog resource.
3. Provide a framework that will allow the continuation of the eastern Maine artisanal fishery for ocean quahogs.

4. Provide a mechanism and process by which industry participants can work cooperatively with Federal and State management agencies to determine the future of the historical eastern Maine fishery.

2.2. Definitions

2.2.1. The Management Unit

The management unit is all surfclams (*Spisula solidissima*) and all ocean quahogs (*Arctica islandica*) in the Atlantic EEZ. This Amendment establishes a management regime specific to the eastern Maine fishery for a zone north of 43° 50' north latitude that recognizes the fundamental social, economic and biological characteristics of this segment of the fishery.

2.2.2. Maine Bushel Definition

During the development of this Amendment, it became known that the "bushel" unit used in Maine is smaller than the "bushel" unit traditionally used in the mid-Atlantic. Maine, in their tax law, uses a bushel definition which measures 1.2445 cubic feet (2,150.4 cubic inches). The standard clam bushel was defined as 1.88 cubic feet in the FMP, and conforms to industry practice in the industrial fisheries for surfclams and ocean quahogs. Throughout this Amendment, any reference to "bushel" harvests in the Maine inshore or EEZ ocean quahog fishery refers to the "Maine bushel" of 1.2445 cubic feet. All references to ocean quahog harvests outside of Maine refer to the regular clam bushel.

2.3. Eastern Maine Ocean Quahog Fishery

1. The fishery in this zone north of 43° 50' will be managed under a separate (from the traditional ITQ cage tag system) quota system to be administered by the National Marine Fisheries Service (NMFS). The initial quota will be a maximum of 100,000 bushels (8 million pounds in the shell) and will include all harvests (except ITQ allocation) from both federal and State of Maine waters from this zone. The quota could be adjusted (increased or decreased) after a resource survey is performed and an assessment is conducted. The maximum initial quota could be decreased on advice from the Maine Ocean Quahog Advisory Panel through the Mid-Atlantic Surfclam and Ocean Quahog Committee. Any changes to the 100,000 bushel initial maximum quota will occur during the Council's annual review process for this FMP. The range of the initial quota (until an assessment is conducted) will set annually between a maximum of 100,000 bushels with a minimum of 17,000 bushels.

2. A moratorium on new entrants to the eastern Maine EEZ ocean quahog fishery is established. Vessels qualifying for an eastern Maine moratorium permit must have held a federal experimental ocean quahog fishery permit between the inception of the experimental fishery (October 1990) and September 1997 and the vessel must have landed at least one bushel of ocean quahogs from the zone north of 43° 50' as documented in either the Federal Multispecies or Shellfish logbooks. The moratorium is to be maintained until it is eliminated or replaced with an alternative management program in a subsequent Amendment. It is the Council's intention that such a change would preferably be made in concert with a new assessment-based quota.

3. The State of Maine will continue to test for paralytic shellfish poisoning (PSP) in designated areas in the Gulf of Maine, including both the Territorial Sea and the EEZ. All ocean quahogs harvested from this zone must come from areas certified to be free of PSP, and all non-ITQ vessels must land their catch in the State of Maine. An ITQ vessel may land in Maine (and thus must comply with Maine laws) or may land outside of Maine, but must have the catch certified safe for human consumption through testing at facilities with a NMFS/FDA/state approved dockside Paralytic Shellfish Poisoning (PSP) testing protocol. These measures are essential for the protection of the public health.
4. All vessels landings ocean quahogs in the State of Maine must comply with all applicable State laws and regulations (Appendix 6).
5. All federally licensed vessels and dealers participating in this fishery will be required to maintain and submit logbooks pursuant to CFR 648.7(b)(ii). Federally permitted vessels must report their ocean quahog landings in Federal Shellfish logbooks only. Vessels that do not qualify for a moratorium permit and that are fishing in State of Maine only waters will be required by the State of Maine to fill out logbooks with similar data elements.
6. Vessels which hold ITQs for ocean quahogs, and do not qualify for a moratorium permit, may fish in the EEZ areas north of 43° 50' north latitude that are certified free of PSP. These ITQ vessels would be required to land their catch in Maine, or if they land outside of Maine, they must have the catch certified safe for human consumption through testing at a facility with a NMFS/FDA/state approved dockside PSP testing protocol. Landings by vessels holding ITQs would be deducted from their ITQ and not counted against the eastern Maine quota.
7. A new Maine Ocean Quahog Advisory Panel to the MAFMC Surfclam and Ocean Quahog Committee will be established to advise the Committee on the management of the eastern Maine ocean quahog fishery. The Advisory Panel will include representatives of harvesters, dealers and the Maine Department of Marine Resources.
8. An eastern Maine ocean quahog moratorium permit expires if the owner or operator retires the vessel from the fishery, on 31 December of each year, or when the ownership of the vessel changes; however the Regional Administrator may authorize continuation of a vessel permit for eastern Maine ocean quahog fishery if the new owner so requests and the vessel meets the relevant criteria of eligibility. This provision is similar to that in the FMP prior to Amendment 8 and implementation of ITQ management.
9. All federally permitted vessels fishing for ocean quahogs in this eastern Maine zone must notify NMFS prior to departure. This call in requirement is consistent with the rest of the fishery and provides additional assurance that harvests can be monitored for PSP. The Regional Administrator has the discretion to suspend this requirement (if he believes it is not necessary for quota enforcement) after consultation with the State of Maine and upon notification of the MAFMC.

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4. INTRODUCTION

4.1. DEVELOPMENT OF THE PLAN

The Mid-Atlantic Fishery Management Council (MAFMC or Council) has been involved in surfclam and ocean quahog management since its first meeting (September 1976), when it was discussed that the surfclam fishery should be the first to have a plan developed. At the February 1977 meeting the Council voted to accept responsibility for the surfclam plan and began discussion of possible management measures. From April through August 1977 every meeting included a debate over possible management measures. Public hearings were conducted during June 1977, with major revisions proposed to the management system based on public comments. The MAFMC developed the original FMP which was approved in November 1977 for the period through September 1979 (MAFMC 1977). Amendment 1 extended it through 31 December 1979. It contained specific quarterly quotas for surfclams (350,000 bushels each for October - December and January - March and 550,000 bushels each for April - June and July - September) and an annual quota (3,000,000 bushels) for ocean quahogs. The effort limitation, permit, and logbook provisions were included. The FMP also instituted a moratorium in the surfclam fishery (all surfclams, since there was no New England Area) for one year to allow time for the development of an alternative limited entry system "such as a stock certificate program" (MAFMC 1977).

Amendment 1 (MAFMC 1979a) extended the FMP for ninety days, until the end of 1979 (primarily to allow for completion of the latest stock assessment). It added processor reporting requirements and removed the requirement that each quarter begin with four days of fishing (even though the stock was depressed, the excess harvesting capacity led to closures very quickly). The moratorium was continued.

Amendment 2 (MAFMC 1979b) extended the FMP through the end of 1981, divided the surfclam portion of the management unit into the New England and Mid-Atlantic Areas. Annual quotas were 25,000 bushels of surfclams for the New England Area, 1,800,000 bushels of surfclams for the Mid-Atlantic Area, 3,500,000 bushels of quahogs for 1980, and 4,000,000 bushels of quahogs for 1981. The quarterly quotas in the Mid-Atlantic Area were moving closer to equal (400,000 bushels for the fall and winter quarters and 500,000 bushels for the spring and summer quarters). The bad weather make up day was introduced. The moratorium was continued in the Mid-Atlantic Area.

Amendment 3 (MAFMC 1981), approved 13 November 1981, extended the FMP indefinitely. A 5.5" surfclam minimum size limit was imposed in the Mid-Atlantic Area. The surfclam fishing week in the Mid-Atlantic Area was expanded to Sunday - Thursday from Monday - Thursday. Quota setting was put on a framework basis with ranges of 1.8 - 2.9 million bushels for Mid-Atlantic Area surfclams, 25,000 - 100,000 bushels for New England Area surfclams, and 4 - 6 million bushels for ocean quahogs. The Council proposed a permit limitation system to replace the moratorium which was disapproved by NMFS; NMFS extended the moratorium.

Amendment 4 was initiated in response to a closure of the New England Area to surfclam fishing during the second half of 1983. On 21 July 1983 the New England Council sent a letter to the Secretary of Commerce requesting Secretarial action to reopen the New England Area surfclam fishery. The Mid-Atlantic Council passed a motion in August 1983 recommending that the Secretary not accept the proposal of the New England Council. After receiving a letter from the Secretary on 6 September 1983 denying implementation of emergency action to reopen the surfclam fishery in the New England Area, work was begun to investigate methods for avoiding an extended closure in 1984. In November 1983 the Mid-Atlantic Council passed a motion authorizing the Regional Administrator and the New England Council to prepare an Amendment for the New England Area involving trip limits, quarterly quotas, or similar strategies to insure fishing throughout the year. A proposed Amendment 4 was drafted by the New England Council staff in cooperation with NMFS staff and hearings were held on 21 and 22 March 1984. At a joint meeting of the New England and Mid-Atlantic Councils in May 1984 representatives of the surfclam industry from both New England and the Mid-Atlantic presented revisions to the proposed regime. The Mid-Atlantic Council passed a motion to adopt the proposed Amendment 4 to the Surfclam and Ocean Quahog FMP as amended to provide that any unharvested portion of a bimonthly allocation be added to the immediately following bimonthly allocation rather than being prorated over all remaining bimonthly periods and that trip and weekly limits be by vessel classes based on relative fishing power using the following ratios: Class 1 = 1.0, Class 2 = 1.8, and Class 3 = 3.4, and that NMFS use a rulemaking procedure to implement the Amendment on an emergency basis. The New England Council voted at the same meeting to adopt the Amendment.

The provisions of Amendment 4 were implemented on an emergency basis for 180 days beginning 1 July 1984, during which time the Amendment was finalized by the New England Council and submitted for Secretarial approval. However, it was determined that the document was not structurally complete for review.

Amendment 5 (MAFMC 1984), approved 28 February 1985, allowed for revision of the surfclam minimum size limit provision, extended the size limit throughout the entire fishery, and instituted a requirement that cages be tagged.

Amendment 6 (MAFMC 1986) was begun in October 1984 following an exploratory fishery conducted on Georges Bank as a result of emergency regulations published 2 August 1984 (49 FR 30946 - 30948), primarily to address problems associated with the development of a surfclam fishery on Georges Bank. At its October 1984 meeting the Council voted to divide the New England Area into the Nantucket Shoals and Georges Bank Areas, the dividing line being 69° longitude. At the same meeting the Council voted to approve revising proposed Amendment 4 so its provisions applied to that portion of the New England Area west of 69° longitude.

In response to the Council's recommendation that Amendment 4 be revised to apply only to that portion of the New England Area west of 69° longitude, the New England Council held a hearing on 11 December 1984.

At its December 1984 meeting the Council adopted the provisions of Amendment 6. The Amendment was adopted by the Council for hearings in January 1985, with hearings held 18 and 19 February 1985. The Council adopted Amendment 6 for Secretarial approval at its March 1985 meeting. At that time Amendment 4 still had not been found structurally complete. Given the relationship between the provisions of Amendments 4 and 6, the decision was made to abandon Amendment 4 and that the Mid-Atlantic Council would combine the provisions of Amendment 4 with the Mid-Atlantic Council's Amendment 6 in one document. The combination of Amendments 4 and 6 did not change any substantive provisions of either Amendment.

The Council was notified via a letter of 25 July 1985 that NMFS had partially approved Amendment 6. The letter from Acting Regional Administrator Richard Schaefer to Council Chairman Robert Martin stated in part that:

"The measures in Amendment 6 that I disapproved are the Nantucket Shoals Area bimonthly quota guidelines and effort control measures, the one landing per day restriction applying to the Mid-Atlantic Area, the provision prohibiting the Regional Director from subdividing allowable fishing hours when the hours are set at 12 or less, and the portion of the notification provision prohibiting vessels that have fished in a notification zone from returning to fish in the same notification zone within that calendar month. The disapproval of the bimonthly guidelines for Nantucket Shoals removed the basis for adjusting the quotas between bimonthly periods when harvest either exceeds or falls short of quota. Therefore, this provision, while not specifically disapproved, can not be implemented on Nantucket Shoals at this time." (This measure was one developed jointly by the New England Council and the NMFS Northeast Regional Office.)

The Council revised Amendment 6 to replace the bimonthly quotas with quarterly quotas, eliminate the weekly landing limits for the Nantucket Shoals Area, clarify the quota adjustment provisions for the Nantucket Shoals and Georges Bank Areas, and present additional justification for the one landing per trip provision. The other disapproved provisions (prohibition on subdividing allowed fishing times under certain conditions and portions of the notification system) were deleted from the Amendment. The Amendment was approved on 9 April 1986 when the 60-day review period expired without action by NMFS.

Amendment 7 (MAFMC 1987) was developed to change the quota distribution on Georges Bank (from 10:40:40:10 to equal quarterly quotas) and revise the roll over provisions from one period to the next. This Amendment was taken to public hearings in February 1987, approved by NMFS, and final regulations published on 24 July 1987.

Amendment 8 (MAFMC 1988) established an individual transferable quota (ITQ) system primarily to replace the regulated fishing time system in place in the mid-Atlantic surfclam fishery. This fishery was operating under a moratorium on vessel permits. Allowable fishing time in this fishery went from 96 hours a week in 1978 to six 6 hour trips per quarter in 1988. The ITQ system essentially converted allowable fishing time into allowable individual levels of harvest. The Council had

several alternatives under consideration during the development of Amendment 8 with respect to management of the New England surfclam fishery and the ocean quahog fishery. These fisheries were controlled through quotas prior to Amendment 8. The ocean quahog quota has never been fully harvested. Many felt that the Council should simply impose a moratorium on this fishery until such time as restraints on harvest were necessary. When such restraints were necessary, an ITQ system could be imposed based on reported landings. The Council decided to bring the ocean quahog fishery under the ITQ system because it believed that the problems experienced in the surfclam fishery under the moratorium would simply be relived under a quahog moratorium.

The vessel owners that received allocation under the ITQ system were those whose vessels had reported landings under the mandatory logbook requirement that had been in place since 1978. All of the vessels that had reported landings were those that were involved in the commercial surfclam and ocean quahog fisheries prosecuted mainly off the Mid-Atlantic. These fisheries involve large vessels towing hydraulic dredges the catch from which is emptied into metal cages holding roughly 32 bushels. These cages are the industry standard that enables processors to handle large volumes of product given the limitations of processing plant size, vessel capacity, and stability as well as that of moving and hauling equipment.

Amendment 8 employed three formulae that gave participants in the Mid-Atlantic surfclam fishery, the New England surfclam fishery and the ocean quahog fishery, respectively, an allocation percentage. Initial allocation percentages were based largely on a vessel's average historical catch. The average catch was weighted with respect to Mid-Atlantic surfclam allocations and a vessel size factor was added in to calculate the initial allocation percentage. This percentage was applied to the annual quota to give the participant his/her allocation in bushels. This number was again divided by 32, the number of bushels in a standard cage used by the industry to determine the number of cage tags the participant was to be issued by the National Marine Fisheries Service.

A traditional EEZ participant's bushel allocation will change in any year if the annual quota is revised. Since these allocations may be bought and sold, a participant's allocation may change as he/she purchases or sells allocation. Each transfer of allocation must be approved by the Regional Administrator. Allocation permits are modified by NMFS to reflect modifications to the participant's allocation percentage following a transfer of allocation. Monitoring the harvest of individual allocations and, in turn, the annual quota is facilitated by a cage tagging requirement and mandatory reporting by vessel owners and dealers with respect to the amount of surfclams and ocean quahogs landed and purchased. Amendment 8 also: (1) allows for the minimum surfclam size to be suspended from year to year; (2) merges the New England and Mid-Atlantic surfclam areas into one management area; (3) authorizes the Regional Administrator to issue shucking-at-sea permits to owners of surfclam vessels based upon certain conditions; and (4) empowers the Regional Administrator to authorize an experimental fishery to gather information necessary for management.

Amendment 9 (MAFMC 1996a) was developed to revise the overfishing definitions in response to a scientific review by NMFS (Rosenberg *et al.* 1994). The overfishing

definitions were changed from an MSY based definition to a percentage maximum spawning potential (MSP) definition.

As Individual Transferrable Quota (ITQ) management, through Amendment 8 in 1990, was implemented for surfclams and ocean quahogs, it was discovered that the Maine inshore ocean quahog, or "mahogany quahog," fishery that occurred on the same species (*Arctica islandica*) was moving out of state waters into the Exclusive Economic Zone (EEZ). This created a problem, in that the Magnuson-Stevens Act mandates that "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" (National Standard 3). The small-scale eastern Maine ocean quahog fishery differs profoundly from the large-scale industrial EEZ ocean quahog fishery that occurs south of Georges Bank in nearly every respect except the scientific name of the target species. The management tools developed during the first twenty years of federal management for surfclams and ocean quahogs do not fit the Maine fishery well. In 1990, the Regional Administrator granted experimental status to the eastern Maine ocean quahog fishery in order to avoid the potential adverse impacts which would have resulted from the imposition of regulations which were not designed for a small artisanal fishery. The experimental fishery status was granted to the Maine ocean quahog fishery until a better and more permanent solution could be found.

Initially, the experimental fishery status was viewed as a way to allow the fishery to operate, outside of Amendment 8 regulations, and to collect information that could be used in the management of the resource. Practically nothing (i.e. location, extent, etc.) was known of the Maine EEZ resource. The data collected during the early years of the experimental status was absolutely critical in the consideration of what forms of management were reasonable. As the experimental status continued annually it became important to not compromise the integrity of the data base. Many Council members believed that the ITQ alternative (Appendix 1) was the most preferred alternative, and in order to implement an ITQ, the integrity of the data needed to be maintained. The description (section 7) and economics (section 8) of the Maine fishery are now able to be accurately identified with the data collected in the logbooks because of the continuation of the experimental classification of this fishery.

Due to time constraints on the part of the Council staff in the early 1990s, the Mid-Atlantic Council requested that the National Marine Fisheries Service prepare a Secretarial Amendment to address the Maine ocean quahog fishery. A draft Amendment was prepared (USDC 1993), and public hearings were held on 16 June in Machias, Maine and 24 June in Cape May, New Jersey. The principal management measures proposed in the Secretarial version of this Amendment included: 1) a restriction of the Maine ocean quahog fishery to the area north of 43° 50', 2) a landing requirement that all ocean quahogs harvested from this area be landed in Maine, 3) a minimum shell length of 1.5 inches, 4) a maximum cutter blade size of 36 inches, and 5) exemption from the cage tag and allocation requirements established in Amendment 8 for vessels fishing for quahogs within this area.

A number of aspects of the Secretarial proposed management program were considered controversial by portions of the industry and the Mid-Atlantic Council, which led to the Council requesting and receiving the authority to continue development of the Amendment rather than agreeing to the proposed measures. The experimental fishery status was annually granted in order to keep the fishery operating and the data base consistent. In the early winter of 1996, the Regional Administrator informed the Council that he could not continue the experimental status of the Maine fishery, and that it was time to solve this fishery problem.

From March through June 1996 the Mid-Atlantic Council worked on Amendment 10 to the Surfclam and Ocean FMP which was to deal with three problems in the fishery. There were two minor problems that dealt with operator permits and voluntary vessel tracking while the major impetus for the Amendment was the resolution of the Maine ocean quahog experimental fishery.

At the MAFMC May 1996 Council meeting, approval for hearings, was voted for a suite of alternatives with the preferred alternative being one developed mostly between the fishing industry that has been operating under the Amendment 8 (ITQ) regulations and the State of Maine. This compromise preferred alternative was viewed as being especially significant in that it offered a resolution to the five-year quahog issue that was acceptable to Maine, acceptable to the major existing industry, and further fell in line with the MAFMC's ITQ management strategy for this particular two-species fishery.

In the 1996 version of this Amendment there was to be no federal moratorium on entrants to the fishery. Non-Maine vessels which hold ITQs for ocean quahogs would not have been prohibited from fishing in the federal waters off Maine. However, as with the experimental fishery, boats landing in Maine would have been required to adhere to all State of Maine landings laws.

In actuality, Amendment 8 regulations would have a significant impact on the small-scale fishermen of Maine. There has never been any intent on the part of anyone involved in this Amendment 10 process to force the Maine ocean quahog fishermen to have to fish under the provisions of Amendment 8. The use of 32 bushel cages would be burdensome and extremely dangerous on small boats such as those used in the Maine fishery. It would be nearly impossible to impose the cage and cage tag requirements on these small vessels. Amendment 8 implementing regulations, with their focus on the industrial component of the fishery, are incompatible with the Maine fishery. Amendment 8 requires that ocean quahogs be landed in 60-cubic-foot metal cages, which generally measure 3 feet x 4 feet x 5 feet, hold 32 bushels, and fit conveniently into tractor trailers. The small Maine one and two man boats can not safely accommodate cages on their deck. Additionally, few of the ports along the northeast coast of Maine have crane facilities, which are needed to load cages on and off vessels. Maine vessels simply land much smaller quantities of ocean quahogs than the traditional EEZ industrial component that fishes Georges Bank and south. The average number of bushels per boat landed in the Maine fishery has been equivalent to 10 to 36 cages (469 - 1,881 Maine bushels) annually over the past six years (Table 2). The industrial traditional fleet has averaged about 4,000 cages per boat annually over the last several years (Table 1).

While a compromise alternative seemed to be near in the spring of 1996, Congressional budget activity precluded work on any ITQ-type FMP or Amendment. The Council and the State of Maine requested the Regional Administrator continue the experimental fishery for one more year, which he did. It was clear that if the problem was not solved before 30 September 1997, the Maine vessels fishing for ocean quahogs in the EEZ would either have to return to state waters or operate under the requirements of Amendment 8. The continuation of the experimental status was important in order to not compromise the integrity of the data base. The description (section 7) and economics (section 8) of the fishery are much better understood because of the data collected in the logbooks due to the continuation of the experimental classification of this fishery. Also, during the mid 1990s, the issue of bycatch in various fisheries became quite important, and the last year of the experimental status was partly designed to assist in answering questions that would help meet the new National Standard 9 requirements.

An Amendment was drafted during the winter of 1996-1997. Three public hearings on the draft were conducted in April 1997. The summary of those hearings and the written comments that were submitted are included in this document as Appendix 4.

According to the April 1997 public hearing document all participants in the Maine ocean quahog fishery would have been required to comply with the provisions of Amendment 8 except as modified by the following management measures:

1. The Governor of the State of Maine would have received an allocation for ocean quahogs landed in Maine from the EEZ.
2. The initial provisional EEZ quota (27,611 Maine bushels) was the average of the first five full years (1991 - 1995) of the experimental fishery.
3. The State of Maine would continue to test for and certify for (paralytic shellfish poisoning (PSP) in the ocean quahogs landed in their State, whether from the EEZ or Territorial Sea, to ensure the public health.
4. The status of the Maine allocation would have had the same legal status as ITQs for the remainder of the fishery. Just as those quota owners may make any financial arrangements they see fit (consistent with governing regulations) for the harvesting of their quota, so could have the Governor of Maine.
5. The State of Maine would have administered the EEZ quota, except that no program would exempt participants from any of the permitting and reporting requirements specified in this or prior amendments to the FMP.
6. Non-Maine vessels which hold ITQs for quahogs would not have been prohibited from fishing in the federal waters off Maine, but if they chose to land their catch in Maine, they would have been required to adhere to all state landing laws.
7. There was no provision to convert Maine allocation (bag tags) to cage tags or cage tags to bag tags.
8. Maine reporting was done in "bushels" through bag tags because of PSP.

There were seven other non-preferred alternatives that were considered to resolve this Maine EEZ fishery problem that were described in Appendix 1 of the April hearing draft. (These seven non-preferred alternatives and the public hearing preferred alternative are identified and described in Appendix 1 of this document.) These public hearing non-preferred alternatives included:

1. No Action -- Amendment 8 Regulations Take Over
2. Amendment 8 Regulations (No Action) but Allowing for Conversion between Bushels and Cages
3. Maine Position: State Management North of 43° 50'
4. NMFS 1993 Secretarial Amendment Preferred Alternative
5. *De Minimus*
6. ITQs
7. Modified Compromise Position - Quota Assigned to Maine DNR - No Transfer Rights

There were also two options for the EEZ quotas. The preferred option was a quota based on the average landings of Maine ocean quahogs between 1991 and 1995, or 27,611 bushels (as calculated from Federal Shellfish logbooks only). Maine was advocating a quota based on the highest landings (37,912 bushels) during the 1991 - 1995 experimental fishery.

During the public hearings it became painfully obvious that the quota estimates were inappropriate since many fishermen from 1994 through 1996 were reporting their ocean quahog landings not in the Federal Shellfish logbooks but rather in the Federal Multispecies logbooks. This discrepancy muddled the public hearings significantly, to the point that many other pertinent issues were never able to be discussed. Several fishermen clearly informed the Council, both at the hearings and in written testimony, that they preferred ITQs. This nonpreferred alternative management measure was unacceptable to the State of Maine.

At its meeting in May of 1997, the MAFMC responded to concerns expressed by fishermen about the open-access permit provision in the draft Amendment 10 and passed a motion directing "...NMFS, the State of Maine and our staff to work out an agreement for a plan that would protect the historical fishermen..." This most recent draft of Amendment 10 has been developed to fulfill that directive.

4.2. PROBLEMS ADDRESSED BY THE AMENDMENT

4.2.1. Introduction

This Amendment 10 is intended to resolve only one long-standing issue: the status of the ocean quahog fishery north of 43° 50' north latitude. Both the needs for a voluntary vessel tracking system and operator permits have been postponed from this Amendment until development of Amendment 11 which is mandated by October of 1998 in order to meet the new requirements of the Magnuson-Stevens Act.

4.2.2. Eastern Maine Ocean Quahog or "Mahogany Quahog" Fishery

This Amendment establishes conservation and management measures that are necessary and appropriate for the historical eastern Maine ocean quahog fishery north of 43° 50' north latitude.

A fishery for small ocean quahogs, referred to in this document as the historical eastern Maine ocean quahog fishery, has occurred off the coast of Maine north of 43°

50' north latitude for at least 20 years (Maine Department of Marine Resources 1977). This fishery had traditionally been prosecuted in the Territorial Sea. However, due to the presence of toxic marine algae (principally *Alexandria tamarensis*) known to cause paralytic shellfish poisoning (PSP) in humans, several areas in State of Maine waters were closed, beginning in 1987, and vessels began to exploit uncontaminated beds located in federal waters.

While the eastern Maine EEZ ocean quahog fishery has existed for the past decade, it was not included in federal ITQ management of Amendment 8 of the Fishery Management Plan for the Atlantic Surfclam and Ocean Quahog Fishery. The annual overall ocean quahog quota is only now being approached and no restraints prior to Amendment 8 were imposed on the Maine fishery other than record keeping and reporting. The eastern Maine ocean quahog fishery, which had been conducted largely in state waters, moved into the nearshore EEZ just as Amendment 8 was being developed, and thus the development of Amendment 8 had no involvement of the participants of the eastern Maine ocean quahog fishery. It was not until one of the fishermen in the Maine ocean quahog fishery was issued a violation notice by the Coast Guard for fishing in federal waters without the requisite permit that most of the other fishermen learned of federal management measures governing the ocean quahog fishery. Some of the participants in this fishery believed that the "mahogany" quahog was a different species than the ocean quahog subject to federal management.

The area where the historical eastern Maine ocean quahog fishery is prosecuted is endemic for marine algae which produces a toxin known to cause PSP in humans. Environmental conditions, similar to those found in the Bay of Fundy, have caused sporadic yet prolific blooms of this algae, called "red tide," in this area off the coast of Maine. The State of Maine has been vigilant in its management of this area for the shellfish-associated toxin. The Maine Department of Marine Resources regularly collects samples of ocean quahogs from the fishing grounds, as well as, of landed product and tests them for the presence of PSP. The federal government has delegated its responsibility to protect the public health under the National Shellfish Sanitation Act to the State of Maine which monitors both its territorial waters and the EEZ. Maine marine resource authorities have been able to eliminate the threat of poisoning by closing, to fishing, areas that have ocean quahogs with levels of toxin exceeding FDA tolerances (Lewis pers. comm.). The Council and NMFS have been assured that the State of Maine will continue to test product coming out of both state and federal waters and refuse to allow the landing of product caught in the EEZ from areas where quahogs were either untested or tested and found to be above acceptable toxin levels, thus presenting a hazard to human safety. While the State of Maine does not have the authority to close areas in the EEZ to fishing, the refusal to allow the landing of product from contaminated areas has effectively accomplished this goal. Fisherman have been highly cooperative in Maine's efforts to safeguard the public health knowing that their industry could be devastated if a single poisoning occurs (Lewis pers. comm.).

The United States EEZ ocean quahog fishery is composed of two distinct components. The first component is the industrial fishery that takes place off the mid-Atlantic and southern New England states and traditionally accounts for over 97%

of the total landings. The fishery which occurs off of the coast of eastern Maine and takes place hundreds of miles to the north in the inshore and nearshore waters of Maine's two most northerly counties is the second component. Significant differences exist between the two ocean quahog fisheries, and the markets into which the species is sold.

The major ocean quahog fishery has typically been an industrial enterprise, conducted by large vessels operating in deep, offshore waters. Ocean quahogs are dislodged from the seabed using large, hydraulic dredges which shoot jets of water from their leading edge. Once on board, ocean quahogs are stored in metal cages each holding 32 bushels. Back at the dock, cranes lift the cages into tractor trailers for shipment to processing plants, where they are steamed open, thoroughly washed, and processed into a variety of product forms but mostly clam chowder. Reported prices, relatively constant during the past two decades, have ranged from about \$3.00 to \$4.70 per bushel.

The small-scale eastern Maine ocean quahog fishery utilizes small (36" maximum cutter bar), dry dredges, on much smaller boats typically ranging between 30 and 40 feet in length. The ocean quahogs targeted by these vessels are smaller than in the industrial fishery, ranging between 1.5" and 2.5", and destined for the fresh, half-shell market. Average exvessel price in 1996 was \$28.85 per bushel but prices have been as high as \$45.00 per bushel in 1991 (NMFS Shellfish Logbook files). Larger ocean quahogs are discarded thus protecting the most productive segment of the spawning biomass. The protection of the spawning biomass is assured since release mortality is low with the dry dredges. The market is for clams on the half shell and could not be filled with broken ocean quahogs. The entire capture process of the small-scale fishery is much more "resource-friendly" than the large-scale industrial fishery to the south. The retained ocean quahogs are held in onion bags. Depending upon demand, the ocean quahogs are either landed directly and trucked out to retail markets in the same day, held in a local dealer's cooler or stored in floating pens for up to three days. The storage in pens also allows the ocean quahogs to deplete silt and body waste (McGowan pers. comm.).

In 1990 the Regional Administrator approached the MAFMC to discuss possible resolutions to the problems caused by this fishery not being a part of Amendment 8. Due to the lack of unanimity (Council, State of Maine, and NMFS) as to how the problem was best resolved, the Regional Administrator established the eastern Maine ocean quahog fishery as an experimental fishery in order to learn more about it. This experimental fishery was extended until 1992 when the MAFMC voted to allow the Regional Administrator to resolve the problem, possibly through the preparation of a Secretarial Amendment. The Northeast Regional Office of NMFS subsequently produced a public hearing draft of Amendment 9 to the Fishery Management Plan for the Atlantic Surfclam and Ocean Quahog Fishery (USDC 1993). Two public hearings were held; one each at Machias, Maine on 16 June 1993, and Cape May Courthouse, New Jersey on 24 June 1993.

Concern over the management measures in the Secretarial draft of Amendment 9 led the Council to reassume responsibility for its preparation at the Council's December 1993 meeting. The Council's major difficulty with the Secretarial draft dealt with the

issue of a separation line at 43° 50'. The Council believed that if a line was drawn separating this fishery from the overall fishery that other States or subareas would want an exemption from the ITQ requirements. The Council has now decided that since this experimental fishery has occurred for the past seven years, a line is acceptable and not precedent setting for other areas. (The Council prepared and approved the version of Amendment 9 which deals with new overfishing definitions and which was implemented in 1996.) The Council was near an ITQ-based solution in 1996 when Congressional budget action prevented work on any ITQ-related program. A 1996 solution was then negotiated between the mid-Atlantic industry and State of Maine officials that the Council believed was a workable compromise. The Regional Administrator at the February 1997 Council meeting informed the Council that he would not continue the experimental fishery for another year and that it was time to solve this problem. The experimental fishery continued through 30 September 1997.

4.2.3. 1996 Magnuson-Stevens Act Requirements

The Council is aware of the new language in the 1996 Magnuson-Stevens Act that will require expanded habitat sections to deal with essential fish habitat and fishing gear impacts on the environment. The Council is scheduled to produce Amendment 11 of this FMP prior to the October 1998 requirement to deal with these two issues and the other additional requirements of the Act. It is anticipated that voluntary vessel tracking and operator permits will also be added to Amendment 11.

4.3. MANAGEMENT OBJECTIVES

4.3.1. The overall objectives of the Atlantic Surfclam and Ocean Quahog Fishery Management Plan (FMP) are:

1. Conserve and rebuild Atlantic surfclam and ocean quahog resources by stabilizing annual harvest rates throughout the management unit in a way that minimizes short term economic dislocations.
2. Simplify to the maximum extent the regulatory requirement of clam and quahog management to minimize the government and private cost of administering and complying with regulatory, reporting, enforcement, and research requirements of clam and quahog management.
3. Provide the opportunity for industry to operate efficiently, consistent with the conservation of clam and quahog resources, which will bring harvesting capacity in balance with processing and biological capacity and allow industry participants to achieve economic efficiency including efficient utilization of capital resources by the industry.
4. Provide a management regime and regulatory framework which is flexible and adaptive to unanticipated short term events or circumstances and consistent with overall plan objectives and long term industry planning and investment needs.

4.3.2. The additional objectives specifically for Amendment 10 to the Atlantic Surfclam and Ocean Quahog FMP are:

1. Protect the public health and safety by the continuation of the State of Maine's PSP monitoring program for ocean quahogs harvested from the historical eastern Maine fishery.
2. Conserve the historical eastern Maine portion of the ocean quahog resource.
3. Provide a framework that will allow the continuation of the eastern Maine artisanal fishery for ocean quahogs.
4. Provide a mechanism and process by which industry participants can work cooperatively with Federal and State management agencies to determine the future of the historical eastern Maine fishery.

4.4. MANAGEMENT UNIT

The management unit is all surfclams (*Spisula solidissima*) and all ocean quahogs (*Arctica islandica*) in the Atlantic EEZ. This Amendment establishes a management regime specific to the eastern Maine fishery for a zone north of 43° 50' north latitude that recognizes the fundamental social, economic and biological characteristics of this segment of the fishery.

5. DESCRIPTION OF THE STOCKS

This section of the FMP remains unchanged with respect to the biology of the majority of the resource. A full description of the species distribution (section 5.1), abundance and present condition (section 5.2), stock characteristics and ecological relationships (section 5.3), estimates of MSY and areal extraction rates (section 5.4), and probable future condition (section 5.5) can be found in Amendment 8 (MAFMC 1988). Most of the general ocean quahog biology that is known was known a decade ago when Amendment 8 was written. The significant data (usually fishery information) are generally updated annually in the Council's annual quota recommendation paper (MAFMC 1996b). Relatively limited knowledge exists about the eastern Maine portion of the ocean quahog resource, however, what is known was summarized at the 19th SAW (USDC 1995).

Ocean quahogs are one of the longest-living, slowest growing marine bivalves in the world. Under normal circumstances, they live for more than 100 years old. The exceedingly slow growth rate gives the appearance of the same size quahogs being harvested over a period of time. They require thirty years to grow to the sizes currently harvested by the industry.

Traditionally, ocean quahogs' dominant use has been in such products as soups and chowders, as their smaller size have not permitted their use in strip products. Ocean

quahogs have a much lower exvessel price than surfclams, on the order of \$4.00 - \$4.50 per bushel, while surfclam prices have recently been in the \$11.00 - \$13.00 range (MAFMC 1996b). Prices can vary substantially depending on the nature of the sales contract. With an exvessel price roughly one-third that of surfclams, there is clearly an incentive for producers to substitute ocean quahogs for surfclams whenever consumer acceptance of the product will allow it.

For fishermen, the higher value of surfclams have always made them the preferred catch of the two species. This has resulted in harvest quotas for surfclams typically being reached year after year, whereas quotas for ocean quahogs have generally not yet been binding on the industry.

Since 1970 there has been a progressively northward shift in harvest of ocean quahogs, with Delmarva peaking in 1988, New Jersey peaking in 1991, and most current harvests coming from a broad stretch of water to the south of Long Island, Rhode Island, and Massachusetts (MAFMC 1996b).

The large biomass of ocean quahogs which research surveys have observed in Southern New England and Georges Bank comprises more than half of the existing resource. These areas had been idle for a number of reasons. One is because some of this resource is in water that is deeper than what is typically harvested. A second is that these resources are both further and more difficult to access than alternative beds that are still productive, and the fleet will always choose to harvest the most profitable beds first. Lastly, the Georges Bank area remains closed to ocean quahog harvests due to the presence of PSP toxin.

Ocean quahog landings from both federal and state waters for 1995 totaled 4.904 million bushels, an increase of 5% from the 4.662 million bushels harvested in 1994 (MAFMC 1996b). As with the surfclam resource, the majority of ocean quahog landings had been occurring in New Jersey, with a percentage share close to 80% for both 1993 and 1994. In 1995 the pattern shifted markedly, with landings into New England ports increasing more than seven-fold. At just shy of 2 million bushels, New England landings are almost equivalent to those of New Jersey.

As one area is left in favor of another, the respective condition of each can be indexed by LPUE statistics. From 1987 to 1995, LPUE values dropped from the 130-150 bushel per hour range to the 60-90 bushel range off Delmarva. Depletion off Long Island saw harvests increase from 700,000 bushels in 1991 to 1.2 million bushels in 1994, while LPUE values declined from 146 bushels per hour to 109 bushels per hour. By 1995, attention had shifted further east, and harvests dropped to 537,000 bushels at an LPUE of 98 bushels per hour (MAFMC 1996b). For the new areas at the northeastern end of the fishery, catch rates are typically greater than 130 bushels per hour, and can exceed 200.

The 22nd SAW (August 1996; USDC 1996a and 1996b) updated estimates of growth rate and briefly examined the spreadsheet programs used in quota setting for ocean quahogs. A new survey was conducted in 1997, but the results will not be assessed until the June 1998 SARC. The 22nd SAW was not a new assessment but only updated analyses that were recommended by SAW 19 (January 1995; USDC 1995).

Ocean quahog annual growth rates were an order of magnitude lower than those of surfclams, ranging from 0.51% to 0.77%.

Ocean quahog reference points were not revised (USDC 1996a and 1996b). The overfishing definition in Amendment 9 is a fishing mortality rate of $F_{25\%}$ (25% of the maximum spawning potential), which equates to an annual exploitation rate of 4.3%.

The NEFSC 1994 survey estimated the following regional distribution for the ocean quahog stock biomass: Georges Bank -- 27%; Southern New England -- 26%; Long Island Deep -- 10%; Long Island Shallow -- 15%; New Jersey -- 21%; Delmarva -- 2%; and Southern VA - NC -- less than 1%. From the survey, roughly 40% of the resource is distributed in the heavily fished areas.

The SAW Report (USDC 1996b) concluded: "For ocean quahogs, the calculated growth rate of fully recruited individuals from the Long Island region (0.5 - 0.8% meat weight per year) was so low that it did not alter the conclusion that there is insufficient supply in the currently harvested areas to support the fishery for 30 years. A 30-year supply is possible only if the biomass on Georges Bank and in areas off southern New England and Long Island, generally too deep to be harvested with current technology, are included. This implies that sustainable fishing after 30 years will be limited to recruitment and very slow annual growth of fully recruited quahogs."

In general, over 97% of the ocean quahog landings in weight come from the industrial fishery from Georges Bank and south (Tables 1 and 2 and Figure 1). Effort and CPUE in the Maine fishery are orders of magnitude less than that in the mid-Atlantic (Tables 1 and 2). The eastern Maine fishery occurs in a relatively restricted area in the inshore and nearshore waters of eastern Maine to the Canadian border (Figure 2). Ocean quahog catches from the coast of Maine are restricted to a narrow band inshore of the 50 fathom line (USDC 1995).

The NMFS collected non-random samples from the coast of Maine with the 1992 and 1994 research surveys in order to map the distribution (Figure 3) of ocean quahogs and to examine the population size frequency distributions. Within the 50 fathom range, ocean quahogs appear to be restricted to a patch centered between 67° and 68° W longitude. Tows were taken to the east and west of the patch to attempt to define the limits. The location of the patch, as defined by survey data, agrees well with the location of recent landings. Maine is the only area with any evidence of substantial recruitment of small quahogs or of growth by medium-sized ocean quahogs in any region (USDC 1995).

In the Maine area, the population consists of two length modes (Figure 4). The larger group is centered between 50 and 54 mm (25 mm = 1 inch) shell length. Most clams in the smaller group measured 20-29 mm in July 1992, and 30-39 mm in August 1994. Work is currently in progress to section these shells and estimate age and growth. Based on the work of Kraus *et al.* (1992) the 50-54 mm long clams would be 35-43 years of age. The smaller group, 30-39 mm long, would be 15-20 years of age (USDC 1995). However, information from Maine ocean quahog fishermen indicates that growth rates may be greater than that calculated by Kraus *et al.* (1992) and this should be the subject of further research.

The 1994 assessment (USDC 1995) states that given the problems with the 1994 survey, it would be inappropriate to use the two surveys from Maine to make inferences about changes in population size, because those samples were taken from nonrandom locations. It is extremely difficult to fish these small concentrated beds of ocean quahogs with a vessel the size currently used by the NMFS because of bottom obstructions.

The ocean quahog is among the longest-lived and slowest growing of marine bivalves worldwide. Growth studies indicate that ages in excess of 100 years are common and longevity past 200 years is documented. There is contradictory evidence about growth rates for ocean quahogs in this area. Recent growth studies conducted off eastern Maine (Kraus *et al.* 1992) indicated a maximum age of 66, but substantially slower rates of growth than for Mid-Atlantic Bight individuals (Figure 5).

Studies of growth in ocean quahogs (Murawski *et al.* 1982; Ropes and Pyoas 1982; and Kraus *et al.* 1992) reveal strong regional differences in the relationship between shell length and age (Figure 5). In their natural environment, quahogs off the coast of Maine grow slower than quahogs from the south. For example, at a length of 40 mm (1.5"), which is the typical size at which this species matures, clams from Maine, Long Island, and Georges Bank would be approximately 23, 8, and 5 years old, respectively (Figure 5). Kraus *et al.* (1992) demonstrated that quahogs from Maine grew as fast as those from southern regions when they were raised in the laboratory (Figure 5). Lutz *et al.* (1983) found similar results. These studies demonstrate the potential for ocean quahogs from Maine to grow more rapidly, and they demonstrate that growth is limited by conditions in their natural environment.

In the absence of a formal stock assessment or even a survey of abundance, it is impossible to quantify the stock status of ocean quahogs off of the coast of Maine. However, there are a number of other sources of information from which one can derive a qualitative understanding of the stock's status.

Since the fishery's inception in the late 1970's, fishing activity has remained focused on a few well-known beds of ocean quahogs. The center of effort shifts no more than a mile or two from year to year. Since landings in this fishery are believed to be driven by market demand (they are demand-limited not resource-limited, see section 7 for details), interannual changes in total landings are not reliable indicators of abundance. A better proxy is catch-per-unit-effort (CPUE). Logbook data show a general increase from approximately two bushels per hour fished at the inception of the experimental fishery in 1991 to over seven bushels per hour fished in 1995 (Table 4).

Unlike the mid-Atlantic portion of the ocean quahog resource, the ocean quahog resource off of eastern Maine produces strong year classes of settled spat and new recruits. Harvesters report that portions of a bed which have been fished down are quickly repopulated with spat and produce new populations of commercial-sized clams (1 1/2") in fishable abundance in as little as seven years (but note that this differs from the results reported by Kraus *et al.* 1992 above). Since the market for eastern Maine ocean quahogs will not take a clam over 2" - 2 1/2" , the most productive segment of the spawning stock enjoys *de facto* protection and is returned

to the beds. These two points are probably related. Additionally, some of the fishermen regularly engage in informal restocking experiments; retaining all the oversized clams from a day's fishing and moving them to more inshore areas which they believe should support a quahog population and a safer winter fishery (Finlayson pers. comm.).

6. DESCRIPTION OF HABITAT

The Council is aware of the new language in the 1996 Magnuson-Stevens Act that will require expanded habitat sections to deal with essential fish habitat and fishing gear impacts on the environment. The Council is scheduled to produce Amendment 11 prior to the October 1998 requirement to deal with these two issues and the other additional requirements of the Act.

The ocean quahog (*Arctica islandica*) is the last living species of an ancient family of mollusks (*Arcticidae*) that were once widely distributed in the temperate and sub boreal waters of the North Atlantic. Ocean quahogs live just below the surface of the sediment where their relatively short siphons extend above the bottom to pump in water which contains the food and oxygen they require. They are usually found in dense beds over level bottoms in sediment that ranges from sand to sandy mud. These beds can be in relatively shallow water (30 feet) in eastern Maine and Nova Scotia, where the bottom temperatures are cool all year but they are never found inter-tidally. South of Cape Cod they are found in deeper, more offshore waters. A seasonal water temperature maximum of 61° F on the bottom seems to determine their near shore distribution. A map of fishing areas in eastern Maine is shown in Figure 2; however, this does not define the full extent of the distribution of ocean quahogs along the coast of Maine but, rather, indicates the distribution of fishing effort (Chenoweth and Dennison 1993).

The larval stage of ocean quahogs is planktonic and fertilized eggs and larvae drift with the currents until the larvae metamorphose into juveniles and settle to the bottom. The planktonic stage is a protracted one and settlement of the larvae can take from 32 to 55 days depending on water temperature. This means that the dispersal of larvae from the spawning site can occur over a considerable distance. Once young ocean quahogs settle to the bottom as juveniles, they are there for life. They are not completely immobile, however, and at irregular intervals may burrow down into the sediment and remain there for several days. Divers on the Maine coast have observed them to be distributed in horizontal layers from one to twelve inches in the sediment (Chenoweth and Dennison 1993).

Waters off of the Northeast region has been divided into six water management units (Figure 6). The boundaries of each water management unit (WMU) were established on the basis of the biogeographic consistency of the entire WMU and its distinctness from other WMUs. Each WMU is relatively consistent in its physical and chemical characteristics with normal latitudinal and seasonal variations in temperature, salinity, and nutrient content. The biota include both endemic and migratory species that exhibit normal seasonal fluctuations in species composition, individual population

size, and geographic distribution. The boundaries between each WMU extend to the heads of drainages, as individual and combined drainages exhibit significant influence on the coastal WMUs. These six units are: Coastal Gulf of Maine, Gulf of Maine, Georges Bank West to Block Channel, Coastal Middle Atlantic, Middle Atlantic Shelf, and Offshelf (USDC 1985).

The Coastal Gulf of Maine WMU encompasses an area bounded seaward by the observable limits of coastal processes, including riverine and estuarine plumes, coastal upwelling and diurnal tidal fluxes. Geographically, the area is bounded on the northeast by the Canadian Border and on the southwest by Cape Cod. This zone is generally marked by steep terrain and bathymetry, joining at a rock bound coastline with numerous isles, embayments, pocket beaches, and relatively small estuaries. Six major rivers, the St. Croix, Penobscot, Kennebec, Androscoggin, Sacq, and Merrimack, provide input from drainage of over 44,000 square miles of Maine, New Hampshire, Vermont, Massachusetts, and southeastern Canada. In addition, the Bay of Fundy outflows through the Grand Manan Channel, influencing the northern section of this zone and providing an area of mixing in which right whales congregate each summer to feed, nurse their young and mate. Circulation is generally to the southwest along Stellwagen Bank, and finally offshore at Cape Cod. In the embayments, axial currents associated with large tidal fluxes dominate the local circulation (USDC 1985).

The Coastal Gulf of Maine provides boreal habitats for important fish (e.g., Atlantic herring, Atlantic cod, haddock, cusk, winter flounder, summer flounder, yellowtail flounder, Atlantic halibut, bluefish, redfish, and scup) shellfish (e.g., American lobster, hard clams, soft clams, ocean quahogs, bay scallop, and northern shrimp), anadromous fish (e.g., shortnose sturgeon, American shad, and Atlantic salmon), coastal cetaceans and pinnipeds (e.g., harbor seal, dolphins, harbor porpoise, humpback whales, fin whales, minke whales, and right whales), sea turtles, and significant birdlife (USDC 1985).

The habitats are presently affected by ocean disposal and effluents from major urban areas (e.g., Eastport, Bangor, Bath, and Portland ME; Portsmouth NH, and Boston MA), along with significant nonpoint source pollution associated with the various rivers. Continued pressure to fill already depleted marsh and shallow water areas occurs in most parts of the area (USDC 1985).

The Gulf of Maine is a semi-enclosed sea of 55,000 square miles separated from the Atlantic Ocean by Browns and Georges Banks. It is an area of five major basins, floored with clays and gravelly silts, and broken by rocky outcroppings, numerous ledges and banks. The circulation is only generally understood: a seasonal clockwise gyre swings around the Gulf and joins the clockwise gyre on the northern edge of Georges Bank. Presently, threats to the area are from the coastal Gulf of Maine and from ships transiting the area (USDC 1985).

7. DESCRIPTION OF FISHING ACTIVITIES

A fishery for small ocean quahogs has occurred off the coast of Maine north of 43° 50' north for a number of years. This fishery had traditionally been prosecuted in Maine state waters, however, due to the presence of a marine organism linked to paralytic shellfish poisoning in humans, several areas in state waters were closed, beginning in 1987, and vessels began to exploit uncontaminated beds located in federal waters.

The eastern Maine ocean quahog fishery began as a summer supplemental fishery in the early 1970's with a single innovative harvester from Buck's Harbor in Machiasport. His successes attracted others from neighboring towns and harbors in central and northern coastal Washington county. With the exception of the monitoring of harvest areas and landings for the presence of PSP or "red tide," the fishery operated without regulation until 1990. In that year, the MAFMC implemented Amendment 8 to the Surfclam and Ocean Quahog FMP. Connections between the mid-Atlantic ocean quahog fishery and the eastern Maine ocean quahog fishery were not obvious at the time. The eastern Maine fishery was largely a seasonal supplement for small vessels which derived their income from a number of different fisheries during the year. The fishery was for small clams in the range of 1 1/2" to 2 1/2" destined for the half-shell market. At these small sizes, the ocean quahogs are a golden-brown or "mahogany" color. All of these features differed markedly from the specialized industrial fishery targeting ocean quahogs 3" or greater taking place many hundreds of miles to the south off New Jersey and the Delmarva Peninsula.

The typical vessel in the Maine quahog fishery is a lobster-style hull in the range of 30'-40' (Table 5). The largest vessel in the active fleet is 45 feet. The ocean quahogs are harvested with a small dry dredge with a cutter bar limited to a maximum of 36" by state regulation. Dredged ocean quahogs are dumped on deck, shoveled into hand-powered mechanical sorters, washed, bagged in 40 lb. (1/2 bushel) lots, and placed on ice in the fish hold below deck. Only ocean quahogs between 1 1/2" and 2 1/2" are retained. Undersized and oversized individuals are immediately returned to the beds.

The current Maine ocean quahog harvesting area is divided into three zones (Figure 2). Zone 1 is bounded on the west by a line running from the westernmost shore of Cape Rosier generally southeast to the westernmost shore of South Deer Isle and then due south to the limits of the EEZ. In practice, the southern boundary of the three zones is defined by the distance of harvesting operations from shore which is seldom more than 10 miles and often much less. The eastern boundary of Zone 1 and the western boundary of Zone 2 runs due south from the southernmost tip of Schoodic Point. The eastern boundary of Zone 2 and the western boundary of Zone 3 is a line running due south from Beals Island. The eastern boundary of Zone 3 is a line running due south from Eastern head.

The harvesting of ocean quahogs is confined to these three areas for two reasons. One is that the vessels fishing this resource can supply their markets without searching further afield. The other is that the State of Maine budget for monitoring

the presence of PSP is very limited and monitoring of a larger area is not possible. Accordingly, ocean quahogs harvested from outside of these areas may not be landed in the State of Maine. This Amendment establishes the requirement that any vessel harvesting ocean quahogs north of 43° 50' do so only from areas that have been tested and certified free of PSP and land their catch in compliance with all requirements of the Interstate Shellfish Sanitation Commission and the National Shellfish Sanitation Program.

Daily landings are highly variable and depend upon the amount of ocean quahogs required by local dealers to meet immediate market demand. A typical good vessel may be capable of landing 100 bushels a day but may go out for as few as 20 bushels if that is all its dealer requires that day. The eastern Maine ocean quahog fishery differs from most fisheries in that it is entirely market-driven (Finlayson pers. comm.). The relationship between harvesters and dealers is one of complex interdependency and informal but important contractual relationships govern their interactions. On the one hand, dealers are dependent upon harvesters to meet their markets' demand with strict standards of size and quality. A local dealer who cannot fill his markets' demand is soon out of business along with the vessels which fished for him. On the other hand, vessels are equally dependent upon a dealer. Without an established relationship with a dealer, a harvester cannot sell any product. Knowing this, vessels will not leave the dock without an order from a local dealer. During periods of low market demand, it is tempting for dealers to encourage price competition among the surplus of harvesters but by and large they do not do this as it would violate their contractual obligations to "their" harvesters whom they must rely upon to keep them supplied with product under highly variable and often difficult market conditions. This may mean that a fisherman may ask a vessel to fish flat out for weeks on end or to make a trip for as few as 10 bushels to top off an order.

Ocean quahogs from the eastern Maine fishery compete in the raw half-shell market with the more desirable hard clam; (*Mercenaria mercenaria*). These ocean quahogs are a less expensive substitute in price-sensitive markets and a supplement to the hard clam during periods of peak market demand. There are three of these centered around the summer holidays of Memorial Day, July 4, and Labor Day. Eighty percent of the eastern Maine landings are harvested between May and August (Figure 7). The huge differences between peak demand and residual demand means that sufficient numbers of vessels must be licensed to meet the demand peaks but that only a very few are needed to supply the residual demand during the remainder of the year. In approximate terms, it may require 40-50 vessels to supply the markets during the peaks but only five or six vessels can derive the majority of their annual income from the eastern Maine ocean quahog fishery.

The number of federally-permitted vessels reporting any landings in a month and the total number of vessels reporting any landings in a given year generally peaks between May and September (Table 6). Data sources are audited and combined federal Shellfish logbooks and federal Multispecies logbooks.

7.1. Profile of the Participants

Records of participation in the eastern Maine fishery were not kept prior to the inception of the experimental fishery in 1990 and the State of Maine did not specifically license quahog harvesters until 1991 (Table 7). It should be noted that while the State of Maine charges a fee for an ocean quahog license, the federal experimental permits were free for the asking. Accordingly, the numbers of Maine licenses may be reasonably construed to approximately represent the numbers of participating vessels while the numbers of federal licenses may not. Fishermen commonly acquire not only those licenses which they plan to actually use but as many others as possible to establish an administrative history of participation as a hedge against the possibility of future license limitations or moratoria.

7.2. Participation in Other Fisheries

Since the eastern Maine ocean quahog fishery is a seasonal supplemental fishery for most participants, it is useful to examine what other state and federal licenses are held by the vessels (Tables 8 and 9). These data indicate that the eastern Maine ocean quahog fishery is the primary fishery for only a few vessels, but for those few it is vital. Instead, it is a variably important component of a flexible annual fishing strategy that typically includes lobstering in the summer months and dragging for scallops and/or urchins in the rest of the year. Some of the license holders may never put an ocean quahog dredge on their boat in the course of any given year if other available fisheries are more lucrative. The great majority which do fish at some point will only put the ocean quahog dredge on the boat for a few days or weeks preceding the peaks in market demand. Those familiar with the fishery estimate that there are only five or six vessels which currently derive the majority of their annual income from the eastern Maine ocean quahog fishery. All but one of these vessels hold multiple other state and federal permits. Only one vessel in the fleet is entirely dependent on ocean quahogs with only a Maine scallop dredge license additionally.

7.3. Landings and CPUE in the Maine Fishery

Landings from the fishery were marginal until 1986, when harvests soared to their historical peak of 125,000 bushels (Table 10). The following seven years saw a gradual decline in landings to a low of 17,000 in 1993, from which point they started a steady increase back to the 69,000 bushels recorded for 1996. Part of the resurgence in landings is due to fishermen taking advantage of previously unexploited areas (Morrill pers. comm.).

Much of the variability in landings also reflects changes in market demand and participation in the ocean quahog fishery, rather than changes in resource abundance. Vessels will rapidly enter or leave this fishery based on the current price of ocean quahogs, the quantity which they have a buyer for, and alternative opportunities in other fisheries. Definitive information on the extent of the existing resource will not be available until a survey and assessment are completed, however reports from fishermen are positive. Previously exploited beds are described as showing new recruitment and growth, and since effort data became available with the start of the experimental fishery in 1991, CPUE has shown a steady increase from 2.0 bushels per hour in 1991 to 7.3 bushels per hour in 1995 with a slight decline to 7.0 bu./hr. in 1996 (Table 4).

In late 1990 the federal experimental fishery was initiated for the Maine EEZ, and fishermen began submitting landings data using federal logbooks (Tables 10 and 11). The years 1991 through 1993 represent a transitional period in which official landings data from the previous, dealer-based system were converted over to one in which the federal logbooks completed by fishermen are intended to capture all landings, whether from state or federal waters. In 1996 there were 80 boats licensed to participate in the Maine ocean quahog fishery (Table 3) from the State of Maine and 82 had obtained federal permits which allowed them to fish in the EEZ experimental fishery. These vessels were required to submit federal logbooks. The remaining vessels were only authorized to fish in the Maine Territorial Sea. Participation in the Federal experimental fishery has varied from a high of 53 vessels in 1992 to a low of 33 vessels in 1993 (Table 3). Sources of ocean quahog purchases reported by Maine dealers in the final year of the Experimental Fishery are presented in Table 12.

A final reporting issue relates to a tax which the State of Maine levies on Maine ocean quahog fishermen in order to fund their PSP monitoring program (Appendix 6). The fact that every bushel of ocean quahogs harvested is subject to this tax creates an incentive to underreport catches. No estimates are available as to the degree to which this may or may not be occurring (Finlayson pers. comm.).

8. DESCRIPTION OF ECONOMIC CHARACTERISTICS OF THE FISHERY

This section of the FMP remains unchanged in regards to the major ocean quahog fishery. A full description of economic characteristics of the fisheries south of this zone of eastern Maine is contained in section 8 of Amendment 8 (MAFMC 1988) and in the annual quota recommendations paper (MAFMC 1996b).

Significant differences exist between the two ocean quahog fisheries, and the markets into which each are sold. The major ocean quahog fishery has typically been an industrial enterprise, conducted by large vessels operating in deep, offshore waters. Ocean quahogs are dislodged from the seabed using large, hydraulic dredges which shoot jets of water from their leading edge. Once on board, ocean quahogs are stored in metal cages each holding 32 bushels. Back at the dock, cranes lift the cages into tractor trailers for shipment to processing plants, where they are steamed open, thoroughly washed, and processed into a variety of product forms but mostly clam chowder. Reported prices, have been relatively constant during the past two decades, and ranged from \$3.00 to \$4.70 per bushel.

In contrast, the small-scale historical eastern Maine ocean quahog fishery utilizes small, dry dredges with a maximum cutter bar width of 36", on boats typically ranging between 30' and 40' in length. The ocean quahogs targeted by these vessels are smaller than in the industrial fishery, averaging between 1.5" and 2.5", and destined for the fresh, half-shell market. Larger ocean quahogs are actually discarded. This gives *de facto* protection to the most productive portion of the spawning biomass and may partly explain why the eastern Maine resource shows regular new recruitment while the portion of the resource fished by the industrial fishery does not.

The ITQ system for surfclams and ocean quahogs was implemented as a management regime for the industrial fishery. Whereas, the catch per unit of effort (CPUE) for class 2 and class 3 vessels, which dominate the industrial fishery, averages nearly 120 bushels per *hour* (MAFMC 1996b), the smaller class 1 vessels in the Maine ocean quahog fishery exhibit a CPUE of about 35 bushels per *trip* (Table 3). A class 1 vessel is defined as being under 50 gross registered tons.

Mandatory logbook data have been collected from the area since October 1990 in compliance with the regulations implementing the experimental fishery. These data give some indication of the economic characteristics of the fishery, however, the data do not include fixed or operating costs associated with fishing operations. Therefore, profit margins accruing to the fishery under the various alternatives discussed cannot be estimated (USDC 1993).

According to unpublished NMFS logbook data there were 40 vessels participating in the ocean quahog experimental fishery in eastern Maine in 1996 (Table 3). A total of 69,067 bushels of ocean quahogs were reported landed in 1996. This represented an increase of 18,596 bushels (36%) from the 1995 level of 50,471 bushels. The average price of a bushel of ocean quahogs was \$28.85 in 1996 (but prices have been as high as \$45.00 per bushel in 1991). This represented a decrease of about \$5 (15%) from the 1995 average. The decrease in price of ocean quahogs was likely caused by the increase in ocean quahog landings from 1995 to 1996. In addition to this, landings of hardclams (*Mercenaria mercenaria*) which compete for market share with Maine ocean quahogs has also increased in recent years (Finlayson pers. comm.). This last factor has likely affected the price of ocean quahogs in an inverse way. Monthly landings show that this fishery is highly seasonal, with more than 90% of harvests occurring between April and September on average (Figure 7).

8.1. Washington and Hancock County Demographics

Maine ocean quahogs are landed in Maine's two most easterly coastal counties (Hancock and Washington) with the Washington county landings exceeding those in Hancock county by an average of roughly 10 to 1. Hancock county includes some of Maine's most popular tourist destinations such as Acadia National Park. It also contains towns such as Castile, Blue Hill and Bar Harbor which are noted for their high proportion of wealthy residents. The town of Bucksport is home to a large paper mill employing over 1,000 workers at wages far above the state average.

Washington county, in contrast, enjoys none of these advantages. These and other contrasts are reflected in the following demographic statistics which help to explain why the employment and income from fishing is far more important to the welfare of Washington county coastal communities than to other areas of Maine.

Jonesport is the primary port of landing for the fishery. Ocean quahogs also are landed in the adjacent towns of Machias and Cutler to the north and Addison, Harrington, Milbridge, Steuben and Gouldsboro to the south. Jonesport is the archetypical fishing-dependent community (Finlayson pers. comm.). The only other source of primary economic activity is a small Coast Guard station. All of the local purveyors of goods and services are crucially dependent upon the income generated

by the fishing industry. Lobsters lead the way in value followed by sea urchins, scallops, quahogs, other shellfish, mussels, finfish, marine worms and seaweed.

The demographics of Washington and Hancock Counties are significantly different (Table 13) with Hancock being more similar to Maine's overall average. These data are derived from both the U.S. Census and statistics compiled by the Maine State Planning Office.

9. FISHERIES MANAGEMENT PROGRAM

9.1. MEASURES TO ATTAIN MANAGEMENT OBJECTIVES

9.1.1. Eastern Maine Ocean Quahog Fishery

9.1.1.1. General provisions

A quota, separate from and independent of the quota held by participants under the ITQ provisions of Amendment 8, will be established for ocean quahogs landed from a zone north of 43° 50' north latitude. The initial quota will be set at a maximum of 100,000 Maine bushels (8 million pounds in the shell), where 1 Maine bushel = 1.2445 cubic feet. This is within the historical range of landings (17,700 bushels to 125,000 bushels) for this fishery (Table 10). All landings of ocean quahogs (from both state and federal waters) in this zone will be counted against the quota, except for harvests counted against an ITQ.

Adjustments to the quota can be made in subsequent years within the range of 100,000 and 17,000 Maine bushels as part of the annual quota setting process. The Maine Ocean Quahog Advisory Panel will make recommendations on the Maine quota, which will report through the MAFMC Surfclam and Ocean Quahog Committee to the MAFMC. Once a fishery independent survey and stock assessment have determined a long-term, biologically-sustainable quota for this zone, the FMP will be modified to reflect this new quota.

The quota would be administered and monitored by the Northeast Region of the National Marine Fisheries Service. Vessels harvesting ocean quahogs in the eastern Maine fishery in the EEZ are required to 1) hold a valid federal permit, 2) maintain and submit Federal Shellfish logbooks of their harvests from both state and federal waters, and 3) notify NMFS prior to a fishing trip.

All ocean quahogs harvested from the zone north of 43° 50' must come from areas certified to be free of PSP, and all non-ITQ vessels must land their catch in the State of Maine. An ITQ vessel may land in Maine (and thus must comply with Maine laws) or may land outside of Maine, but must have the catch certified safe for human consumption through testing at facilities with a NMFS/FDA/state approved dockside Paralytic Shellfish Poisoning (PSP) testing protocol. Nothing in this Amendment precludes ITQ holders from fishing the EEZ portion of this zone, as long as they use their ITQ allocation.

A moratorium on entry to the fishery is established, based on the criteria of having held an experimental permit for this fishery and reported landings of at least one bushel of ocean quahogs from the zone north of 43° 50' in the Federal Shellfish or Multispecies logbooks during the period of the experimental fishery (October 1990 through September 1997). Vessels holding only a State of Maine ocean quahog permit will be excluded from the EEZ fishery. Vessels that hold only a State of Maine mahogany quahog permit must also report through the Maine shellfish logbooks so that similar data are collected and their landings can be counted towards the overall zone quota. This shellfish logbook reporting for vessels that hold only a State of Maine permit will be required by and coordinated by the State of Maine (Mercer pers. comm.). These data will also be provided to NMFS so that the record keeping is complete. All dealers (irrespective of whether they are federally licensed or state only licensed) will also have to keep a record of all quahogs purchased at the point of first sale. This is currently required by Maine law (section 4715, Appendix 6). All federally permitted vessels must now report in only the Federal Shellfish logbooks, and not in the Multispecies logbooks as has been somewhat common between 1994 and 1997.

The NMFS will tally dealer reports of harvest on a weekly basis, compare them with vessel logbooks on a monthly basis, and compare the running total with the quota. When the quota is reached, all vessels will be prohibited from fishing in this zone north of 43° 50'. Even ITQ vessels will be prohibited from fishing in this zone once the quota is reached in order to facilitate enforcement.

When a resource survey and full assessment of the eastern Maine portion of the resource has been completed, a quota for the fishery based upon the long-term sustainable yield from this portion of the stock will be determined, and incorporated into an amendment to the FMP.

The State of Maine will continue to protect the public health by monitoring harvesting areas in both state and federal waters for the presence of PSP. Ocean quahogs landed in the State of Maine must carry a tag specifying the time and place of harvest and certifying that they have come from a safe open area in accordance with the National Shellfish Sanitation Program. The continued protection of the public health by the State of Maine is absolutely essential because of the incidence of PSP in the Gulf of Maine. Any landings from ITQ vessels that are not landed in Maine must be tested and certified safe for human consumption at facilities with a NMFS/FDA/state approved dockside PSP testing protocol. These measures are essential for the protection of the public health.

9.1.1.2. Quota for the Eastern Maine Ocean Quahog fishery

Recorded landings from this fishery have varied from a high of 125,000 bushels in 1986 to the low of 17,000 bushels in 1993 (Table 10). These variations are driven largely by changes in market demand for the product and alternative opportunities for the vessels in other fisheries (sections 7 and 8). An MSY estimate cannot be accurately determined until a fishery independent survey of the resource and comprehensive stock assessment are available. Therefore, it is reasonable to set an initial maximum quota that reflects the long-term average performance of the fishery

in the past. The initial quota will be a maximum of 100,000 Maine bushels (8 million pounds in the shell). The Council has directed that the quota for the eastern Maine fishery is in addition to and independent from the quota that is annually allocated to current ITQ holders. The current (1997) 4.317 million bushel quota is based on stock assessments (1994 last survey and assessment) which did not encompass the resource population in Maine.

To date, there have been no comprehensive, systematic surveys or assessments of the ocean quahog resource in eastern Maine. A full stock assessment of the resource should be a priority to ensure that this segment of the fishery will have a sustainable future. The Council's annual quota setting process for the majority of the resource will remain intact. This initial maximum quota for this zone will remain in effect until a resource survey and assessment is completed. The quota can be lowered annually below 100,000 bushels on the advice of the Maine Ocean Quahog Advisory Panel which will report through the MAFMC Surfclam and Ocean Quahog Committee to the MAFMC. A reduction in quota would occur through the annual Council review and quota-setting process.

The Council and the State of Maine will monitor the fishery using the best available data. Any resource assessment information from the SARC/SAW process will be considered. Commercial landings data and CPUE will be also be evaluated. Should any change appear necessary, the Council will seek input from the State of Maine before proposing changes to the regulations implementing the Maine quahog fishery.

9.1.1.3. Eastern Maine Harvest Areas

Vessels will only be permitted to harvest ocean quahogs from areas which have been certified to be PSP-free. Vessels holding only State of Maine ocean quahog licenses would be restricted to fishing only in state waters. All ocean quahogs harvested from these areas by non-ITQ vessels would be required to be landed in the State of Maine. An ITQ vessel may land in Maine (and thus must comply with Maine laws) or may land outside of Maine, but must have the catch certified safe for human consumption through testing at facilities with a NMFS/FDA/state approved dockside Paralytic Shellfish Poisoning (PSP) testing protocol. The significant occurrence of PSP both in state waters and the EEZ off the coast of Maine require that such measures be taken. Unacceptable risk to the public and the fishery would occur if these procedures were circumvented.

9.1.1.4. Dealer Reporting Requirements

Weekly landings will be reported to NMFS by dealers (as for all other fishery segments under Amendment 8 management) and monitored on a weekly/cumulative basis. Vessel logbooks will be submitted to NMFS on a monthly basis and their reported landings compared with those from dealers. Vessel logbooks have been a part of management of the surfclam and ocean quahog resource management since the inception of the FMP in 1977 and have been required from all participants during the duration of the experimental fishery. The fishery for ocean quahogs in both state and federal waters in this zone will be closed if the quota is filled prior to the end of the fishing year. A closure of the zone will also effect any ITQ allocation vessel.

9.1.1.5. Vessel Permits and Reporting Requirements

A federal moratorium permit is required for vessels to participate in the EEZ fishery for ocean quahogs north of 43° 50' north latitude, except when fishing under an ITQ allocation. To qualify for this permit, a vessel must have held a permit in the experimental fishery and reported at least one bushel of ocean quahog landings in either the Federal Shellfish or Multispecies logbooks from the zone north of 43° 50'. The basic permit and reporting requirements established in Amendment 8 and the experimental fishery will continue unchanged by this Amendment. Owners or operators of the vessels must obtain vessel permits and file the required logbook reports. Vessels that do not qualify for the federal moratorium permit and want to fish in State of Maine waters only will be bound by Maine law (Appendix 6) and in the future will have to provide similar (to the Federal Shellfish logbook) data to the State of Maine. Federally permitted vessels can only sell to federally permitted dealers.

9.1.1.6 Monitoring and Enforcement

The landings from all non-ITQ vessels will be assigned to the quota for this zone north of 43° 50' and must be recorded in the vessels' logbooks as such, even if they have been taken from state waters. Vessels holding no federal permits and fishing exclusively in state waters are not exempt from the shellfish logbook program. Vessels holding no federal permits and fishing exclusively in state waters will be required to report their catch to the State of Maine through Maine's reporting system (Mercer pers. comm.). Vessels which hold ITQs for ocean quahogs will be allowed to fish in the EEZ portion of this zone until the quota is taken and will have their catch counted towards their ITQ allocation. The ITQ catches will not count towards this zone's quota.

Maine and interstate shellfish sanitation laws require that harvesters attach tags to each container of shellstock identifying the exact time and location of their harvest. Licensed shellfish dealers must attach their own tags to these containers or to other containers into which the shellstock may be transferred. In either case, the location of original harvest and the name of the original harvesting vessel must be retained.

The FMP requires that federally licensed harvesters sell their catch only to a federally licensed dealer and that both dealers and harvesters each keep accurate and complete logbooks. The federal harvester's logbook requires that the location of harvest be recorded. Dealers buying ocean quahogs from State of Maine only licensed vessels not holding a federal permit will be required to report those landings to Maine (Mercer pers. comm.).

All non-ITQ ocean quahogs landed in Maine by any vessel fishing in this eastern Maine zone will count against the quota for this fishery. Landings from the eastern Maine EEZ portion of the zone by vessels holding ITQ will not count against the eastern Maine quota but will be deducted from their ITQ allocation.

Dealer logbooks are required to be submitted to NMFS on a weekly basis, and NMFS will maintain a running tally of landings against the total available quota. If analyses

show that the quota would likely be reached prior to the end of the fishing year, NMFS will issue a notice to that effect to license holders and close the EEZ fishery. The State of Maine has agreed that it too will close to landings of ocean quahogs at the same time NMFS closes the EEZ (Finlayson pers. comm.).

Amendment 8 (MAFMC 1988), requires that surfclam and ocean quahog vessel owners and operators call the NMFS Office of Law Enforcement nearest to the point of offloading (contact the Regional Administrator for locations and phone numbers) and accurately provide specific information prior to departure of their vessel from the dock to fish for surfclams or ocean quahogs in the EEZ. The information to be provided consists of: 1) name of the vessel; 2) NMFS permit number assigned to the vessel; 3) expected date and time of departure from port; 4) whether the trip will be directed on surfclams, ocean quahogs, or Maine ocean quahogs -- this is needed in order to facilitate enforcement and ensure public health; 5) expected date, and location of landings; and 6) and name of the individual providing notice. This Amendment establishes the fact that the Regional Administrator has the discretion to suspend this requirement for fishermen in this zone (if he believes it is not necessary for quota enforcement) after consultation with the State of Maine and upon notification of the MAFMC.

9.1.1.7. Federal Limited Access Permits

This Amendment establishes a moratorium on federal eastern Maine ocean quahog permits. During this moratorium, federal permits will be issued only to those vessels which both held a Federal Experimental Ocean Quahog permit at any time during the experimental fishery from October 1990 through September 1997 and reported harvesting at least one bushel of ocean quahogs from the zone north of 43° 50' in either the Federal Shellfish logbook or in the Federal Multispecies logbook. Based upon analyses of the logbooks available, 83 vessels qualify.

This provision addresses the concerns of the historical participants regarding the establishment of a quota. Although the experimental fishery was open-access, in meetings with fishermen from eastern Maine, it became clear that the central concern regarding management was the establishment of a quota, the potential for the quota to be filled, and the fishery closed. An open-access licensing system would permit fishermen who had not complied with the experimental fishery reporting requirements to compete for a limited quota with those who had complied.

The purpose of the moratorium on new entrants is to reduce the potential for overcapitalization and the dissipation of economic rent which occurs when an unlimited number of new participants is allowed into a fishery. An increase in the number of participants in the Maine ocean quahog fishery would cause economic hardship for the ocean quahog vessels that have traditionally participated in the fishery. The extent of the economic pressure would depend on the ability of the vessels that currently fish for ocean quahog to compete in other fisheries. Taking into consideration the current level of specialization of these vessels and the overall level of competition for the existing fishery resources of the Atlantic coast, it is likely that the number of alternatives for those vessels would be very small.

Since the eastern Maine portion of the ocean quahog resource extends considerably beyond the area currently being fished, it is probable that the sustainable yield is larger than present harvest levels and that the fishery could support more than the number of vessels which will initially qualify for a moratorium permit. The State of Maine and the Council will develop policies and criteria for increasing the number of federal permits for the eastern Maine fishery should a full stock assessment show that the resource can sustainably support additional participants.

9.1.1.8. Eastern Maine Quota Relative to Overfishing Definition in Amendment 9

The maximum initial quota will be set at 100,000 Maine bushels. The initial quota is frameworked with a minimum set at 17,000 bushels. This is within the historical range (17,700 bushels to 125,000 bushels, Table 10). The quota will also be frameworked so that when a survey and assessment of the resource is conducted, a more accurate sustainable quota will be set that can meet the new Magnuson-Stevens Act requirements.

Quotas are often set relative to landings when little is known about the extent of the biomass, and in fact is the methodology that was used to set the initial quota and MSY estimate for the surfclam and ocean quahog resources when the first federal FMP was implemented in the late 1970s. Two NMFS surveys have been conducted in the EEZ of the Gulf of Maine but because of their nonrandom nature and the difficulties in fishing the bottom with a large research vessel, no biomass estimates have been developed (Chapter 5).

An initial eastern Maine maximum quota of 100,000 bushels is approximately 2% of the EEZ ITQ quota of 4.317 million bushels in 1997. Thus, the relatively small eastern Maine quota will not significantly impact the reproductive capability of ocean quahogs in the US EEZ. This quota is definitely set at a risk averse level.

Overfishing of ocean quahogs in Amendment 9 (MAFMC 1996a) was defined as a fishing mortality rate of $F_{25\%}$ (25% of the maximum spawning potential), which equates to an annual exploitation rate of 4.3% for the entire resource.

The Council also has a policy to set the quota within the OY range at a level that will allow fishing to continue at that level for at least 30 years. The 30 year policy equates to an annual exploitation rate of the assessed biomass at 3.2%. Within the above constraint, the non-Maine quota is set at a level that will meet estimated annual demand. The initial maximum quota of 100,000 bushels for this zone, since it is only about 2% of the overall quota, will not raise the current overall annual exploitation rate of 3.2% to a level that approaches the overfishing threshold of 4.3%. Thus, this 100,000 bushel quota, is risk averse, will not cause overall overfishing, and will not jeopardize the ocean quahog resource in the US EEZ.

The Council has had a 30 year supply horizon for ocean quahogs as its policy for annual quota setting for nearly a decade. This policy can remain intact for the annual quota setting and serves as what NMFS calls a "target". The overfishing level is considered a "threshold" beyond which the long-term productive capability of the stock is jeopardized. The NMFS is encouraging the Council not to have the target

and the threshold equal because the overfishing threshold, is intended to and, could become quite constraining if exceeded. The Council's quota setting process is more conservative than the rate-based overfishing levels, given the general current resource conditions.

9.1.2. Establishment of the Maine Ocean Quahog Advisory Panel

This Amendment establishes a Maine Ocean Quahog Advisory Panel to make recommendations to the Surfclam and Ocean Quahog Committee of the MAFMC for any future Framework Adjustments or Amendments to the Surfclam and Ocean Quahog FMP, as well as the annual quota setting process, necessary for the orderly and sustainable operation of the eastern Maine fishery. The eastern Maine ocean quahog fishery is sufficiently distinct and remote from the major industrial fishery as to justify a separate advisory panel. The fact that bringing this portion of the fishery into the FMP has been so difficult and protracted is largely due to the radical differences between the social, economic, cultural and ecological features of the artisanal eastern Maine fishery and the industrial Mid-Atlantic fishery.

The number and composition of the advisory panel is to be determined by the Surfclam and Ocean Quahog Committee but it will include representatives of harvesters, dealers and the Maine Department of Marine Resources.

9.2. ANALYSIS OF BENEFICIAL AND ADVERSE IMPACTS OF PROPOSED MANAGEMENT MEASURES

9.2.1. The FMP Relative to the National Standards

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

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

The Amendment does not change the MSYs, OYs, or quota setting process for surfclams and only allows for a small (approximately 2% of the total quota) increase in the overall quota for ocean quahogs. This initial maximum quota of 100,000 bushels is a small increase in overall quota on a portion of the biomass that has not been assessed through any of NMFS regular research surveys. While the ocean quahog biomass in eastern Maine has not been assessed, the quota is consistent with landings during the approximately 20 years this fishery has existed. Therefore, this Amendment does not alter the FMP's consistency with this standard.

An eastern Maine initial quota of 100,000 bushels is 2.3% of the entire quota in the non-Maine EEZ of 4.317 million bushels in 1997. Thus, the relatively small Maine quota is risk averse and will not significantly impact the reproductive capability of ocean quahogs in the U.S. EEZ.

Overfishing of ocean quahogs in Amendment 9 (MAFMC 1996a) was defined as a fishing mortality rate of $F_{25\%}$, (25% of the maximum spawning potential), which equates to an annual exploitation rate of 4.3%.

The Council also has a policy to set the overall quota within the OY range at a level that will allow fishing to continue at that level for at least 30 years. The 30 year policy equates to an annual exploitation rate of the assessed biomass of 3.2%. Within the above constraint, the non-Maine quota is set at a level that will meet estimated annual demand. There is no way that the 100,000 bushel maximum quota for this eastern Maine zone will cause the fishing mortality rate to go from the 3.2% annual level, to in excess of the threshold level of 4.3%.

The Council has had a 30 year supply horizon for ocean quahogs as its policy for annual quota setting for nearly a decade. This policy can remain intact for the annual quota setting and serves as what NMFS calls a "target". The overfishing level is considered a "threshold" beyond which the long-term productive capability of the stock is jeopardized. The NMFS is encouraging the Council not to have the target and the threshold equal because the overfishing threshold, is intended to and, could become quite constraining if exceeded. The Council's quota setting process is more conservative than the rate-based overfishing levels, given the general current resource conditions.

In the summer of 1997 the NEFSC conducted a surfclam and ocean quahog survey from Georges Bank through Cape Hatteras. The eastern Maine zone was not surveyed in 1997. The winter SARC (December 1997) assessed the surfclam resource in the US EEZ. The summer SARC (June 1998) will assess the ocean quahog resource but is not expected to assess this eastern Maine zone since no fishery independent data will be available. It may however, examine vessel logbooks for both total landings and CPUE. Potentially, some light may be shed on the nature of the sustainability of this resource.

In the absence of a formal stock assessment or even a survey of abundance, it is impossible to quantify the stock status of ocean quahogs off of the coast of Maine. There are a number of other sources of information from which one can derive a qualitative understanding of the stock's status.

Since the fishery's inception in the late 1970's, fishing activity has remained focused on a few well-known beds of ocean quahogs. The center of effort shifts no more than a mile or two from year to year. Since landings in this fishery are believed to be driven by market demand (they are demand-limited not resource-limited, see section 7 for details), interannual changes in total landings are not reliable indicators of abundance. A better proxy for abundance may be catch-per-unit-effort (CPUE). Logbook data show a general increase from approximately two bushels per hour fished at the inception of the experimental fishery in 1990 to seven bushels per hour fished in 1996 (Tables 3 and 4).

Unlike the mid-Atlantic portion of the ocean quahog resource, the ocean quahog resource off of eastern Maine produces strong year classes of settled spat and new recruits. Harvesters report that portions of a bed which have been fished down are

quickly repopulated with spat and produce new populations of commercial-sized clams (1 1/2") in fishable abundance in as little as seven years (but note that this differs from the results reported by Kraus *et al.* 1992 above). Since the market for eastern Maine ocean quahogs will not take a clam over 2" - 2 1/2" , the most productive segment of the spawning stock enjoys *de facto* protection and is returned to the beds. These two points are probably related. Additionally, some of the fishermen regularly engage in informal restocking experiments; retaining all the oversized clams from a day's fishing and moving them to more inshore areas which they believe should support an ocean quahog population and a safer winter fishery (Finlayson pers. comm.).

The provisions of the FMP concerning setting annual quotas, requiring cage tags, minimum size limit, closed areas, and reporting will prevent overfishing of surfclams and ocean quahogs. The initial eastern Maine quota of 100,000 bushels may be reviewed annually and adjusted by the Council via framework. After a resource survey and stock assessment the maximum quota may be increased, but the quota would have to be sustainable long-term. Clearly, the two Councils, the State of Maine and NMFS all agree that the long-term sustainability of this resource, and thus fishery, is extremely necessary.

In conclusion, given the current general condition of the overall resource, there is no way that a 100,000 bushel eastern Maine quota added to the ITQ portion of the resource quota (as long as the 30 year supply horizon policy is in effect) would create a situation where the overall annual exploitation rate of 4.3%, and thus the overfishing threshold, for the entire resource would be exceeded. In addition, it is important to remember that the surveys on which the 30 year supply horizon are based have never included adequate sampling of this eastern Maine resource. Given all the above information the Council believes that this quota is in compliance with the risk adverse policy of NMFS.

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

This FMP is based on the best and most recent scientific information available. Data used include NMFS logbook and permit files, data from the State of Maine, and the most recent stock assessments. Future ocean quahog research should be devoted toward both survey and data collection that provide biomass estimates for eastern Maine, upon which sustainable harvest rates can be accurately projected. Surfclam and ocean quahog assessments should continue to be performed after each NMFS survey.

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

This Amendment improves the FMP's consistency with this standard since it would bring the eastern Maine ocean quahog fishery into the basic management regime, rather than having it continue operating as an experimental fishery.

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

The FMP does not discriminate among residents of different states. It does not differentiate among US citizens, nationals, resident aliens, or corporations on the basis of their state of residence. It does not incorporate or rely on a state statute or regulation that discriminates against residents of another state.

Additionally, it brings the eastern Maine ocean quahog fishery into the basic management regime. It does not preclude any ITQ owner from fishing his ITQ in the EEZ portion of the zone north of 43° 50' as long as those ITQ bushels are landed in Maine or if they are landed outside of Maine, they must be landed at facilities with a NMFS/FDA/state approved dockside PSP testing protocol.

The experimental fishery that was conducted between October 1990 and September 1997 was an open access fishery and all interested parties could have enrolled. There were many more experimental permits issued annually than vessels that actually reported landings. The EEZ moratorium permit for this zone is restricted to those vessels that had an experimental permit and actually landed at least one bushel of ocean quahogs during the experiment. This is fair and equitable to all fishery participants.

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

The management regime is intended to allow the fishery to operate at the lowest possible cost (e.g., fishing effort, administration, and enforcement) given the FMP's objectives.

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

The Amendment does not alter the FMP's consistency with this standard. The Amendment sets a maximum initial quota consistent with historical landings. It is expected that if the fishery with its associated abundance and catches changes, there will be considerable pressure generated to perform a resource survey and assessment. The Council expects minimal pressure to conduct a resource survey and assessment if the quota is truly market driven and is not exceeded, thus triggering a closure. Quota increases can occur once accurate biomass estimates are produced. Quota decreases from the maximum 100,000 bushel initial quota can occur annually based on the advice of the Maine Ocean Quahog Advisory Panel through the Surfclam and Ocean Quahog Committee. Variations among and

contingencies in for both the resource and catches could result in annual changes to the frameworked maximum annual quota, or result in initiations of the Amendment process.

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

By applying the basic management regime to the ocean quahog fishery in eastern Maine the Amendment minimizes costs and avoids duplication. All eastern Maine moratorium EEZ permit holders will be required to comply with the management measures that were in the experimental fishery (i.e. landing requirements, reporting, etc.), and thus will not have new costs. The pressure for the continuation of the experimental fishery will be discontinued. The State of Maine will continue to enforce their landing restrictions to ensure compliance with the PSP monitoring program and to protect the public health. The PSP monitoring program by the State of Maine is not a cost borne by the Federal government. Quantities of ITQ landed EEZ ocean quahogs would have to be landed in Maine or if landed outside of Maine, they must be landed at facilities with a NMFS/FDA/state approved dockside PSP testing protocol. The State of Maine has agreed to collect comparable data from the few vessels that will not have moratorium permits and that currently are permitted to fish in State of Maine only waters. Thus, there is no unnecessary duplication.

9.2.1.8. Conservation and management measures shall, consistent with the conservation requirements of this Act (including the prevention of overfishing and rebuilding of overfishing 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.

These proposed management measures take into account the importance of the fishery resources to the fishing communities. The impacts of the proposed actions on participants in the ocean quahog fisheries including analyses of biological, economic, and social impacts are described previously, in the next section (Analysis of Beneficial and Adverse Impacts of Proposed Management Measures), in Appendix 1 (Alternatives to the FMP), and in Appendix 2 (Regulatory Impact Review) of the FMP. The following is a brief summary of the socioeconomic characteristics of the fishery.

There are between 33 and 53 boats participating in the ocean quahog fishery off of Maine in any given year. In 1996, 82 boats had federal permit that allows them to participate in the experimental fishery. Of all the vessels that participate in the eastern Maine ocean quahog fishery, there are no more than a dozen year-round participants. The rest fish for market peak periods such as Memorial Day, 4th of July, and Labor Day. When those boats are not fishing for ocean quahogs they target other species such as: sea scallops, lobster, sea urchins, and groundfish among others (Finlayson pers. comm.). Under the criteria proposed in this Amendment, 83 vessels would qualify for a moratorium permit.

Mandatory logbook data have been collected from the area since October 1990 in compliance with the regulations implementing the experimental fishery. These data

give some indication of the economic characteristic of the eastern Maine fishery, however, the data do not include fixed or operating costs associated with fishing operations.

According to unpublished NMFS logbook data there were 43 vessels participating in the ocean quahog experimental fishery in Maine in 1996. A total of 69,067 bushels of ocean quahogs were reported landed in 1996. This represented an increase of 18,596 bushels (36%) from the 1995 level of 50,471 bushels. The average price of a bushel of ocean quahogs was \$28.85 in 1996 (but prices have been as high as \$45.00 per bushel in 1991). This represented a decrease of about \$5 (15%) from the 1995 average. The decrease in price of ocean quahogs was likely caused by the increase in ocean quahog landings from 1995 to 1996. In addition to this, landings of hardclams (*Mercenaria mercenaria*) which compete for market share with eastern Maine ocean quahogs has also increased in recent years (Finlayson pers. comm.). This last factor has likely affected the price of ocean quahogs in an inverse way. Monthly landings show that this fishery is highly seasonal, with more than 90% of harvests occurring between April and September on average (Figure 7).

Ninety percent of the eastern Maine ocean quahog's landings are in Washington County, Maine. Jonesport accounts for the largest percent of the total ocean quahog's landings, thus, being the most active port in the region (Finlayson pers. comm.). Socioeconomic indicators show that Washington county is among the more severely depressed areas in the Northeast United States (USDC 1990). In 1990, 91% of the population of Washington County was classified as residing in rural areas; 27% did not attain a high school diploma. The area is economically depressed with per capita income of \$9,607 and a median household income of \$19,993. Approximately 19% of the population lives below poverty level. To gain a clearer perspective on the state of the economy in Washington County, consider that in neighboring Hancock County per capita income is approximately 25% higher at \$12,347 with only 10% of the population living below the poverty level. The unemployment rate in Washington County was 10.3% in 1990 (USDC 1993). More recent employment statistics show that as of December 1996 the unemployment rate (not seasonally adjusted) in Washington County was 7.5% (Finlayson pers. comm.).

This amendment improves the FMP to better enable it to meet this new National Standard. The major thrust of this Amendment is to allow small-scale fishing communities on the coast of Maine to continue to operate as they have historically and under the experimental fishery between October 1990 and September 1997. Amendment 8, with its associated ITQs and cage requirements is currently in effect by default. Amendment 8 regulations do not readily provide for the sustained participation of these fishermen nor their communities, nor does it minimize adverse economic impacts. If this Amendment is not implemented, these small-scale fishing boats and the communities with which they are associated will be significantly impacted.

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

None of the management measures proposed in this Amendment will promote or result in increased levels of bycatch relative to the status quo. The range of surfclams and ocean quahogs overlaps with that of marine mammals and endangered species to a large degree, and there always exists some very limited potential for an incidental kill. Except in unique situations (e.g., tuna-porpoise in the central Pacific), such accidental catches should have a negligible impact on marine mammal/endangered species abundance, and the Council does not believe that implementation of this Amendment will have any adverse impact upon these populations. While marine mammals may occur near surfclam and ocean quahog beds, it is highly unlikely any significant conflict between the fishermen managed by this Amendment and these species would occur. Ocean quahog vessels dredge at very slow speeds and healthy animals should have no difficulty avoiding these vessels. Additionally, surfclams and ocean quahogs are benthic organisms, while marine mammals and marine turtles are pelagic and spend nearly all of their time up in the water column or near the surface. The realized reduction in the number of fishing vessels resulting from Amendment 8 reduced the potential for the interaction with endangered species from a minimal to a very minimal level. Furthermore, management of these two bivalves are in the EEZ only except for this zone in eastern Maine and the only listed endangered fish species, shortnose sturgeon, practically never ventures far from its riverine existence. Bycatch in eastern Maine clam dredges of fish species is extremely minimal (Finlayson pers. comm.). The economic characterization of what these Maine fishermen also catch in addition to ocean quahogs is briefly described in section 8. Observations made during the PSP sampling program by the Maine Department of Marine Resources indicate negligible bycatch in this fishery (McGowan pers. comm.).

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

None of the management measures proposed in this preferred alternative will promote or result in increased levels of unsafe behavior at sea relative to the status quo. The proposed management measures of this Amendment do not limit the times or places when or where vessels may fish. Therefore, the Council has concluded that the proposed Amendment will not affect the safety of vessels fishing in this fishery. If anything, continuing to impose Amendment 8 regulations on the eastern Maine fishery could increase risk to life and property. Cages would be much more unsafe for these small vessels than requiring landings of the resource in bags. Thus, this Amendment is actually promoting safety at sea.

9.2.2. Cost/Benefit Analysis (Note: the analyses of the alternative management systems considered are presented in Appendix 1.)

9.2.2.1. Eastern Maine ocean quahog fishery

Before the costs and benefits of federal management of the ocean quahog fishery in the eastern Maine zone can be developed, the basis on which the proposed action is to be evaluated must be specified. The fishery has been operating under an experimental fishery program since September 1990. The experimental fishery expired as of 30 September 1997. Therefore, the basic cost-benefit evaluation will be

based on operating the Maine fishery under the basic provision of the Surfclam and Ocean Quahog FMP relative to operating it with the provisions of this Amendment, which are intended to adapt the basic FMP so the Maine fishery may operate legally within the framework of the FMP.

The situation in the absence of this Amendment would either prohibit the historical participants in the eastern Maine ocean quahog fishery from fishing in the EEZ or require participants in the eastern Maine ocean quahog fishery to obtain permits from NMFS and to lease allocation (either permanently or through cage tags) from persons in the industry that currently own allocation. They would be required to develop a way of complying with the cage tagging requirement, even though, in general, the boats are too small to handle cages. Vessel operators would continue to be required to submit logbook reports. Federally licensed dealers would be required to obtain permits and file reports. If they did not do these things, they would be limited to state waters.

With the implementation of this Amendment, eastern Maine ocean quahog moratorium vessel permits would be issued and an initial maximum quota for the fishery would be established. There are a number of potential costs associated with the proposed management system for the ocean quahog fishery off Maine:

1. The surveys of designated harvesting areas must be funded.
2. To move from the initial maximum quota (up to 100,000 bushels) to a larger quota from the eastern Maine portion of the ocean quahog resource, will require a survey and stock assessment of the resource in this zone.
3. The creation of the new Maine Ocean Quahog Advisory Panel will entail some additional costs to the MAFMC.
4. The real time monitoring of a quota, once it is implemented, will entail some additional costs to the NMFS.

There are a number of benefits associated with the proposed management system for the ocean quahog fishery off Maine:

1. The artisanal fishery, so important to Maine's poorest county, will continue to be viable.
2. The eastern Maine fishery would become part of the overall management system and allow the meeting of National Standard 3.
3. An experimental fishery would not need to be continued in order to allow this fishery.
4. Management would be initiated and the probability of overfishing the Maine resource in this zone would be reduced.
5. This Amendment has the support of the participants in the experimental fishery.
6. From the federal perspective, the transition from the experimental fishery to the eastern Maine fishery is transparent and will require no new administrative costs.

9.2.2.2. Administrative, enforcement, and information costs

A reporting system has been implemented by the NMFS. This system was designed to collect information for various fisheries according to their respective FMP's. The logbook data collected in the experimental fishery will continue to be collected by the federal government while the State of Maine will continue their shellfish landings data collection of similar data to the Federal Shellfish logbook (Mercer pers. comm.).

The cost of enforcing the quota equals the value of the additional capital and labor resources required to expand current enforcement efforts to encompass the new regulations. However, these are expected to be minimal due to the small numbers of vessels in the eastern Maine fleet and the small range of their operations. The PSP monitoring and other state regulations for ocean quahogs are already in effect and are being enforced.

It is expected that since most of the historical eastern Maine vessel operators already submit logbook reports in the experimental fishery program or under the Northeast Multispecies, Scallop, and Summer Flounder FMPs, the implementation of this plan would not affect the reporting process to any significant extent.

Amendment 8 (MAFMC 1988), requires that surfclam and ocean quahog vessel owners and operators call the NMFS Office of Law Enforcement nearest to the point of offloading (contact the Regional Administrator for locations and phone numbers) and accurately provide specific information prior to departure of their vessel from the dock to fish for surfclams or ocean quahogs in the EEZ. The information to be provided consists of: 1) name of the vessel; 2) NMFS permit number assigned to the vessel; 3) expected date and time of departure from port; 4) whether the trip will be directed on surfclams, ocean quahogs, or Maine ocean quahogs -- this is needed in order to facilitate enforcement and ensure public health; 5) expected date, and location of landings; and 6) and name of the individual providing notice. This Amendment establishes the fact that the Regional Administrator has the discretion to suspend this requirement for fishermen in this zone (if he believes it is not necessary for quota enforcement) after consultation with the State of Maine and upon notification of the MAFMC.

The vessel permits, the vessel, its gear, and catch shall be subject to inspection upon request by an authorized officer. This will in turn aid in the management and administering of the ocean quahog and surfclam resource.

When the call-in requirement for the surfclam and ocean quahog fisheries was implemented (Amendment 8), it was intended to apply, and it considered, everyone that was fishing for surfclams and ocean quahogs. Therefore, this specific management action has already received OMB Paper Reduction Act clearance for information collections affecting the public.

The cost associated with the requirement of vessel owners and operators call-in is minimal since it corresponds to a time when most vessels will be contacting their buyers with the same information, and NMFS has an 800 number for their use.

This management action will allow NMFS to manage the fishery in a close and efficient manner. Other benefits expected from this action will be attained by

increasing the enforcement of surfclams and ocean quahog regulations and the monitoring of the surfclams and ocean quahogs landings.

9.2.2.3. Prices to consumers

Retail prices to consumers for eastern Maine ocean quahogs or any of the other surfclam and ocean quahog fishery products are expected to remain stable under this Amendment.

9.2.2.4. Redistribution of costs

The FMP is designed to give fishermen the greatest possible freedom of action in conducting business consistent with the FMP's objectives. It is not anticipated that the proposed management measures will redistribute costs between users or from one level of government to another.

9.2.2.5. Fishery impact statement

The impacts of the proposed actions on participants in the surfclam and ocean quahog fisheries including analyses of biological, economic, and social impacts are described previously in this section (Analysis of Beneficial and Adverse Impacts of Proposed Management Measures), in Appendix 1 (Alternatives to the FMP), and in Appendix 2 (Regulatory Impact Review) of the FMP. The following is a brief summary of the socioeconomic characteristics of the fishery.

There are between 33 and 53 boats participating in the ocean quahog fishery off of Maine in any given year. In 1996, 82 boats had federal permit that allows them to participate in the experimental fishery. Of all the vessels that participate in the eastern Maine ocean quahog fishery, no more than a dozen year-round participants. The rest fish for market peak periods such as Memorial Day, 4th of July, and Labor Day. When those boats are not fishing for ocean quahogs they target other species such as: sea scallops, lobster, sea urchins, and groundfish among others (Finlayson pers. comm.). Under the criteria proposed in this Amendment, 83 vessels would qualify for a moratorium permit.

Mandatory logbook data have been collected from the area since October 1990 in compliance with the regulations implementing the experimental fishery. These data give some indication of the economic characteristic of the fishery, however, the data do not include fixed or operating costs associated with fishing operations. Therefore, profit margins accruing to the fishery under the various alternatives discussed can not be estimated (USDC 1993).

According to unpublished NMFS logbook data there were 43 vessels participating in the ocean quahog experimental fishery in Maine in 1996. A total of 69,067 bushels of ocean quahogs were reported landed in 1996. This represented an increase of 18,596 bushels (36%) from the 1995 level of 50,471 bushels. The average price of a bushel of ocean quahogs was \$28.85 in 1996 (but prices have been as high as \$45.00 per bushel in 1991). This represented a decrease of about \$5 (15%) from the 1995 average. The decrease in price of ocean quahogs was likely caused by the

increase in quahog landings from 1995 to 1996. In addition to this, landings of hardclams (*Mercenaria mercenaria*) which compete for market share with eastern Maine ocean quahogs has also increased in recent years (Finlayson pers. comm.). This last factor has likely affected the price of ocean quahogs in an inverse way. Monthly landings show that this fishery is highly seasonal, with more than 90% of harvests occurring between April and September on average (Figure 7).

Ninety percent of the eastern Maine ocean quahog's landings are in Washington County, Maine. Jonesport accounts for the largest percent of the total ocean quahog's landings, thus, being the most active port in the region (Finlayson pers. comm.). Socioeconomic indicators show that Washington county is among the more severely depressed areas in the Northeast United States (USDC 1990). In 1990, 91% of the population of Washington County was classified as residing in rural areas; 27% did not attain a high school diploma. The area is economically depressed with per capita income of \$9,607 and a median household income of \$19,993. Approximately 19% of the population lives below poverty level. To gain a clearer perspective on the state of the economy in Washington County, consider that in neighboring Hancock County per capita income is approximately 25% higher at \$12,347 with only 10% of the population living below the poverty level. The unemployment rate in Washington County was 10.3% in 1990 (USDC 1993). More recent employment statistics show that as of December 1996 the unemployment rate (not seasonally adjusted) in Washington County was 7.5% (Finlayson pers. comm.).

9.3. RELATION OF RECOMMENDED MEASURES TO EXISTING APPLICABLE LAWS AND POLICIES

9.3.1. FMPs

Many fisheries of the northwest Atlantic result in significant non-target species fishing mortality. Therefore, each FMP must consider the impact of non-target species fishing mortality on other stocks and as a result of other fisheries. There is no significant bycatch of other species in either the surfclam or ocean quahog fisheries.

9.3.2. Treaties or international agreements

No treaties or international agreements, other than GIFAs entered into pursuant to the MSFCMA, relate to this fishery. Of course, since this fishery occurs in the Gulf of Maine, vessel operation will be limited to the United States Exclusive Economic Zone west of the Hague Line.

9.3.3. Federal law and policies

9.3.3.1. Marine mammals and endangered species

Numerous species of marine mammals and sea turtles occur in the northwest Atlantic Ocean. The most recent comprehensive survey in this region was done from 1979-1982 by the Cetacean and Turtle Assessment Program (CETAP), at the University of Rhode Island (University of Rhode Island 1982), under contract to the Minerals Management Service (MMS), Department of the Interior. The following is a

summary of some of the information gathered in that study, which covered the area from Cape Sable, Nova Scotia, to Cape Hatteras, North Carolina, from the coastline to 5 nautical miles seaward of the 1,000 fathom isobath.

Four hundred and seventy one large whale sightings, 1547 small whale sightings and 1172 sea turtles were encountered in the surveys (Table 14). The "estimated minimum population number" for each mammal and turtle, as well as those species the area currently included under the Endangered Species Act were also tabulated. The CETAP concluded that both large and small cetaceans are widely distributed throughout the study area in all four seasons, and grouped the 13 most commonly seen species into three categories, based on geographical distribution. The first group contains only the harbor porpoise, which is distributed only over the shelf and throughout the Gulf of Maine, Cape Cod, and Georges Bank, and infrequently south to Virginia. The second group contains the most frequently encountered baleen whales (fin, humpback, minke, and right whales) and the white-sided dolphin. These are found in the same areas as the harbor porpoise, and also occasionally over the shelf at least to Florida or out to the shelf edge. The third group "shows a strong tendency for association with the shelf edge" and includes the grampus, striped, spotted, saddleback, and bottlenose dolphins, and the sperm and pilot whales.

Loggerhead turtles were found throughout the study area, but appear to migrate north to about Massachusetts in summer and south in winter. Leatherbacks appear to have a more northerly distribution. The CETAP hypothesized a northward migration in the Gulf Stream with a southward return in continental shelf waters nearer to shore. Both species usually were found over the shoreward half of the slope and in depths less than 200 feet. The study area may be important for sea turtle feeding or migrations, but the nesting areas for these species generally are in the South Atlantic and Gulf of Mexico.

The only other endangered species occurring in the northwest Atlantic is the shortnose sturgeon (*Acipenser brevirostrum*). The Council urges fishermen to report any incidental catches of this species to the Regional Administrator, NMFS, One Blackburn Drive, Gloucester, MA 01930, who can forward the information to the active sturgeon data base.

The range of surfclams and ocean quahogs and the above marine mammals and endangered species overlap to a large degree, and there always exists some very limited potential for an incidental kill. Except in unique situations (e.g., tuna-porpoise in the central Pacific), such accidental catches should have a negligible impact on marine mammal/endangered species abundances, and the Council does not believe that implementation of this scientific research program will have any adverse impact upon these populations. While marine mammals and endangered species may occur near surfclam and ocean quahog beds, it is highly unlikely any significant conflict between the fishermen managed by this proposal and these species would occur. Clam vessels dredge at very slow speeds and healthy animals should have no difficulty avoiding these vessels. Additionally, surfclams and ocean quahogs are benthic organisms, while marine mammals and marine turtles are pelagic and spend nearly all of their time up in the water column or near the surface. The realized reduction in the number of fishing vessels resulting from Amendment 8 reduced the

potential for the capture of endangered species from a minimal to a very minimal level.

9.3.3.2. Marine sanctuaries

National marine sanctuaries are allowed to be established under the National Marine Sanctuaries Act of 1973. Currently there are 11 designated marine sanctuaries (Figure 8) that creates a system that protects over 14,000 square miles (National Marine Sanctuary Program 1993).

There are two designated national marine sanctuaries in the area covered by the FMP: the *Monitor* National Marine Sanctuary off North Carolina, and the Stellwagen Bank National Marine Sanctuary off Massachusetts. There are currently five additional proposed sanctuaries, but only one of the proposed five, the Norfolk Canyon, is on the east coast. There are no marine sanctuaries in the zone of eastern Maine.

The *Monitor* National Marine Sanctuary was designated on 30 January 1975, under Title III of the Marine Protection, Research and Sanctuaries Act of 1972 (MPRSA). Implementing regulations (15 CFR 924) prohibit deploying any equipment in the Sanctuary, fishing activities which involve "anchoring in any manner, stopping, remaining, or drifting without power at any time" (924.3 (a)), and "trawling" (924.3 (h)). The Sanctuary is clearly designated on all National Ocean Service (NOS) charts by the caption "protected area." This minimizes the potential for damage to the Sanctuary by fishing operations. Correspondence for this sanctuary should be addressed to: *Monitor* NMS, NOAA, Building 1519, Fort Ousterhout, VA 23604.

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

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

9.3.3.3. Indian treaty fishing rights

No Indian treaty fishing rights are known to exist in the fishery.

9.3.3.4. Oil, gas, mineral, and deep water port development

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

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

The laws and regulations governing the harvest and landing of ocean quahogs in the State of Maine are found in Appendix 6.

9.3.4.1. State management activities

Maine has divided its coastline into three areas for purposes of ocean quahog management. A person must have a permit to fish for, possess, transport, and sell ocean quahogs, with the authorized area indicated on the license. There is a three bushel per day personal use exemption from the license requirement. In addition the cutter bar for ocean quahog dredges cannot exceed 36".

The State of Maine has one of the most comprehensive monitoring programs for paralytic shellfish poisons in the US. This program was necessitated by yearly occurrences of toxic shellfish. The purpose of the program is to assure that only safe shellfish are harvested. At the beginning of the PSP testing year, shellfish samples are collected from potential toxic areas (based on past experience) to determine the background level of toxicity. Sampling stations from these areas are sampled each week during April-October regardless of toxin patterns. When shellfish show any toxicity, sampling is expanded until stations of no toxicity is found. This sampling allows for closures to be made in a safe manner. Maine's law and regulation require the immediate closure of toxic shellfish harvest areas, embargo or confiscation of all suspect shellfish. The Maine Department of Marine Resources is the state agency responsible for marine biotoxin monitoring.

Shellfish such as the ocean quahog are sampled from chartered fishing boats by departmental personnel. Areas where ocean quahogs and similar species cannot be sampled are closed because they cannot be regarded as safe without sampling. Ocean quahog sampling for PSP testing increases in intensity from spring through summer as the risk of a bloom increases. Thirty-eight sampling areas are routinely sampled from April through October. Sampling frequency is as follows: one sample per area in April, two samples per area every other week in May, three samples per

area every other week in June until 15 June, 12 samples per area every week through September, and two samples every other week if needed in October. If a closure is enacted, the closed area will be sampled every other week. The potential number of samples per area is 20. Sampling involves a 10 minute drag at each of the specified locations with a DMR employee present. A sample of 15-20 quahogs are retained with LORAN bearings of the sample location.

9.3.4.2. State action necessary to implement measures within State waters to achieve FMP objectives, consequences of State inaction or contrary action, and recommendations

The State of Maine intends to adopt regulations to collect data from fishermen and dealers that will be complementary to that collected in the federal program (Mercer pers. comm.). This would entail collection of data from State of Maine only ocean quahog vessels (non-moratorium), which is currently only four vessels. These data are necessary to ensure the integrity of the initial quota. No other explicit additional actions need to be taken by the State of Maine to make the program set forth in this Amendment succeed. The State will continue to monitor areas of harvest and landings for the presence of PSP and to collect shellfish landings data.

9.3.4.3. Impact of federal regulations on state management activities

No explicit additional actions need to be taken by the State of Maine to make the program set forth in this Amendment succeed. It is assumed that Maine will continue to test quahogs from both state and federal waters for PSP.

9.3.4.4. Coastal zone management program consistency

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

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

In order to comply with the CZM Act, Amendment 10 was reviewed relative to the approved CZM programs of Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland and North Carolina. Letters have been sent to all of the states listed above stating that the Council concluded that the Amendment is consistent to the maximum extent practicable with the state's CZM program as understood by the Council.

9.4. COUNCIL REVIEW AND MONITORING OF THE FMP

The Councils will monitor the fishery using the best available data, including that specified in section 9.1. As a result of that monitoring, the Councils will determine whether it is necessary to amend the FMP. To decrease the initial maximum quota will not require a new Amendment. To increase the quota above 100,000 bushels will require a scientific survey and stock assessment of the resource.

To date, there have been no comprehensive, systematic surveys of the ocean quahog resource in eastern Maine. Until such time as NMFS conducts a formal stock assessment, it is recommended that the eastern Maine quota be set as a based upon historical landings. Methodologically, the Council's annual quota setting process for the majority of the resource would remain intact. There would be no reason to change or review the target quota until a survey and assessment of the resource is conducted.

Once NMFS conducts a survey, the assessment results should be vetted in a peer-reviewed scientific forum like the SARC/SAW process. Biomass estimates should be generated. The MAFMC will consider the advice of the SAW on the biomass and decide how this portion of the resource should be managed relative to the entire surfclam and ocean quahog resource. The NEFMC, the State of Maine, and NMFS should all be involved at the various stages.

10. REFERENCES

- Atlantic Biodiversity Center. 1994. An analysis of the comprehensive conservation and management plan for Delaware's Inland Bays. Nassau, DE. 20 p.
- Chenoweth, S. and D. Dennison. 1993. The ocean quahog in Maine: fishery and biology. Maine Dept. of Marine Resources research document. 23 p.
- Council on Environmental Quality (CEQ). 1993. Incorporating biodiversity considerations into environmental impact analysis under the National Environmental Policy Act. Executive Office of the President. Washington. 29 p.
- Finlayson, A.C. 1997. Personal communication. ME DMR, Augusta, ME.
- Kalogiannides, P. 1997. Personal communication. Sea Connect, Bethesda, MD.
- Kraus, M.G., B.F. Beal, S.R. Chapman, and L. McMartin. 1992. A comparison of growth rates in *Arctica islandica* (Linnaeus, 1767) between field and laboratory populations, U.S.A. J. Shellfish Res. 11(2): 289-294.
- Lewis, R.D. 1992. Personal communication. ME DMR, Augusta, ME.
- Lutz, R.A., J.G. Goodsell, M. Castagna, and A.P. Stickney. 1983. Growth of experimentally grown ocean quahogs (*Arctica islandica*) in north temperate embayments. J. World Maricul. Soc. 14: 185-190.

Maine Dept. of Marine Resources. 1977. The ocean quahog fishery of Maine. ME DMR. 47 p.

McGowan, J. 1993. Personal communication. ME DMR, Augusta, ME.

Mercer, L. 1997. Personal communication. ME DMR, Augusta, ME.

Mid-Atlantic Fishery Management Council (MAFMC). 1977. Surfclam and ocean quahog fishery management plan. 42 FR 60438.

_____. 1979a. Amendment #1 to the surfclam and ocean quahog fishery management plan. Dover, DE.

_____. 1979b. Amendment #2 to the surfclam and ocean quahog fishery management plan. Dover, DE.

_____. 1981. Amendment #3 to the surfclam and ocean quahog fishery management plan. Dover, DE.

_____. 1984. Amendment #5 to the fishery management plan for the Atlantic surfclam and ocean quahog fisheries. Dover, DE.

_____. 1986. Amendment #6 to the fishery management plan for the Atlantic surfclam and ocean quahog fisheries. Dover, DE.

_____. 1987. Amendment #7 to the fishery management plan for the Atlantic surfclam and ocean quahog fisheries. Dover, DE.

_____. 1988. Amendment #8 to the fishery management plan for the Atlantic surfclam and ocean quahog fisheries. Dover, DE.

_____. 1996a. Amendment #9 to the fishery management plan for the Atlantic surfclam and ocean quahog fisheries. Dover, DE.

_____. 1996b. 1997 Optimum yield, domestic annual harvest, domestic annual processing, joint venture processing, and total allowable level of foreign fishing recommendations for surfclams and ocean quahog FMP. Dover, DE.

Morrill, R. 1995. Personal communication. NMFS, Portland, ME.

Murawski, S.A., J.W. Ropes and F.M. Serchuk. 1982. Growth of the ocean quahog, *Arctica islandica*, in the Middle-Atlantic Bight. Fish. Bull. 80(1): 21-34.

National Marine Sanctuary Program. 1993. Marine Sanctuary. Vol. 1. No. 1. 20 p.

NMFS. 1994. Appendix 2.d.: Guidelines on regulatory analysis of fishery management actions. Revised version. In operational guidelines for fishery management plan process. NMFS, Silver Spring, MD.

National Research Council. 1994. Restoring and protecting marine habitat. The role of engineering and technology. National Academy Press. Washington. 193 p.

Raizin, M.A. 1997. Personal communication. NMFS. Gloucester, MA.

Ropes, J.W. and D. Pyoas. 1982. Preliminary age and growth observations of ocean quahogs, *Arctica islandica* Linne, from Georges Bank. ICES, C.M. K:15.

Rosenberg, A., P. Mace, G. Thompson, G. Darcy, W. Clark, J. Collie, W. Gabriel, A. MacCall, R. Methot, J. Powers, V. Restrepo, T. Wainwright, L. Botsford, J. Hoenig, and K. Stokes. 1994. Scientific review of definitions of overfishing in U. S. Fishery Management Plans. NOAA Tech. Memo. NMFS-F/SPO-17. 205 p.

University of Rhode Island. 1982. A characterization of marine mammals and turtles in the Mid and North Atlantic areas of the US outer continental shelf. Final Report. Prepared for USDI under contract #AA551-CT8-48.

U.S. Dept. of Comm. (USDC). 1985. Regional action plan: northeast regional office and northeast fisheries center. NOAA. NMFS. Tech. memo. F/NEC-37. 20 p.

_____. 1990. Bureau of the Census: 1990 U.S. Census of Population: Maine.

_____. 1993. Amendment 9 to the fishery management plan for Atlantic surfclams and ocean quahogs. Public hearing draft. Gloucester, MA. 71 p.

_____. 1995. Report of the 19th northeast regional stock assessment workshop (19th SAW). NEFSC Ref. Doc. 95-09. 57 p.

_____. 1996a. Report of the 22nd Northeast Regional Stock Assessment Workshop. (22nd SAW). Stock Assessment Review Committee (SARC) Consensus Summary of Assessments. NEFSC, Woods Hole, MA.

_____. 1996b. Report of the 22nd Northeast Regional Stock Assessment Workshop. (22nd SAW). Advisory Report on Stock Status. NEFSC, Woods Hole, MA.

_____. 1997. NMFS, Northeast Fisheries Science Center. Unpublished weighout landings data. Woods Hole, MA.

Wallace, David H. Personal communication. 1993 and 1997. Wallace and Associates, Inc. Salisbury, MD.

Table 1. Non-Maine Ocean Quahog Fishery in the EEZ: Number of Vessels, Trips, Hours at Sea, Hours Fishing, Landings (Mid-Atlantic bushels), Landings per Unit Effort (bu/hour fishing), and Average Landings per Vessel (Mid-Atlantic bushels)

<u>Year</u>	<u>Class</u>	<u>Vessels</u>	<u>Trips</u>	<u>Hours at Sea</u>	<u>Hours Fishing</u>	<u>Landings</u>	<u>LPUE*</u>	<u>Ave Bu. per Boat</u>
1979	1 & 2	22	735	10,325	4,333	477,346	109	21,698
	3	37	1,966	35,635	19,545	2,557,350	127	69,118
	All	59	2,701	45,960	23,878	3,034,696	124	51,436
1980	1 & 2	19	561	7,836	3,528	354,110	95	18,637
	3	33	1,950	39,488	22,025	2,607,679	114	79,021
	All	52	2,511	47,324	25,553	2,961,789	111	56,957
1981	1 & 2	12	399	5,965	2,793	248,498	88	20,708
	3	35	2,011	37,914	20,859	2,639,789	125	75,423
	All	47	2,410	43,879	23,652	2,888,287	121	61,453
1982	1 & 2	12	274	4,414	2,391	187,447	77	15,621
	3	31	2,146	39,956	21,515	3,053,328	136	98,494
	All	43	2,420	44,370	23,906	3,240,775	130	75,367
1983	1 & 2	8	225	3,561	1,936	159,214	81	19,902
	3	29	2,243	40,718	21,072	3,056,426	142	105,394
	All	37	2,468	44,279	23,008	3,215,640	137	86,909
1984	1 & 2	16	467	7,266	3,873	369,529	92	23,096
	3	41	2,738	51,563	26,845	3,593,438	129	87,645
	All	57	3,205	58,829	30,718	3,962,967	124	69,526
1985	1 & 2	17	611	9,352	4,756	483,004	99	28,412
	3	47	3,101	58,462	28,988	4,086,505	138	86,947
	All	64	3,712	67,814	33,744	4,569,509	133	71,399
1986	1 & 2	16	471	8,795	4,159	441,192	103	27,575
	3	56	2,714	51,648	25,292	3,726,013	146	66,536
	All	72	3,185	60,443	29,451	4,167,205	140	57,878
1987	1 & 2	16	333	7,359	3,405	359,042	105	22,440
	3	55	2,995	59,220	29,482	4,383,983	146	79,709
	All	71	3,328	66,579	32,887	4,743,025	142	66,803
1988	1 & 2	11	221	4,555	2,088	251,674	114	22,879
	3	51	2,818	60,554	31,213	4,217,699	133	82,700
	All	62	3,039	65,109	33,301	4,469,373	132	72,087
1989	1 & 2	13	540	9,823	4,945	650,059	124	50,005
	3	56	3,055	66,364	34,671	4,280,221	121	76,433
	All	69	3,595	76,187	39,616	4,930,280	122	71,453
1990	1 & 2	14	496	11,002	6,470	623,346	96	44,525
	3	42	2,753	62,569	34,614	3,999,071	115	95,216
	All	56	3,249	73,571	41,084	4,622,417	112	82,543

Table 1. (continued)

<u>Year</u>	<u>Class</u>	<u>Vessels</u>	<u>Trips</u>	<u>Hours at Sea</u>	<u>Hours Fishing</u>	<u>Landings</u>	<u>LPUE*</u>	<u>Ave. Bu. per Boat</u>
1991 - Excludes Maine Fishery								
	1&2	11	545	11,889	6,343	731,634	115	66,512
	<u>3</u>	<u>38</u>	<u>2,824</u>	<u>68,002</u>	<u>39,531</u>	<u>4,108,190</u>	<u>103</u>	<u>108,110</u>
	All	49	3,369	79,911	45,874	4,839,824	104	98,772
1992 - Excludes Maine Fishery								
	1&2	9	527	11,267	5,464	693,971	127	77,108
	<u>3</u>	<u>34</u>	<u>2,563</u>	<u>61,914</u>	<u>31,678</u>	<u>4,244,729</u>	<u>132</u>	<u>124,845</u>
	All	43	3,090	73,181	37,142	4,938,700	131	114,853
1993 - Excludes Maine Fishery								
	1&2	8	535	12,764	6,442	720,702	112	90,088
	<u>3</u>	<u>28</u>	<u>2,655</u>	<u>67,549</u>	<u>38,860</u>	<u>4,091,239</u>	<u>105</u>	<u>146,116</u>
	All	36	3,190	80,313	45,302	4,811,941	106	133,665
1994 - Excludes Maine Fishery								
	1&2	7	444	10,748	5,580	580,198	104	82,885
	<u>3</u>	<u>29</u>	<u>2,683</u>	<u>65,734</u>	<u>38,764</u>	<u>4,031,197</u>	<u>104</u>	<u>139,007</u>
	All	36	3,127	76,482	44,344	4,611,395	104	128,094
1995 - Excludes Maine Fishery								
	1&2	6	480	12,168	7,116	692,491	97	115,415
	<u>3</u>	<u>30</u>	<u>2,496</u>	<u>60,216</u>	<u>32,752</u>	<u>3,935,832</u>	<u>120</u>	<u>131,194</u>
	All	36	2,976	72,384	39,868	4,628,323	116	128,565
1996 - Excludes Maine Fishery								
	1&2	5	429	11,439	6,026	678,804	113	135,761
	<u>3</u>	<u>31</u>	<u>2,116</u>	<u>52,328</u>	<u>27,104</u>	<u>3,712,624</u>	<u>137</u>	<u>119,762</u>
	All	36	2,545	63,767	33,130	4,391,428	133	121,984

Source: NMFS Shellfish Logbook files.

Table 2. Maine Quahog Experimental Fishery, Shellfish Logbook Reports. Number of Vessels, Trips, Hours at Sea, Hours Fishing, Landings (Maine bushels), Value (\$), Landings per Unit of Effort (bu/hour fishing), and Average Landings per Vessel (Maine bushels).

Year	Class	Vessels	Trips	Hours at Sea	Hours Fishing	Landings	LPUE*	Ave. Bu. per Boat
1991	All	45	2,221	23,465	17,162	36,679	2.0	815
1992	All	53	1,677	17,711	13,469	24,839	1.8	469
1993	All	33	685	9,732	5,748	17,144	3.0	520
1994	All	30	792	7,189	5,102	21,480	4.2	716
1995	All	30	1,052	8,233	5,747	37,912	6.6	1,264
1996	All	25	1,374	11,811	8,483	47,025	5.5	1,881

* LPUE values are computed from only those trips which have both Hours Fished and Landings data reported. The Hours Fished and Landings values displayed in this table are gross reported totals, and hence may not be divided to calculate LPUE.

Source: NMFS Shellfish Logbook files.

Table 3. Maine Ocean Quahog Summary - Data Combined from Multispecies and Clam Logbooks.

Year	PARTICIPATION			QUAHOGS LANDED AND EFFORT			
	Permits ME ¹	Permits USDC ²	Vessels Fishing ³	Landed Bushels ⁴	Trips ⁵	Bu/Trip	Bu/Hour ⁶
1991	78	62	45	36,667	2,222	16.50	2.14
1992	66	90	53	24,839	1,677	14.81	1.84
1993	48	92	33	17,144	685	25.03	2.98
1994	43	78	37	26,890	1,018	26.40	4.21
1995	64	78	41	50,471	1,473	34.30	6.60
1996	80	82	40	69,067	2,058	33.60	5.54
1997	62						

1. Number of Maine ocean "mahogany" quahog permits issued.
2. Number of NMFS "experimental" ocean quahog fishery permits issued.
3. Number of NMFS permits identified from SC/OQ, clam, logbook and multispecies logbook databases as an index of vessels actually fishing.
4. Bushels landed as reported from clam and multispecies logbooks, trip duplicate reporting deleted.
5. Number of trips reported from clam and multispecies logbooks, trip duplicate reporting deleted.
6. Bushels landed per hour fished estimated from clam and multispecies logbooks.

Source: NMFS Permit files, Maine DMR Permit files, NMFS Shellfish Logbook files, NMFS Multispecies Logbook files.

Table 4. Bushels Ocean Quahogs Landed per Hour Gear Deployed.

	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>
JAN	2.34	2.06			6.12	7.27
FEB	2.54	2.18			5.84	6.84
MAR	2.40	1.70	12.26		7.25	6.78
APRIL	2.28	1.73	2.36	4.22	6.43	6.50
MAY	2.25	1.90	2.37	5.23	6.74	6.86
JUNE	2.17	2.15	2.93	5.35	7.63	7.40
JULY	1.79	1.80	3.15	4.82	7.69	6.91
AUG	1.82	1.70	3.94	4.71	8.03	7.16
SEPT	1.80	1.84	4.15	5.72	7.30	6.44
OCT	1.62	1.92	4.82	4.70	6.64	5.99
NOV	1.74			4.71	5.27	8.43
DEC	2.53			7.20	6.66	7.52
YEAR	2.04	1.88	3.14	5.08	7.30	7.00

Bushels landed per fishing effort were calculated from the field: "bushels landed per hour gear deployed" in the clam/quahog logbook, and the "gear deployment time - minutes"/60 and "number of hauls" in the multispecies logbook.

Source: NMFS Shellfish Logbook files, NMFS Multispecies Logbook files.

Table 5. Maine Experimental Quahog Fishery - Vessel Information 1996.

<u>HOMEPORT</u>	<u># OF VESSELS</u>	<u>LENGTH RANGE</u>	<u>TON RANGE</u>	<u>HP RANGE</u>
Addison	3	37 - 38	2 - 9	185 - 358
Beals	5	35 - 41	5 - 17	195 - 375
Boothbay	1	39	4	250
Boston	13	30 - 58	4 - 62	135 - 650
Bucks Harbor	7	32 - 37	3 - 16	110 - 370
Cutler	3	33 - 40	5 - 24	122 - 320
Eastern Harbor	1	40	5	375
Harrington	2	38 - 39	5 - 12	130 - 300
Jonesport	11	37 - 49	4 - 47	120 - 375
Kittery Point	1	36	18	306
Lubec	2	39	4 - 8	286 - 325
Machiasport	1	37	17	250
Milbridge	2	38 - 50	5 - 7	250 - 355
Northeast Harbor	1	38	13	135
Pigeon Hill	1	37	17	210
Roque Bluff	3	34 - 38	5 - 10	135 - 220
Rowley	1	42	24	195
Scarborough	1	32	6	350
South Addison	1	39	5	250
Southwest Harbor	1	42	31	425
Steuben	3	38 - 42	5 - 10	315 - 360
Stonington	3	38 - 42	5 - 27	250 - 350
Sunshine	1	40	5	375
Winter Harbor	2	35 - 39	5 - 11	210 - 380

Source: NMFS Permit files.

Table 6. Vessels Reporting Landings by Month.

<u>Year</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug</u>	<u>Sept</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>All</u>
91	7	14	14	20	32	39	39	33	23	13	4	3	45
92	3	8	11	20	32	38	39	29	18	7	0	0	53
93	0	0	3	5	24	29	21	14	9	5	0	0	33
94	1	1	2	7	29	34	30	19	13	9	6	3	37
95	5	6	9	13	29	37	32	29	20	15	7	7	41
96	7	10	17	21	35	37	35	32	23	14	12	12	40

Source: NMFS Shellfish Logbook files, NMFS Multispecies Logbook files.

Table 7. Numbers of State and Federal Licenses Issued.

<u>Year</u>	<u>State (ME)</u>	<u>Federal</u>
90	N/A	85
91	78	62
92	66	90
93	48	92
94	43	78
95	64	78
96	80	82
97	62	82

Source: NMFS Permit files, Maine DMR Permit files.

Table 8. Numbers of Other Federal Permits Held by Maine Mahogany Quahog Harvesters Holding Federal Permits for the Experimental Fishery 1990 - 1997.

<u>Year:</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>
Experimental Permits Held:	85	62	90	92	78	78	82	
Other Permits Held by Experimental Permit Holders:								
Lobster							36	
Surfclam							47	
Swordfish							26	
Multispecies							27	
Squid/Mackerel/Butterfish							9	
Summer Flounder							-	
Scup							-	
Black Sea Bass							-	

Source: NMFS Permit files, Maine DMR Permit files.

Table 9. Numbers of Other Maine Licenses Held by Maine Mahogany Quahog Harvesters, 1993 - 1997.

<u>Year:</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>
Maine Quahog Licenses Held:	48	42	64	80	70
Other Licenses Held by Maine Quahog Harvesters:					
Commercial Shellfish	9	5	11	19	11
Commercial Fishing	10	10	30	35	33
Lobster & Crab	22	24	44	55	35
Mussel, Boat	3	5	3	6	3
Mussel, Hand	0	0	0	1	1
Marine Worm	2	1	2	3	4
Scallop, Boat	44	40	64	74	62
Scallop, Hand	1	0	0	7	6
Sea Urchin, Boat	28	33	34	36	28
Sea Urchin, Hand	2	2	6	9	7
Sea Urchin, Raker/Trapper	0	0	0	0	0
Seaweed	1	0	0	1	1
Scallop/Urchin Tender	0	0	2	8	4

Source: Maine DMR Permit files.

Table 10. Maine Quahog Landings, 1984 - 1996, from Multiple Sources (Maine bushels)

<u>Year</u>	<u>Maine Bushels</u>
1984	43
1985	0
1986	124,530
1987	92,113
1988	88,054
1989	55,175
1990	51,233
1991	36,679
1992	24,839
1993	17,144
1994	26,890
1995	50,471
1996	69,067

Note:

1 Maine bushel = 1.2445 cubic feet. The bushel unit used in the Mid-Atlantic fishery = 1.88 cubic feet.

Sources:

1984 - 1990: NMFS Unpublished Weighout Files. Assumes 11 pounds meat weight per Maine bushel.

1991 - 1993: NMFS Shellfish Logbook files.

1994 - 1996: NMFS Shellfish and Multispecies Logbook files, adjusted for duplicate reporting.

Table 11. Maine Ocean Quahog Landings from All Sources, 1994 - 1997.

Federal Shellfish and Multispecies Logbooks - Results of Comparison and Adjustment of Daily Trip Records for 1994 - 1996. Maine Shellfish Dealer Records and Federal Processor Records also noted. All figures are bushels.

	<u>LANDINGS - Year 1994</u>					<u>LANDINGS - Year 1995</u>				
	<u>Shell Log</u>	<u>Multi Log</u>	<u>Adj SH/MU</u>	<u>Maine Dirs</u>	<u>Fed Proc</u>	<u>Shell Log</u>	<u>Multi Log</u>	<u>Adj SH/MU</u>	<u>Maine Dirs</u>	<u>Fed Proc</u>
JAN	50		50			502	162	664	677	467
FEB	218		218	375		330	170	500	615	311
MAR	338		338	95	74	1,048	539	1,587	1,487	818
APR	756	60	816	397	258	1,240	297	1,525	1,434	934
MAY	4,905	908	5,511	333	2,255	6,085	2,657	7,953	6,206	4,545
JUN	4,706	2,172	5,949	2,813	2,293	11,509	4,276	14,629	8,954	8,448
JUL	3,771	2,068	5,044	3,747	2,582	4,571	1,737	6,134	6,252	2,726
AUG	4,149	1,636	5,489	5,385	3,899	6,735	2,507	8,969	5,100	4,582
SEP	1,109	421	1,530	1,938	970	2,368	1,249	3,617	1,343	1,493
OCT	655	208	863	1,184	710	1,490	725	2,215	1,220	1,159
NOV	493	77	570	517	230	994	117	1,111	944	765
DEC	330	182	512	723	246	1,040	527	1,567	1,484	844
TOT	21,480	7,732	26,890	17,507	13,517	37,912	14,963	50,471	35,716	27,092

	<u>LANDINGS - Year 1996</u>					<u>LANDINGS - Year 1997**</u>		
	<u>Shell Log</u>	<u>Multi Log</u>	<u>Adj sh/mu</u>	<u>Maine Dirs</u>	<u>Fed Proc</u>	<u>Shell Log</u>	<u>Maine Dirs</u>	<u>Fed Proc</u>
JAN	1,065	882	1,947	206	1,300	3,029	2,699	2,908
FEB	1,421	724	2,145	2,339	1,509	3,384	3,196	2,947
MAR	3,083	1,334	4,417	2,628	1,874	3,287	3,866	3,117
APR	3,081	1,821	4,902	3,101	2,017	4,590	3,567	3,268
MAY	6,385	4,412	10,105	6,970	6,902	9,315	8,024	6,082
JUN	7,736	4,446	11,211	7,134	7,738	12,898	10,436	9,114
JUL	6,103	4,384	9,724	9,968	7,357	7,874	4,561	5,177
AUG	6,941	4,609	10,926	19,104	7,978		6,726	
SEP	3,786	1,127	4,913	5,153	3,474			
OCT	2,272	473	2,745	186	2,114			
NOV	2,584	367	2,951	2,669	3,049			
DEC	2,693	388	3,081	3,166	2,619			
TOT	47,150	24,967	69,067	62,624	47,931	44,377	43,075	32,613

KEY

- Shell Log - Federal Shellfish Harvester Logbook ("Clamlog")
- Multi Log - Federal Multispecies Harvester Logbook*
- Adj SH/MU - Shell Log Data Combined with non-Duplicate Multi Log Data*
- Maine Dealers - Maine ISSC Dealers Report of Purchases
- Fed Proc - Federal Processor/Dealer Logbook Reports

* - Multi Log and Adj SH/MU Data Sets Contain Questionable Multiple Entries on Some Dates

** - 1997 Landings From Reports to Date

**Table 12. Sources of Ocean Quahog Purchases Reported by Maine Dealers,
October 1996 - August 1997 (Maine bushels).**

	MAINE WATERS				FEDERAL, EEZ WATERS				
	<u>Zone1</u>	<u>Zone2</u>	<u>Zone3</u>	<u>Total Maine</u>	<u>Zone1</u>	<u>Zone2</u>	<u>Zone3</u>	<u>Total EEZ</u>	<u>Total ME&EEZ</u>
<u>1996</u>									
Oct		1,761		1,761				-	1,761
Nov		2,741	41	2,783				-	2,783
Dec		2,519	646	3,166					3,166
<u>1997</u>									
Jan		1,872	827	2,699				-	2,699
Feb	214	2,286	696	3,196				-	3,196
Mar	271	1,593	1,316	3,180		686		686	3,866
Apr	456	1,230	1,210	2,896		671		671	3,567
May	728	1,599	2,950	5,277		2,747		2,747	8,024
June	819	1,845	798	3,462		6,974		6,974	10,436
July	723	1,390	102	2,215		2,346		2,346	4,561
Aug	-	969	103	1,072		5,654		5,654	6,726
Total	3,211	19,805	8,689	31,707		19,078		19,078	50,785

Source: Maine DMR Landings files.

Table 13. Washington and Hancock County Demographics

	Maine	Washington County	Hancock County
Population (1995)	1,241,382	36,156 (2.9% of state total)	49,272 (3.3% of state total)
Retail Economic Activity (1994)	\$9 billion	\$149.4 million (1.6% of state total)	\$411.1 million (4.5% of state total)
Unemployment Rate (1996)		7.5%	6.0%
Median Household Income	\$27,854.00	\$19,993.00	\$25,247.00
Persons Below Poverty Level (1990 census)	10.8%	19.3%	10.0%
Families with children below poverty level (1990 census)	11.8%	21.6%	9.9%
Population (1990 census) % urban/rural	44.6% / 55.4%	9% / 91%	20.1% / 79.9%
Population (1990 census) % high school graduate or higher	78.8%	78.2%	83.3%
Population (1990 census) % bachelor's degree or higher	18.8%	12.7%	21.4%

Source: Finlayson, pers. comm.

Table 14. Cetaceans and Turtles Found in Survey Area.

<u>Scientific Name</u>	<u>Common Name</u>	<u>Est. Minimum Number in Study Area</u>	<u>Endangered</u>	<u>Threatened</u>
<u>LARGE WHALES</u>				
<i>Balaenoptera physalus</i>	fin whale	1,102	X	
<i>Megaptera novaeangliae</i>	humpback whale	684	X	
<i>Balaenoptera acutorostrata</i>	minke whale	162		
<i>Physeter catodon</i>	sperm whale	300	X	
<i>Eubalaena glacialis</i>	right whale	29	X	
<i>Balaenoptera borealis</i>	sei whale	109	X	
<i>Orcinus orca</i>	killer whale	unk		
<u>SMALL WHALES</u>				
<i>Tursiops truncatus</i>	bottlenose dolphin	6,254		
<i>Globicephala spp.</i>	pilot whales	11,448		
<i>Lagenorhynchus acutus</i>	Atlantic white-sided dolphin	24,287		
<i>Phocoena</i>	harbor porpoise	2,946		
<i>Grampus griseus</i>	grampus (Risso's) dolphin	10,220		
<i>Delphinus delphis</i>	saddleback dolphin	17,606		
<i>Stenella spp.</i>	spotted dolphin	22,376		
<i>Stenella coeruleoalba</i>	striped dolphin	unk		
<i>Lagenorhynchus albirostris</i>	white-beaked dolphin	unk		
<i>Ziphius cavirostris</i>	Cuvier's beaked dolphin	unk		
<i>Stenella longirostris</i>	spinner dolphin	unk		
<i>Steno bredanensis</i>	rough-toothed dolphin	unk		
<i>Delphinapterus leucas</i>	beluga	unk		
<i>Mesoplodon spp.</i>	beaked whales	unk		
<u>TURTLES</u>				
<i>Caretta caretta</i>	loggerhead turtle	4,017		X
<i>Dermochelys coriacea</i>	leatherback turtle	636	X	
<i>Lepidochelys kempfi</i>	Kemp's ridley turtle	unk	X	
<i>Chelonia mydas</i>	green turtle	unk		X

Source: University of Rhode Island 1982.

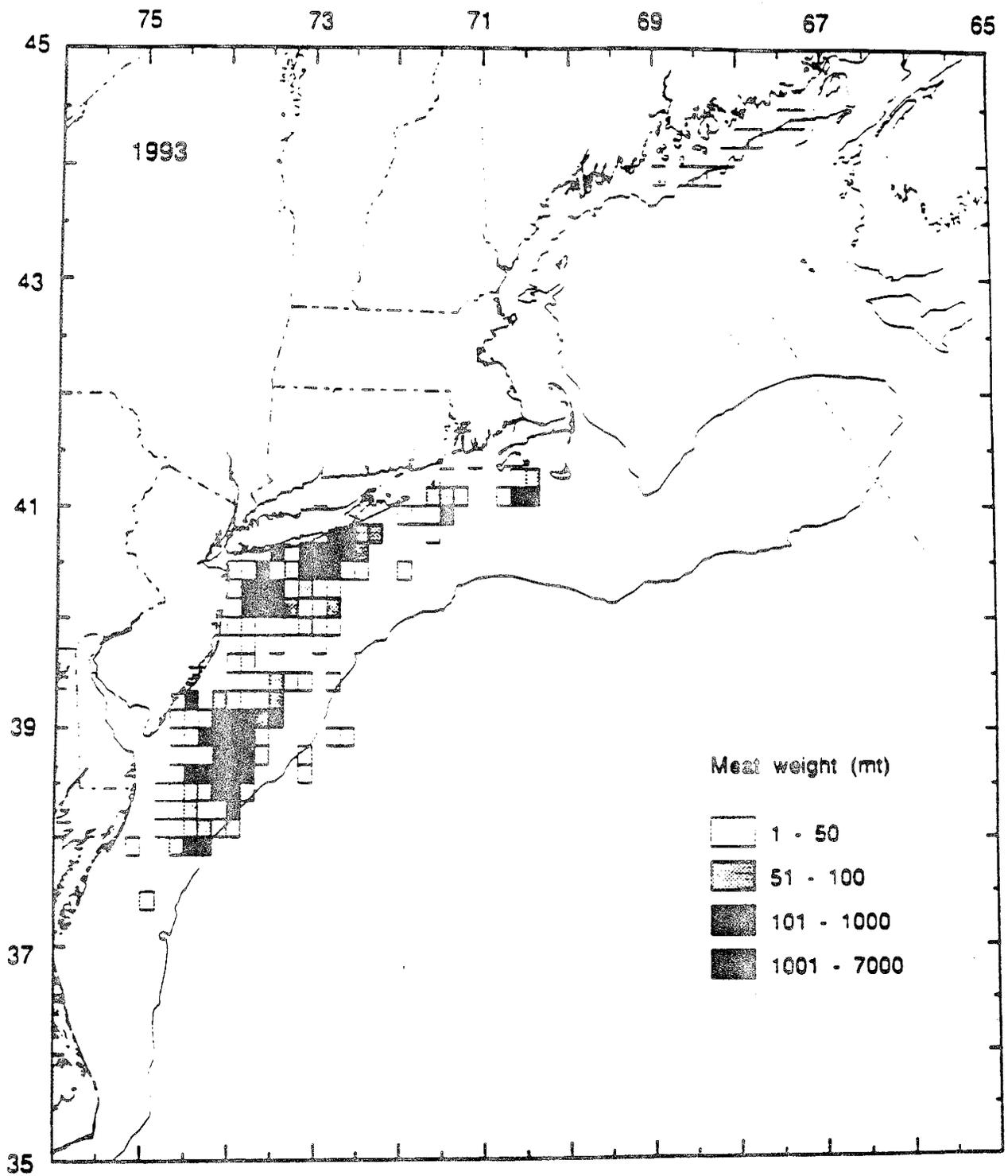


Figure 1. Distribution of ocean quahog landings by 10' square, 1993.

Source: USDC 1995.

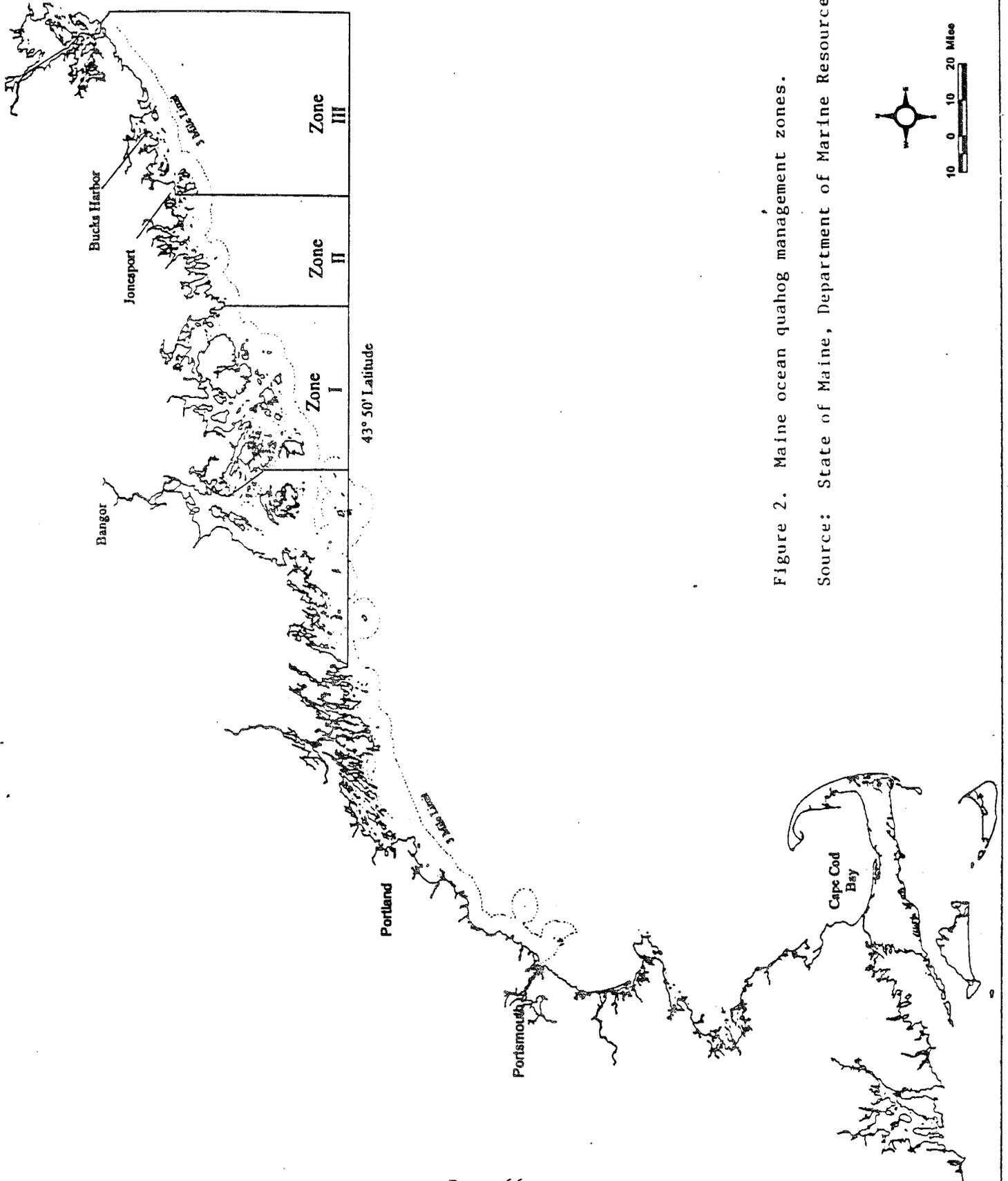


Figure 2. Maine ocean quahog management zones.

Source: State of Maine, Department of Marine Resources.

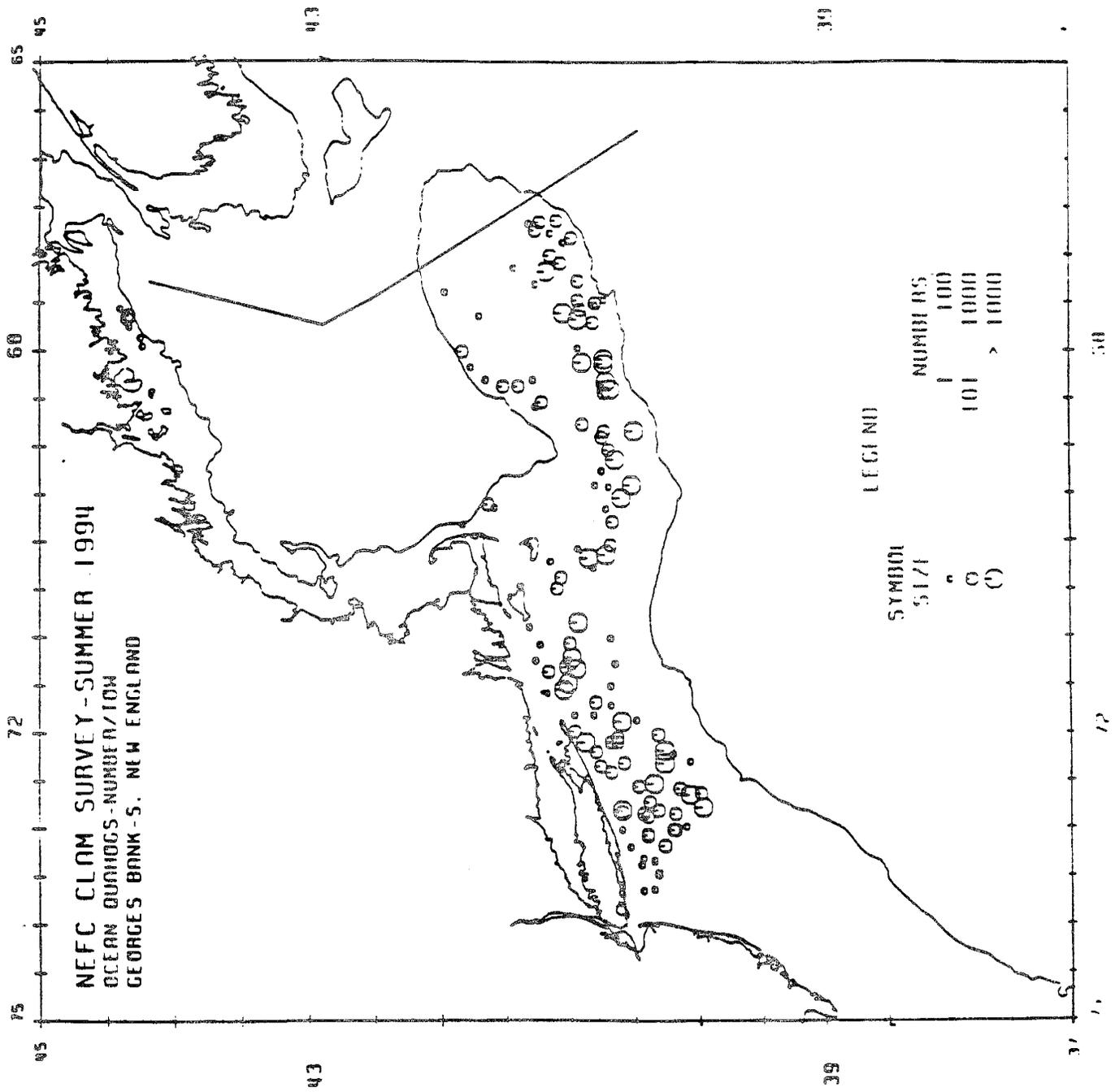
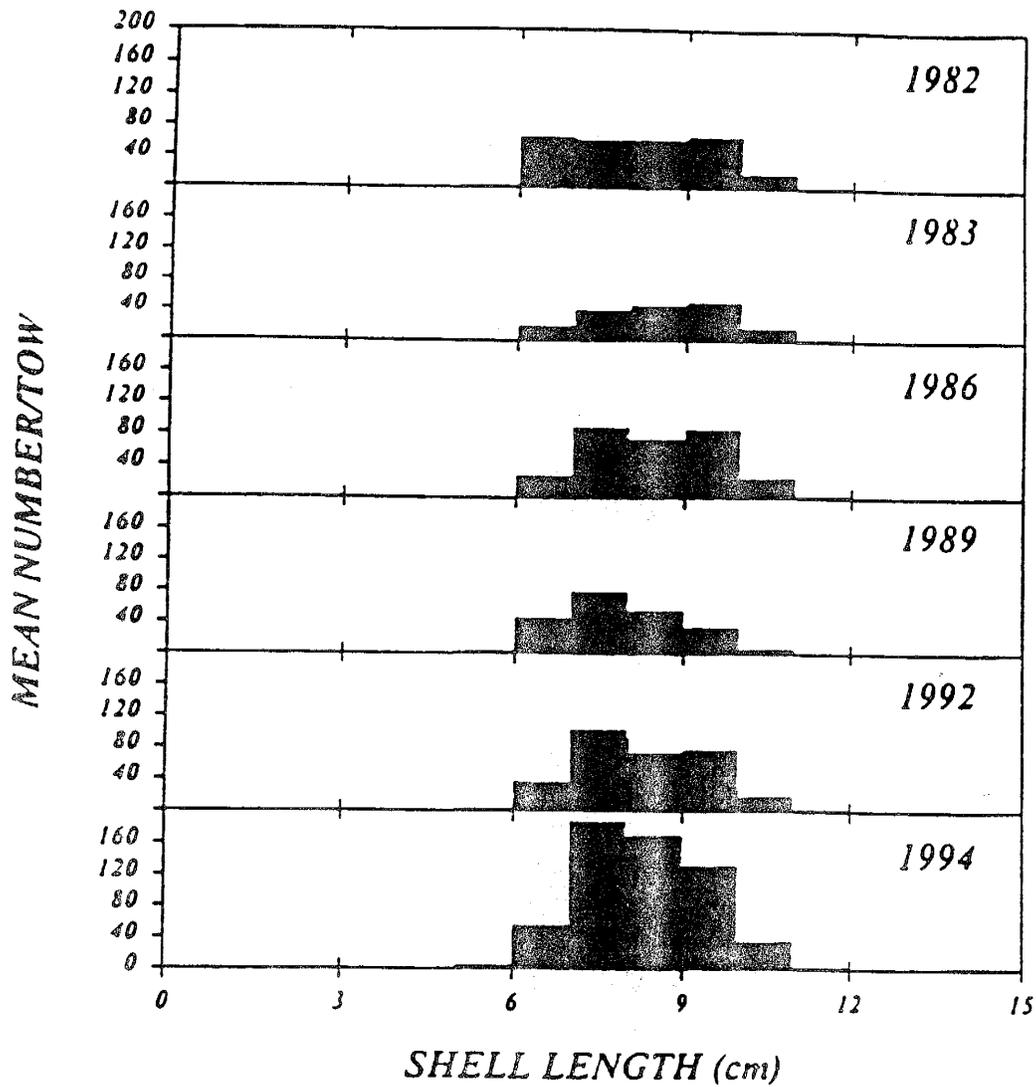


Figure 3. 1994 NEFSC Research Survey with various concentrations.

Source: NEFSC 1994 Clam Survey.



Length frequencies of ocean quahogs taken during hydraulic dredge surveys off Long Island, 1982-1994. Data are stratified mean numbers per standardized survey tow.

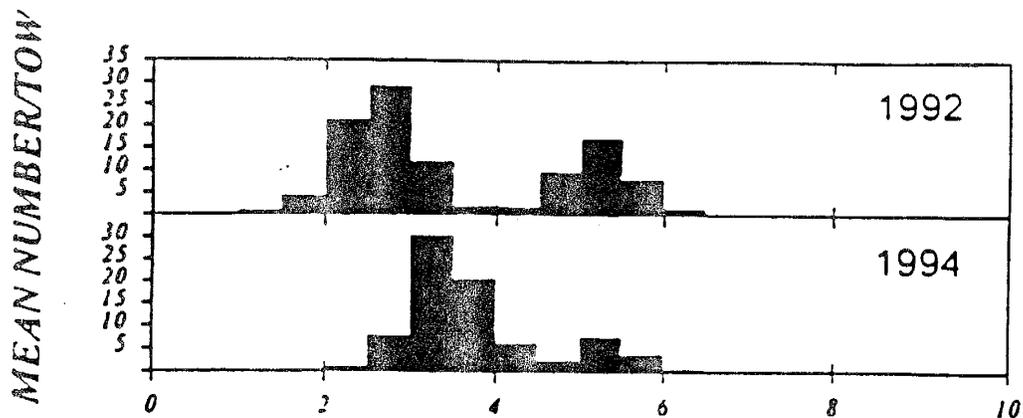


Figure 4. Length frequencies of ocean quahogs taken during hydraulic dredge surveys off Maine, 1992 and 1994. Data are mean numbers per standardized survey tow.

Source: USDC 1995.

OCEAN QUAHOGS

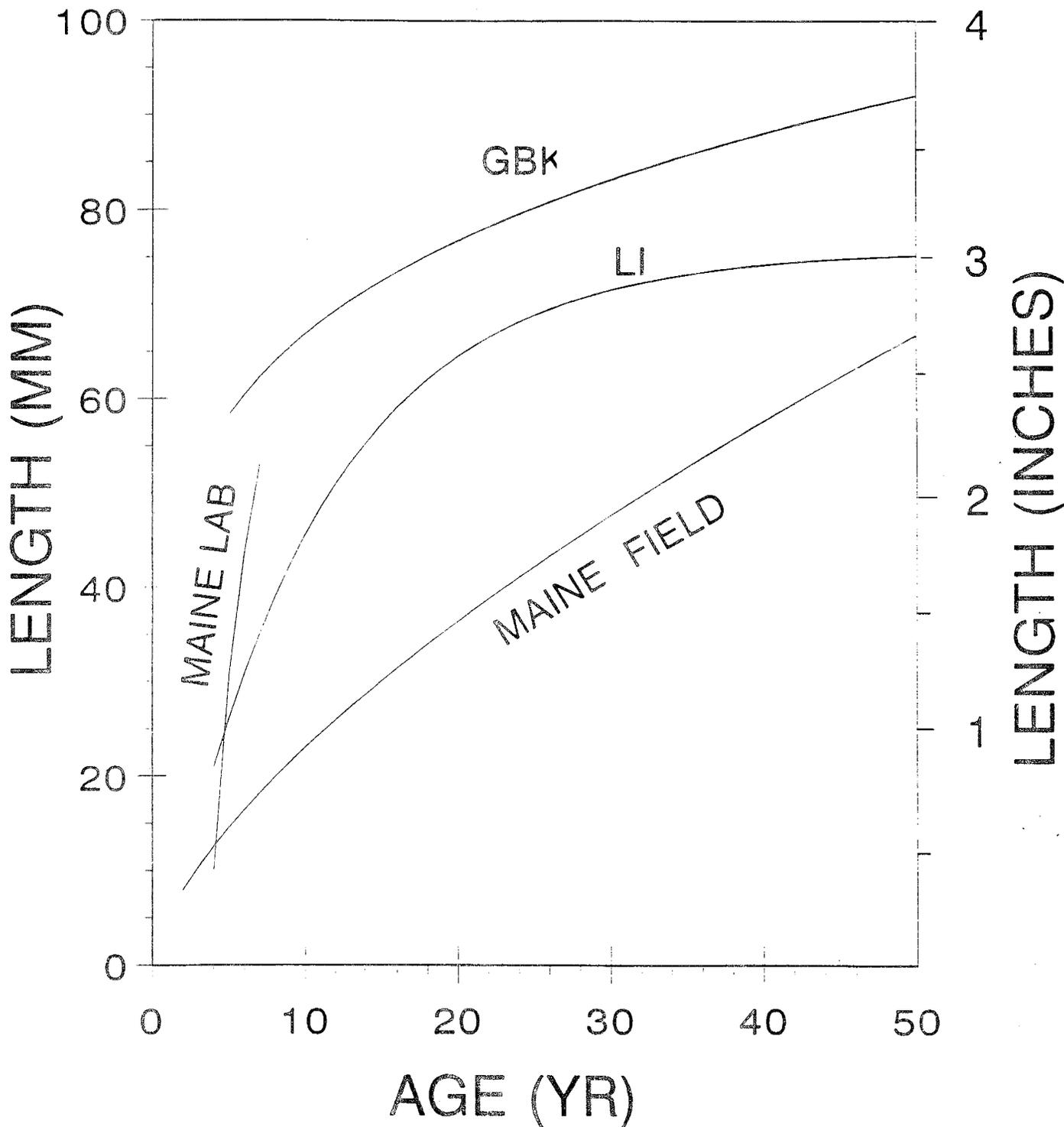


Figure 5. Growth rates among various ocean quahog populations.

Source: USDC 1993.

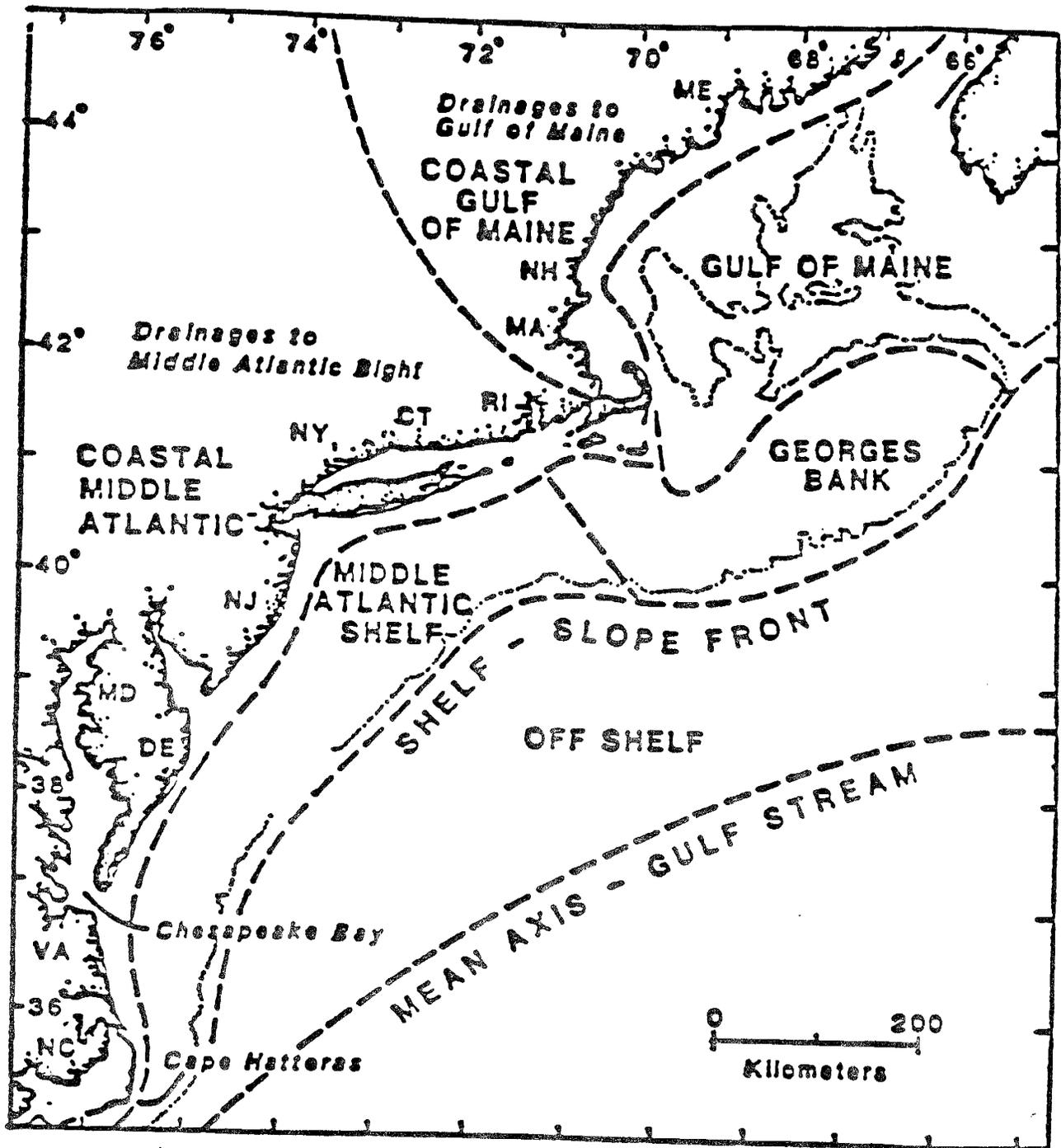


Figure 6. Northeast Regional Action Plan (RAP) Water Management Units.

Source: USDC, 1985b.

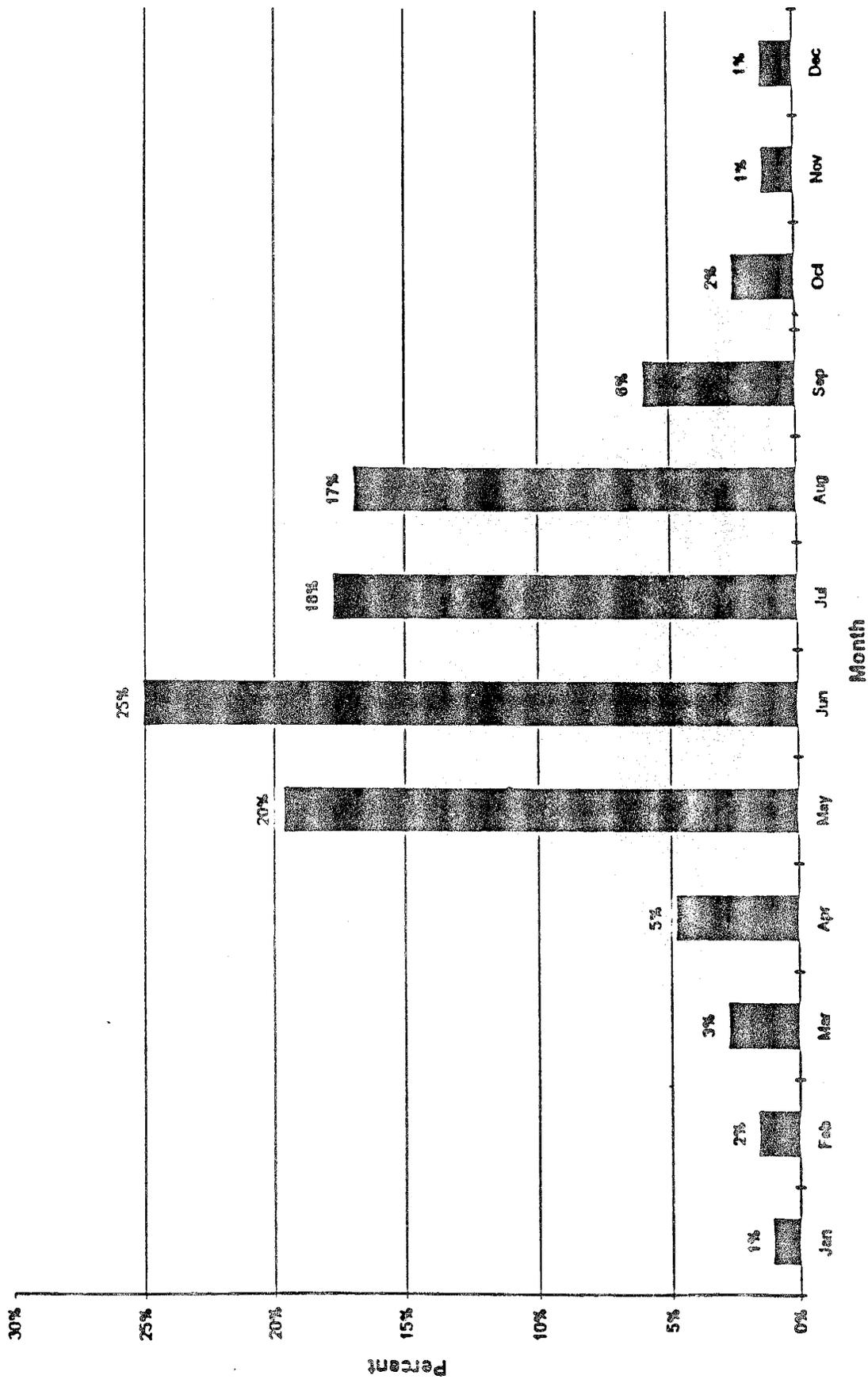


Figure 7. 1991 - 1995 Maine Quahog Landings (Combined) - Percentage by Month.

Source: NMFS Vessel Logbook Files.

National Marine Sanctuary Program

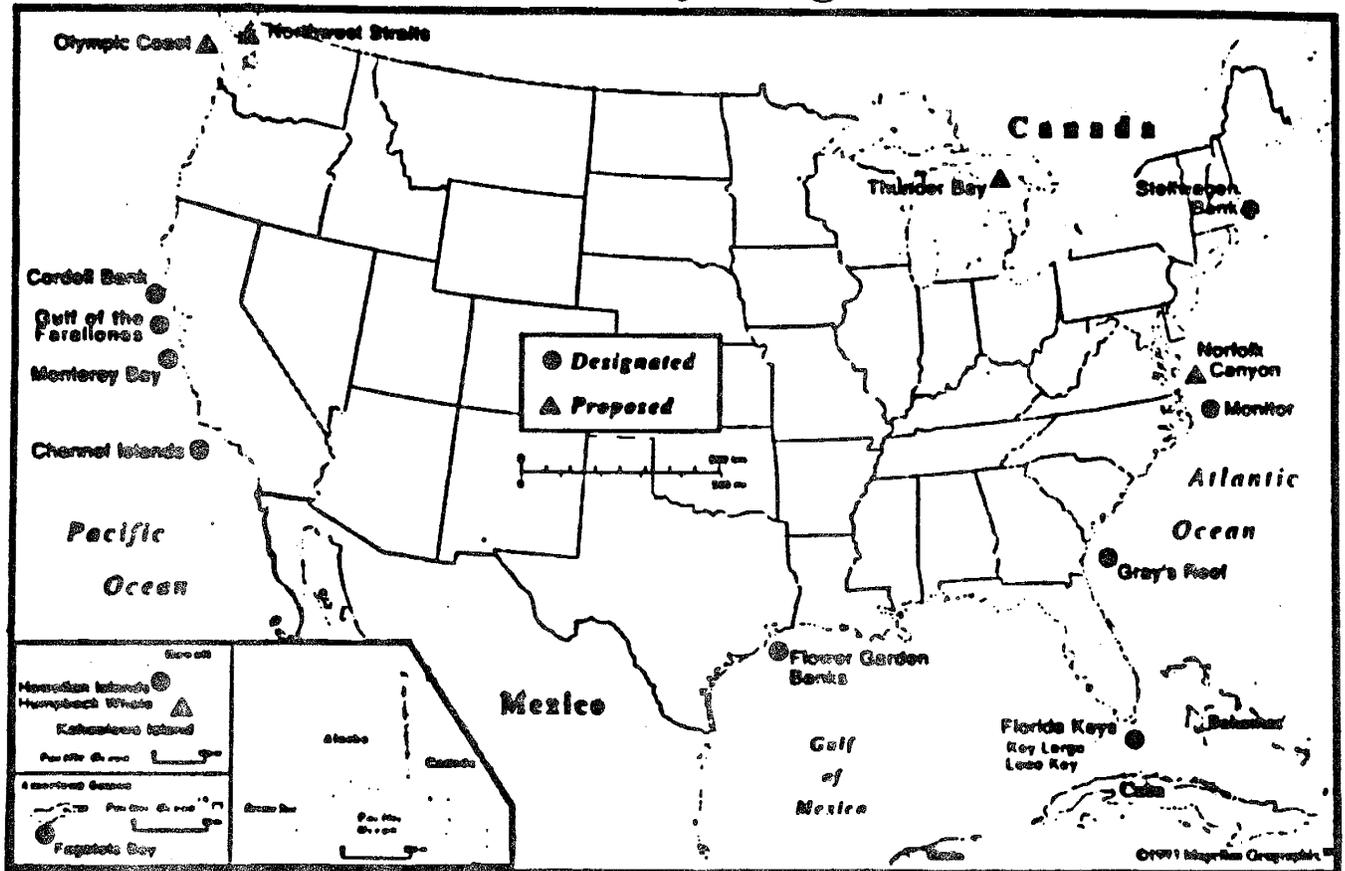


Figure 8. Designated and Proposed National Marine Sanctuaries.

Source: National Marine Sanctuaries Program, 1993.

APPENDIX 1. ALTERNATIVE MANAGEMENT REGIMES

There were seven non-preferred alternatives that were taken to public hearings in April 1997. The public hearing preferred alternative is now listed here as Alternative 8. Additionally, there were two quota options for the public hearing draft. There are now two additional alternatives for the initial maximum quota for the Maine zone.

1. NO ACTION -- AMENDMENT 8 REGULATIONS TAKE OVER

The experimental fishery for ocean quahogs in federal waters off the coast of Maine expired on 30 September 1997. The National Marine Fisheries Service will not renew it again. Without an Amendment, all vessels are required to operate under the provisions of Amendment 8. The Maine fishery is required to return to Maine state waters, unless a boat buys allocation or cage tags from current allocation owners. There would be no increase in the annual EEZ quota for the Maine EEZ.

The benefits of no action would include the fact that the integrity of the ITQ system would not be compromised. There would be no additional administrative costs to the federal government for the implementation of a distinct management system for the State of Maine. The current allocation owners would benefit from any higher prices that might result from additional demand for their ITQs from Maine fishermen. The risks of overfishing the EEZ resource off Maine are minimal.

The costs associated with this alternative include the fact that prosecution of the fishery from federal waters will be made significantly more costly and difficult for Maine fishermen. The regulations in Amendment 8 state that: "All surf clam and ocean quahog cages shall be tagged before the cable is removed from the cage on the dock and tags shall not be removed until cages are emptied at the processing plant." This requirement implies that all land transport of quahogs occur while using tagged cages. Many ports in Maine do not have cranes for lifting the cages out of vessels, or onto trucks. The practical cost of this alternative is likely to be that Maine fishermen will have a strong incentive to not comply with the regulations, and report catches from federal waters as coming from state waters. The competence of management officials may be called into question if regulations are imposed which are ill suited to the Maine fishery, having been designed for the more industrialized fishery. Enforcement costs would increase substantially if the existing regulations were to be adequately enforced in the Maine fishery. Currently, there is no at-sea monitoring of catches from state vs. federal waters, and no tracking of cage tags in the commerce of Maine quahogs.

2. AMENDMENT 8 REGULATIONS (NO ACTION) BUT ALLOWING FOR CONVERSION BETWEEN BUSHELS AND CAGES

In this alternative the Maine ITQ shares would be purchased from existing fishery participants. No new federal allocation would be necessary. There would be no increase in the annual quota for Maine. A cage tag could be converted to 32 bushel tags. This is the only alternative that allows cage to bushel conversion.

The major benefit associated with this alternative is the maintenance of the integrity of the existing ITQ system. This alternative allows small Maine boats to purchase ITQ shares in amounts suitable for their boats, and removes the requirement that ocean quahogs must be shipped in cages. Current allocation owners would benefit from any higher prices that might result from additional demand for their ITQs from Maine fishermen.

The costs of this alternative are similar to the "No Action" alternative in that it increases costs to the Maine industry. This alternative also creates an incentive to report federal harvests as coming from state waters. The major cost is that it creates a potentially significant administrative burden in the issuance and tracking of thousands of new bushel tags. Convertibility would likely increase the risk of overfishing Maine ocean quahog beds if large amounts of (relatively inexpensive) allocation from the rest of the EEZ were diverted to the more highly valued Maine ocean quahogs.

3. MAINE'S ORIGINAL POSITION: STATE MANAGEMENT NORTH OF 43° 50'

This alternative creates a line with separate management north of 43° 50'. The fishery north of this line would be declared exempt from Amendment 8 regulations so long as it does not exceed 2% of total quota (2% of the current 4.317 million bushel quota is 86,340 bushels). All harvests from the zone would have to be landed in Maine. There would be additional gear restrictions (maximum 36 inch cutter bar) and a possible minimum size limit of 1.5 inches. No limitation on entry is considered. There would be no conversion between bushels and cages.

The major benefit of this alternative would be that Maine would be responsible for all management and thus no additional costs would be borne by the federal government.

The costs would include the fact that any fishermen would be precluded from fishing in the EEZ north of 43° 50' if their gear utilized a cutter bar greater than 36 inches. This would exclude virtually all non-Maine boats, and thus is likely to violate National Standard 4. This alternative does not address potential overcapitalization of the fishery, or the "dilution" of incomes which occurs as an increasing number of fishermen divide the earnings from a finite (and often declining) resource. Perhaps the biggest problem is that it is widely perceived as setting a precedent for state control of resources in federal waters, thereby abrogating federal responsibilities and allowing for preferential treatment of citizens of one state versus another.

4. NMFS 1993 SECRETARIAL AMENDMENT PREFERRED ALTERNATIVE

This alternative also creates a line with separate management north of 43° 50' (USDC 1993). There would be no annual quota. All catches from the zone would have to be landed in Maine. Additional gear restrictions (maximum 36 inch cutter bar) and minimum size limit of 1.5 inches would be implemented. No limitation on entry was proposed. There would be no convertibility between bushels and cages. This was the preferred alternative developed by NMFS in their draft 1993 Secretarial Amendment.

The largest benefit would be that management would be straightforward in that the Councils would not be at all involved. There would be no additional administrative or enforcement costs to the federal government since Maine would do everything.

Costs would include the fact that fishermen would be precluded from fishing in the Maine EEZ if their gear utilized a cutter bar greater than 36 inches. This would exclude virtually all non-Maine boats, and thus is likely to violate National Standard 4. This alternative does not address potential overcapitalization of the fishery, or the "dilution" of incomes which occurs as an increasing number of fishermen divide the earnings from a finite (and often declining) resource. The major cost is that it is widely perceived as setting a precedent for state control of resources in federal waters, thereby abrogating federal responsibilities and allowing for preferential treatment of citizens of one state versus another. Finally, a lack of a quota greatly increases the risk of overfishing.

5. DE MINIMUS

Under this alternative the Maine fishery would be classified as *de minimus* as long as harvests from federal waters off Maine were less than 1% of the annual quota specified for the federal ITQ fishery. Landings in Maine have exceeded this 1% recently of the current EEZ quota. A moratorium on new entrants would be instituted. Annual evaluation for *de minimus* status is required. There would be no conversion between bushels and cages.

The benefits of this alternative would include the fact that this would be easily implemented and could possibly require no additional expenditures in the short run. This alternative responds to the concern that developing a separate management infrastructure for such a small segment of the fishery may not be considered warranted. The moratorium reduces the risk of overcapitalization.

The costs are that this does not provide a long-term solution for the Maine fishery. A new plan amendment would be required to introduce new management measures once the 1% EEZ threshold was reached. Maine DMR opposed a moratorium until this current compromise position.

6. INDIVIDUAL TRANSFERRABLE QUOTAS (ITQs)

A provisional quota would be specified for the EEZ ocean quahog fishery off the coast of Maine. Percentage shares (ITQs) of the quota would be issued to the owners of vessels which have reported landings in the experimental fishery. Shellfish sanitation tags with a special numbering system would replace the cage tags used in the non-Maine fishery. All temporary and permanent transfers of allocation would go through NMFS, Gloucester. There would be no conversion between bushels and cages. A moratorium on entrants to the fishery would not be necessary.

Non-Maine vessels which hold ITQs for ocean quahogs would not be prohibited from fishing in the federal waters off Maine. However, as with the experimental fishery, boats landing in Maine would be required to adhere to all State of Maine landings laws.

The benefits of this alternative would include the fact that no new separate management regime would need to be created. This provides the full benefits of ITQ management in the current plan, including:

- 1) Reduces the potential for overcapitalization, as fishermen use only as many boats as necessary to harvest their allocation.
- 2) Eliminates the "race for fish" which occurs when quotas are left in a common pool, with each individual competing for the largest share.
- 3) If some fishermen choose to sell their share of the fishery, those that remain are able to make a better living, as harvest revenues are spread out among fewer individuals.
- 4) The overall quota reduces the risk of overfishing.

The major cost is that of administering the temporary and permanent transfers of allocations which will increase administrative costs. The enforceability of bushel tags which are not permanently attached to bags (and hence might be used repeatedly) has not yet been demonstrated. Additionally, since Maine is not likely to regulate state waters similarly, there will be an incentive to report federal harvests as coming from state waters. New enforcement resources will be required, as NMFS currently has only two enforcement agents for the entire Maine coast. This alternative was strongly opposed by Maine DMR.

7. MODIFIED COMPROMISE POSITION - QUOTA ASSIGNED TO MAINE DNR - NO TRANSFER RIGHTS

Maine would receive a provisional quota for the EEZ fishery off its shores. The quota would not be considered an ITQ, and hence Maine would not have the right to sell or transfer harvest rights to other institutions or individuals. No special tagging system would be needed. The federal fishery would be closed when the quota is reached. Trip limits could be used to spread the harvest through the season at Maine's discretion.

A moratorium would be placed on new entrants to the federal fishery. Non-Maine vessels which hold ITQs for quahogs would not be prohibited from fishing in the federal waters off Maine. However, as with the experimental fishery, boats landing in Maine would be required to adhere to all State of Maine landings laws.

The benefits include the fact that the quota will reduce the likelihood of overfishing. If Maine were to enforce a joint quota for both state and federal waters, then there would be no need to positively identify harvests as coming from either area, and eliminate any need for at-sea enforcement. Administrative costs would be minimal. A moratorium partially addresses the potential for overcapitalization.

Costs center on the fact that if a joint state/federal quota is not enforced, then federal harvests could be misreported as coming from State of Maine waters. This alternative does not provide the benefits of ITQs. Maine DMR expressed opposition to a moratorium until this iteration of this Amendment.

8. 1997 PUBLIC HEARING PREFERRED ALTERNATIVE.

The Council went to public hearings in April of 1997 with a preferred alternative that included a separate unit of quota (27,611 bushels) that would have been established for ocean quahogs landed in Maine from the EEZ. This quota would have been in addition to that currently held by participants under the ITQ provisions. The quota would have been allocated to the Governor of the State of Maine as the owner of record. Vessels wishing to land ocean quahogs in the State of Maine from the EEZ would have been required to follow all State laws and hold a valid federal permit, as well as, a Maine resident or non-resident permit, maintain and submit logbooks of the harvesting in federal waters. Quota accounting would have been in terms of bushels rather than 32 bushel steel cages. The State of Maine was to review the records submitted to NMFS of harvest from the EEZ on a weekly basis and compare the running total with the available quota. If that quota was reached prior to the end of the fishing year, the harvesting of ocean quahogs in the Maine EEZ by vessels holding both Maine and federal permits would have been prohibited for the balance of the year.

There were a number of potential costs associated with the hearing preferred alternative the biggest of which was the initial quota. It was determined during the hearings that many vessels during the past several years were reporting their catches in the federal Multispecies logbooks as opposed to the federal Shellfish logbooks and thus catches and the proposed initial quota were significantly underestimated. Costs also centered on if a joint state/federal quota was not enforced, then federal harvests could be misreported as coming from state waters. It did not provide the benefits of ITQs. Maine DMR had expressed opposition to a moratorium. Additionally, dealers would have needed to complete dealer reports the same as in the balance of the fishery and as is required under the experimental fishery and Amendment 8.

The benefits included the fact that the quota would reduce the likelihood of overfishing. If Maine were to enforce a joint quota for both state and federal waters, then there would be no need to positively identify harvests as coming from either area, and eliminate any need for at-sea enforcement. Administrative costs would be minimal. A moratorium partially addresses the potential for overcapitalization. Additionally, the Maine EEZ fishery would become part of the overall management system and allow the meeting of National Standard 3. An experimental fishery would not need to be continued in order to allow this fishery. This proposal was supported as a compromise position between Maine DMR and the traditional ocean quahog industry.

NON-PREFERRED QUOTA OPTION

In the public hearing draft there were two obvious quota possibilities. Maine advocated a quota based on the highest landings (37,912 bushels) over the first five years of the experimental fishery, while the major ocean quahog industry and the MAFMC supported usage of the average Maine landings during the period (27,611 bushels). The lower number, average, was preferred since some (although unknown) portion of the landings from the experimental fishery did come from the Territorial Sea and thus the average was believed to be probably generous.

During the public hearings it became painfully obvious that the proposed quota estimates were inappropriate since many fishermen from 1994 through 1996 were reporting their ocean quahog landings not in the Federal Shellfish logbooks but rather in the Multispecies logbooks. This discrepancy muddied the public hearings significantly, to the point that many other pertinent issues were never able to be discussed.

Other than the preferred initial maximum quota (100,000 Maine bushels) alternative now proposed in the Amendment, two other alternatives were considered for the eastern Maine ocean quahog quota.

The first non-preferred alternative would set the initial quota at 17,000 bushels (1,360,000 pounds). This quota would be similar to the recorded historical low landings in 1993. This initial maximum quota would remain in effect until a resource survey and assessment is completed. The quota would be administered and monitored the same way as the preferred quota alternative. While this alternative would provide the maximum degree of resource protection until a resource survey and assessment is completed, it would not minimize significant economic impacts on small entities. An initial quota of 17,000 bushels would reduce landings of ocean quahogs by 52,000 bushels in 1998, compared to 1996.

The second non-preferred alternative would set the initial quota at 125,000 bushels (10 million pounds). This quota would be similar to the recorded historical high landings in 1986. This initial maximum quota would remain in effect until a resource survey and assessment is completed. The quota would be administered and monitored the same way as the preferred quota alternative. While this alternative would potentially allow fishermen to harvest ocean quahogs at the highest historical landing level, it may not provide the maximum degree of resource protection. When Maine's ocean quahog landings climbed to historical highs in the mid 1980's, the market was saturated with ocean quahogs. This allowed the market to be more selective regarding the product that was purchased. This market saturation also lowered prices at the wholesale level as well as the retail level. Furthermore, a few years after the fishery recorded record landings, the resource indicated signs of depletion (Chenoweth and Dennison 1993). An initial quota of 125,000 bushels would increase landings of ocean quahogs by 56,000 bushels in 1998, compared to 1996.

The impacts and effects of these two quota extremes are evaluated in the Regulatory Impact Review (Appendix 2).

APPENDIX 2. REGULATORY IMPACT REVIEW REGULATORY FLEXIBILITY ANALYSIS

1. INTRODUCTION

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

The RIR addresses many items in the regulatory philosophy and principles of Executive Order 12866. The RIR also contains analytical information used to review the impacts of the proposed action under the Regulatory Flexibility Act (Section 5).

1.1. Description of User Groups

The description of fishing activities is presented in section 7 of this Amendment. The economic characteristics of the fishery and the fishery impact statement are described in sections 8 and 9.2.2.7 of this Amendment, respectively.

1.2. Problems Addressed by the Amendment

The problems to be addressed by the Amendment are described in section 4.2 of this Amendment.

1.3. Management Objectives

The objectives of the Amendment are described in section 4.3 of this Amendment.

2. METHODOLOGY AND FRAMEWORK FOR ANALYSIS

The basic approach adopted in this RIR is an assessment of management measures from the standpoint of determining the resulting changes in costs and benefits to society. The effects of actions were analyzed by employing quantitative approaches to the extent possible. Where quantitative data were not available, qualitative analyses were conducted.

3. IMPACTS OF PROPOSED MEASURES

3.1. Preferred Alternatives

3.1.1. Quota for the Eastern Maine Ocean Quahog Fishery

A quota, separate from and independent of the quota held by participants under the ITQ provisions of Amendment 8, will be established for ocean quahogs landed from a zone north of 43° 50' north latitude. All ocean quahogs landed from this zone will count towards this quota unless they are ITQ allocation landings. The initial quota will be set at a maximum of 100,000 Maine bushels (8 million pounds in the shell). The initial quota is within the historical range of landings during the past decade from a low of 17,000 bushels in 1993 to a record high of 125,000 in 1986. The quota can be annually adjusted between a maximum of 100,000 bushels and a minimum of 17,000 bushels on the advice of the Maine Ocean Quahog Advisory Panel which will report through the MAFMC Surfclam and Ocean Quahog Committee to the MAFMC. An adjustment in the quota within this range would occur through the annual Council review and quota-setting process. The quota would be administered and monitored by the Northeast Region of the National Marine Fisheries Service.

Vessels which hold ITQs for ocean quahogs may fish in the EEZ north of 43° 50' north latitude, from areas that are certified free of PSP. These ITQ vessels would be required to land their catch in Maine, or if landed in another state, the catch must be certified safe for human consumption through testing at a facility with NMFS/FDA/state approved dockside PSP testing protocol. Landings by vessels holding ITQs would be deducted from their ITQ and not counted against the eastern Maine quota. If the quota is reached and the zone is closed to ocean quahog fishing, this closure will also apply to ITQ vessels in order to facilitate enforcement.

The initial ocean quahog quota in 1998 will be 100,000 Maine bushels. Since landings in the eastern Maine ocean quahog fishery are believed to be driven by market demand, that is, they are demand-limited not resource-limited (section 7 of this Amendment), the amount of ocean quahogs that will be landed in 1998 will depend on the market need for the product. There is no information available to estimate the market demand for Maine ocean quahogs. However, there is no indication that the market demand for this product will be significantly different from 1996. In order to evaluate the potential effects on exvessel revenue due to a potential increase in landings, a sensitivity analysis has been generated. The effect on the overall ocean quahog exvessel price given the potential increase in landings from the implementation of the proposed quota would depend on the elasticity of demand for ocean quahogs. Since no study has estimated the exvessel demand function for eastern Maine ocean quahogs, revenue changes from the implementation of the new quota were calculated by taking exvessel price (value divided by bushels) for 1996, and multiplying this by the potential change in landings. In 1996, 69,067 bushels of Maine ocean quahogs were landed at an estimated exvessel price of \$28.85 per bushel (\$2.0 million total value). Assuming 1996 as the base year, an increase in landings in 1998 of 0%, 10%, 25%, and taking the entire 100,000 bushel quota (which are arbitrary, and were selected in order to compare possible gross revenue effects) would increase revenues by \$0, \$199,258, \$408,146, and \$892,417, respectively. However, it is important to note that in this sensitivity analysis it is assumed that exvessel price was constant regardless of the amount of ocean quahog landed. In reality, it would be expected that as the quantity of ocean quahog landings increased, the exvessel price for this commodity would decrease. Therefore, the increase in revenues shown above may be considerably lower.

3.1.2. Eastern Maine Harvest Area

Vessels will only be permitted to harvest ocean quahogs from areas which have been certified to be PSP-free. Vessels that only hold a State of Maine ocean quahog license would be restricted to fishing only in state waters. All ocean quahogs harvested from these PSP-free areas would be required to be landed in the State of Maine or if landed in another state, at a facility with NMFS/FDA/state operated dockside PSP testing protocol, in order to ensure public health. The significant occurrence of PSP both in state waters and the EEZ off the coast of Maine dictate that landing laws be used to certify that landings are consumable and the public health is protected. Unacceptable risk to the public and the fishery would occur if these landing laws are circumvented.

The following discussion on the potential costs and benefits of this alternative are paraphrased from USDC (1993).

"The definition of an area for both the harvest and landings of Maine mahogany quahogs will yield a positive economic benefit in terms of cost savings that may be associated with the unregulated movement of PSP-contaminated mahogany quahogs from the area. The amount of the benefit would be the sum of several direct and indirect costs attributed to an outbreak of mahogany quahog related PSP."

"Direct costs might take the form of medical costs, costs of lost work time, value of life costs, and decreases in profits to the fishery due to a decrease in demand for mahogany quahogs. Indirect costs may be in the form of avoidance costs emanating from information on poisoning causing a decrease in demand for other shellfish."

"To measure this cost savings, a number of publicized outbreaks of the illness would need to have occurred. Since we do not have this information, a quantification of this benefit is not possible." Nevertheless, this benefit is considered in determining the potential effects of this management measure.

3.1.3. Permits and Reporting Requirements

3.1.3.1. Dealer permit and reporting

All dealers with permits issued pursuant to this Amendment will be required to maintain and submit logbooks pursuant to CFR 648.7(b)(ii). Weekly landings will be reported to NMFS by dealers (as for all other fishery segments under Amendment 8 management) and monitored on a weekly/cumulative basis, and their reported purchases compared with those from vessels (section 3.2.3.2).

Federally licensed harvesters can sell their catch only to a federally licensed dealer and it is required that both dealers and harvesters each keep accurate and complete logbooks. Federally licensed dealers are required to report their purchases and transactions on a weekly basis as specified in both Amendment 8 and the experimental fishery.

Currently there are about six federally licensed dealers purchasing ocean quahogs (operating under the experimental fishery regulations). These dealers are already maintaining and submitting weekly landings to NMFS. Therefore, this action will not cause an increase in federal or public burden hours. As such, this management action will not require OMB clearance under the Paperwork Reduction Act.

This management action will allow the Regional Administrator and the State of Maine to forecast when a closure will be needed thus protecting the resource. Other benefits expected from this action will be attained by increasing the enforcement of surfclams and ocean quahog regulations and the monitoring of the surfclams and ocean quahogs landings.

3.1.3.2. Vessel permit and reporting

All moratorium vessels participating in this fishery will be required to maintain and submit logbooks pursuant to CFR 648.7(b)(ii). Federally licensed vessels must report all ocean quahog landings in Federal Shellfish logbooks only. These logbooks will be submitted to NMFS on a monthly basis and their reported landings compared with those from dealers (section 3.2.3.1).

In October 1990 the federal experimental fishery was initiated for the Maine EEZ, and fishermen began submitting landings data using Federal Shellfish logbooks. In 1996 there were 80 boats licensed to participate in the Maine ocean quahog fishery while 83 had obtained federal permits which allow them to fish in the EEZ experimental fishery. The vessels in the experimental fishery were required to submit federal logbooks.

The landings from all vessels (except ITQ vessels fishing with their allocations) will be assigned to the quota for this zone (both EEZ and State waters) north of 43° 50' north latitude and must be reported. Vessels holding no federal permits and fishing exclusively in state of Maine waters will have similar data reporting requirements by the State of Maine in order to maintain the integrity of the overall quota (Mercer pers. comm.).

Since the initiation of the experimental fishery for the Maine EEZ in 1990, 83 vessels have submitted landings data using federal logbooks. It is expected that since most of the historical eastern Maine vessel operators already submit logbook reports in the experimental fishery program or under the Northeast Multispecies, Scallop, and Summer Flounder FMPs, the implementation of this management measure will not affect the reporting process. Therefore, this action will not cause an increase in federal or public burden hours. As such, this management action will not require OMB clearance under the Paperwork Reduction Act.

This management action will allow the Regional Administrator and the State of Maine to forecast when a closure will be needed thus protecting the resource. Other benefits expected from this action will be attained by increasing the enforcement of surfclams and ocean quahog regulations and the monitoring of the surfclams and ocean quahogs landings.

3.1.4. Monitoring and Enforcement

3.1.4.1. Special notification requirement

Amendment 8 (MAFMC 1988), requires that surfclam and ocean quahog vessel owners and operators call the NMFS Office of Law Enforcement nearest to the point of offloading (contact the Regional Administrator for locations and phone numbers) and accurately provide specific information prior to departure of their vessel from the dock to fish for surfclams or ocean quahogs in the EEZ. The information to be provided consists of: 1) name of the vessel; 2) NMFS permit number assigned to the vessel; 3) expected date and time of departure from port; 4) whether the trip will be directed on surfclams, ocean quahogs, or Maine ocean quahogs -- this is needed in order to facilitate enforcement and ensure public health; 5) expected date, and location of landings; and 6) and name of the individual providing notice. Under this Amendment the RA may suspend this call-in provision.

Owners or operators that have given notification of a fishing trip under the above paragraph who decide to cancel or postpone the trip prior to departure must immediately provide notice of cancellation by telephone to the Office of Law Enforcement to which the original notification was provided. A separate notification shall be provided for the next fishing trip. Owners or operators that discontinue a fishing trip must immediately provide notice of discontinuance by telephone to the Office of Law Enforcement to which the original notification was provided. The owner or operator providing notice of discontinuance shall advise of any changes in landing time or port of landing.

The vessel permits, the vessel, its gear, and catch shall be subject to inspection upon request by an authorized officer. This will in turn aid in the management and administering of the ocean quahog and surfclam resource.

When the call-in requirement for the surfclam and ocean quahog fisheries was implemented (Amendment 8), it was intended to apply, and it considered, everyone that was fishing for surfclams and ocean quahogs. Therefore, this specific management action has already received OMB Paper Work Reduction Act clearance for information collections affecting the public.

The cost associated with the requirement of call-in is minimal since it corresponds to a time when most vessels will be contacting their buyers with the same information, and NMFS has an 800 number for their use.

This management action will allow NMFS to manage the fishery in a close and efficient manner. Other benefits expected from this action will be attained by increasing the enforcement of surfclams and ocean quahog regulations and the monitoring of surfclams and ocean quahogs landings.

3.1.5. Federal Limited Access Permits

This Amendment establishes a moratorium on federal eastern Maine ocean quahog permits. During this moratorium, federal permits will be issued only to those vessels

which both held a Federal Experimental Ocean Quahog permit at any time during the experimental fishery (from October 1990 through September 1997) and reported at least one bushel of landings in either the Federal Shellfish logbook or (from 1994 on) in the Federal Multispecies logbook from the zone north of 43° 50". Based upon analyses of the logbooks available, 83 vessels would qualify.

This provision addresses the concerns of the historical participants regarding the establishment of a quota. Although the experimental fishery was open-access, in meetings with fishermen from eastern Maine, it became clear that the central concern regarding management was that with the establishment of a quota there was the potential for the quota to be filled and thus the fishery closed. An open-access licensing system would permit fishermen who had not complied with the experimental fishery reporting requirements to compete for a limited quota with those who had complied.

Since the eastern Maine portion of the ocean quahog resource extends considerably beyond the area currently being fished, it is probable that the sustainable yield is larger than present harvest levels and that the fishery could support more than the number of vessels which will initially qualify for a moratorium permit. The State of Maine and the Council will develop policies and criteria for increasing the number of federal permits for the eastern Maine fishery should a full stock assessment show that the resource can sustainably support additional participants.

The purpose of a moratorium on new entrants is to reduce the potential for overcapitalization and the dissipation of economic rent which occurs when an unlimited number of new participants is allowed into a fishery. An increase in the number of participants in the Maine ocean quahog fishery would cause economic hardship for the ocean quahog vessels that have traditionally participated in the fishery. The extent of the economic pressure would depend on the ability of the vessels that currently fish for ocean quahog to compete in other fisheries. Taking into consideration the current level of specialization of these vessels and the overall level of competition for the existing fishery resources of the Atlantic coast, it is likely that the number of alternatives for those vessels would be very small.

It is expected that all vessels that participated in the experimental fishery (83 vessels) will apply for a moratorium vessel permit. The following costs represent total costs when all vessels are considered. The total initial cost associated with public requirements (collection of information, including time for reviewing instructions, completing and reviewing information, appeals of permit denial, and paint, brush, and stencil for vessel identification) is estimated at \$5,745. Then \$315 every year for permit renewal. The initial cost associated with government requirements (processing of submissions, appeals of permit denial) are estimated to be \$3,946. Then \$693 every year for permit renewal.

3.1.6. Unused moratorium permits are not reissued

A moratorium permit under this Amendment would expire: (1) when the owner or operator retires the vessel from the fishery, or (2) on December 31 of each year, or (3) when the ownership of the vessel changes; however, the regional Administrator

may authorize continuation of a vessel permit for the ocean quahog fishery if the new owner so requests. Applications for continuation of a permit must be addressed to the Regional Administrator.

The intent of this measure is to help evaluate the true scope of the participation in the fishery. It is possible that some vessels would take advantage of the qualification rules for the moratorium permit of the fishery by obtaining a moratorium permit even if they do not intend to participate in the fishery in the future. That is, they would only obtain a moratorium permit in this fishery in order to maintain a window of opportunity for future participation. This provision is included in the Amendment because it is believed that the retirement provision is necessary to reduce potential excess harvesting capacity over time.

4. EVALUATION OF E.O. 12866 SIGNIFICANCE

The proposed action does not constitute a significant regulatory action under E.O. 12866 for the following reasons. First, it will not have an annual effect on the economy of more than \$100 million. According to unpublished NMFS logbook data (preliminary) there were 43 vessels landing ocean quahogs in the experimental fishery in Maine in 1996. The total commercial value of the ocean quahogs in this fishery was estimated at \$2 million. According to the same data file, there were 56 non-Maine vessels that landed ocean quahogs and surfclams in 1996. The value of ocean quahog and surfclam landings for those vessels was estimated at \$18 and \$25 million, respectively. The measure considered in this Amendment will not affect total revenues generated by the commercial sector to the extent that a \$100 million annual economic impact will occur in any of these fisheries. The proposed actions are necessary to provide management measures for the small artisanal fishery for ocean quahogs off the northeast coast of Maine which has been operating as an experimental fishery from 1990 until its expiration on 30 September 1997. The principal intent of the proposed actions is to promote appropriate conservation and management of the resource while maintaining the harvest of these species at sustainable levels. The proposed action benefits in a material way the economy, productivity, competition and jobs. The proposed action will not adversely affect, in the long-term, competition, jobs, the environment, public health or safety, or state, local, or tribal government communities. Second, the proposed actions will not create a serious inconsistency or otherwise interfere with an action taken or planned by another agency. No other agency has indicated that it plans an action that will affect the surfclam and ocean quahog fishery in the EEZ. Third, the proposed actions will not materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of their participants. And, fourth, the proposed actions do not raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in E.O. 12866.

5. REVIEW OF IMPACTS RELATIVE TO THE REGULATORY FLEXIBILITY ACT

5.1. Introduction

The purpose of the Regulatory Flexibility Act (RFA) is to minimize the adverse impacts from burdensome regulations and record keeping requirements on small

businesses, small organizations, and small government entities. The category of small entities likely to be affected by the proposed plan is that of small-scale ocean quahog fishermen in eastern Maine. The impacts of the proposed action on the fishing industry and the economy as a whole were discussed above. The following discussion of impacts centers specifically on the effects of the proposed actions on the mentioned small businesses entities.

5.2. Determination of Significant Economic Impact on a Substantial Number of Small Entities

According to guidelines on regulatory analysis of fishery management actions, a "substantial number" of small entries is more than 20 percent of those small entries engaged in the fishery. The Small Business Administration (SBA) defines a small business in the commercial fishing activity as a firm with receipts of up to \$2.0 million annually (NMFS 1994).

According to unpublished NMFS logbook data (preliminary), in 1996, 43 vessels landed ocean quahogs under the experimental fishery program (valued at \$1,992,582). According to the same data file, there were 56 non-Maine vessels that landed ocean quahogs and surfclams in 1996 (valued at \$18 and \$25 million, respectively). All these vessels readily fall within the definition of a small business, so according to guidelines on regulatory analysis of fishery management actions, a substantial number of small entities are affected to some extent by this action. There is no history of participation of mid-Atlantic ocean quahog vessels landing ocean quahogs caught in Maine. This is likely to be related to the vessel size and fishing mode (e.g., gear, time, etc.) employed by the mid-Atlantic vessels which are not conducive to operations in the eastern Maine ocean quahog fishery. Furthermore, the cyclical nature of the ocean quahog fishery in Maine, in addition to the market structure or dynamics associated with this product (section 7 of this Amendment) will likely inhibit non-traditional participants from operating in this fishery. However, this Amendment does not prohibit ITQ holders from participating in the ocean quahog fishery in the zone north of 43° 50' north latitude when complying with all provisions in this Amendment. However, it is not anticipated that this will occur since no mid-Atlantic vessel ever participated in this fishery.

5.3. Analysis of Economic Impacts

The initial maximum quota of 100,000 bushels in 1998 may potentially allow landings to increase up to 30,933 bushels from the 1996 level. The potential increase in revenues in the fishery would depend on the increase in the landing level. Assuming 1996 as the base year, an increase in landings in 1998 of 0%, 10%, 25%, and taking the entire 100,000 bushel quota (which are arbitrary, and were selected in order to compare possible gross revenue effects) would increase revenues by \$0, \$199,258, \$408,146, and \$892,417, respectively (section 3.1.1). Assuming that this is the initial increase in annual revenues for all participants in the fishery (43 vessels landed ocean quahogs in 1996), each business unit would potentially gain from \$0 to \$20,754. However, it is important to note that in the sensitivity analysis conducted in section 3.1.1, it was assumed that exvessel price was constant regardless of the amount of ocean quahogs landed. In reality, it would be expected that as the

quantity of ocean quahogs landed increased, the exvessel price for this commodity would decrease. Therefore, the increase in revenues shown above may be considerable lower.

The proposed eastern Maine harvest areas are expected to allow for the continual monitoring of harvest of ocean quahogs from areas that are certified free of PSP. It is not possible to quantify this benefit due to lack of information. However, it is expected that positive economic benefits will be derived from cost savings associated with medical costs, costs of lost time, and decreases in profits to the fishery due to a decrease in demand for Maine quahogs that could be associated with a potential outbreak of Maine ocean quahog PSP.

The proposed dealer, vessel, and reporting requirements will likely provide positive benefits from increased enforcement and better monitoring of regulations. There are currently six federally licensed dealers (operating under the experimental fishery regulations) maintaining and submitting weekly landings to NMFS. Since the initiation of the experimental fishery for the Maine EEZ, 83 vessels have been licensed to operate in this fishery, thus, have submitted landings data using Federal Shellfish logbooks. It is not expected that these requirements will affect either revenues or costs in a negative way. Positive net benefits from the implementation of these requirements will be attained by increasing the enforcement of surfclam and ocean quahog regulations and the monitoring of the surfclam and ocean quahog landings.

The proposed special notification requirement (call-in) will allow for the fishery to be managed more closely and efficiently. The cost associated with the requirement of vessel owners and operators calling in is minimal since it corresponds to a time when most vessels will be contacting their buyers with the same information, and NMFS has an 800 number for their use. Under this Amendment the RA may suspend this call-in provision.

The provision dealing with the implementation of a moratorium on new entrants will provide positive benefits to the historical participants of the fishery by avoiding potential dissipation of revenues due to a future increase in the number of entrants. At the same time this will also reduce the potential of overcapitalization in the fishery. It is expected that it will cost each business unit \$69 to apply for a federal moratorium permit. This provision is expected to provide positive benefits to the overall management system.

NMFS has established several criteria to be used to determine if an action has a significant impact on a substantial number of small entities:

(a) The regulations are likely to result in a loss in annual gross revenues by more than 5 percent: The analysis under economic impacts indicate that there will be no loss of revenues. This threshold is not met.

(b) Annual compliance costs (annualized capital, operating, reporting, etc.) increase total costs of production for small entities by more than 5 percent: One of the requirements of the experimental fishery was that dealers and vessels had to obtain permits and maintain and submit logbook reports. Therefore, there is no additional

reporting costs associated with the dealer permit and reporting and vessel permit and reporting provisions. The cost associated with the requirement of vessel owners and operators calling in is minimal since it corresponds to a time when most vessels will be contacting their buyers with the same information, and NMFS has an 800 number for their use. The Council proposes through this Amendment, to establish a moratorium permit criteria. It is expected that all vessels that participated in the experimental fishery (83 vessels) will apply for a vessel permit. The total burden associated with public requirements (collection of information, including time for reviewing instructions, completing and reviewing information, and appeals of permit denial) and government requirements (processing of submissions, appeals of permit denial) are estimated to be 113 hours. The total burden associated with vessel permit renewal is estimated at 21 hours. Government initial annualized cost is estimated at \$3,946 (then \$693 for permit renewal once a year). On average, the fishing participants are expected to bear \$69 initially (vessel permit, appeals of permit denial, paint, brush, and stencil for vessel identification), then \$4 for permit renewal once a year. There is no information on the costs of production for vessels participating in the ocean quahog fishery in Maine. However, it is not believed that the compliance costs associated with the implementation of a moratorium permit will increase the costs of production for those entities by more than 5 percent. This threshold is not met.

(c) Compliance costs as a percent of sales for small entities are at least 10 percent higher than compliance costs as a percent of sales for large entities: All the firms expected to be impacted by the rule are small entities and hence there is no differential impact. This threshold is not met.

(d) Capital costs of compliance represents a significant portion of capital available to small entities considering internal cash flow and external financing capabilities: The proposed actions do not require any existing fishing entity to acquire new equipment or to completely refit existing equipment for compliance purposes. This threshold is not met.

(e) The requirement of the regulations are likely to result in a number of small entities affected being forced to cease business operations. This number is not precisely defined by SBA but as a "rule of thumb" to trigger this criterion would be 2 percent of the small entities affected: The analyses under economic impacts for each proposed action do not indicate that any entity will be forced to cease operations. On the contrary, the proposed actions provide management measures that allow small artisanal ocean quahog fishermen to continue to operate off the northeast coast of Maine in the absence of an experimental fishery program. This threshold is not met.

The preceding analysis of impacts relative to the Regulatory Flexibility Act indicates that, while a substantial number of small entities may be impacted by this action, the proposed regulatory actions or regulations in this Amendment will not result in significant economic impacts upon a substantial number of such entities. The proposed actions are necessary to provide management measures for the small artisanal fishery for ocean quahogs off the eastern coast of Maine which had operated as an experimental fishery. The principal intent of the proposed actions is

to promote appropriate conservation and management of the resource while maintaining the harvest of these species at sustainable levels.

5.4. Alternatives

Significant alternatives to the proposed management actions were described in Appendix 1.

1) No action alternative -- Amendment 8 regulations take over -- would require that all vessels operate under the provisions of Amendment 8 due to the termination of the experimental fishery for ocean quahogs in federal waters of the coast of Maine as of 30 September 1997. Unless a vessel purchases an allocation or cage tags from current allocation owners, they would be required to return to harvesting ocean quahogs from state waters only. The benefits of no action would include the fact that the integrity of the ITQ system would not be compromised. There would be no additional administrative costs to the federal government for the implementation of a distinct management system for the State of Maine. The current allocation owners would benefit from any higher prices that might result from additional demand for their ITQs from Maine fishermen. The risks of overfishing the EEZ resource off Maine would be reduced. However, it will be more costly and difficult for Maine fishermen to participate in the fishery from federal waters. The regulations in Amendment 8 state that: "All surf clam and ocean quahog cages shall be tagged before the cable is removed from the cage on the dock and tags shall not be removed until cages are emptied at the processing plant." This requirement implies that all land transport of ocean quahogs occur while using tagged cages. Many ports in Maine do not have cranes for lifting the cages out of vessels, or onto trucks. The practical cost of this alternative is likely to be that Maine fishermen will have a strong incentive to not comply with the regulations, and report catches from federal waters as coming from state waters. The competence of management officials may be called into question if regulations are imposed which are ill suited to the Maine fishery, having been designed for the more industrialized fishery. Enforcement costs would increase substantially if the existing regulations were to be adequately enforced in the Maine fishery. Currently, there is no at-sea monitoring of catches from state vs. federal waters, and no tracking of cage tags in the commerce of Maine ocean quahogs.

Inclusion of the Maine EEZ ocean quahog fishery under Amendment 8 does not address the serious health concerns associated with the ocean quahog fishery in the Gulf of Maine. Contamination of widespread areas of this fishery due to PSP is a common occurrence. Without a limitation on landing outside the area where the fishery is conducted, there is a risk that contaminated product could be landed in areas that do not have a rigorous shellfish inspection program as the one conducted by the State of Maine in Washington and Hancock Counties. If contaminated product is consumed, serious illness and possibly death might ensue. Aside from the costs of treating contaminated shellfish, public confidence in the health and safety of seafood could radically affect purchases of ocean quahogs and other look alike products. This would have a dramatic impact on the income derived from the ocean quahog fishery (USDC 1993).

If this Amendment is not implemented, fishermen from Maine would be prohibited from fishing for ocean quahogs in the EEZ (assuming they did not purchase or lease ITQ allocations from other individuals in the industry), they would forego revenues derived from the sale of ocean quahogs. Given the average exvessel price for ocean quahogs harvested in Maine in 1996 (\$28.85 per bushel) and assuming that landings would approximate those of 1996 (69,067 bushels), annual total loss in revenues for this industry would be \$1,992,583 ($\$28.85 \times 69,067$) in 1998 compared to 1996.

On the other hand, if fishermen from Maine were to purchase or lease allocations, the following costs and benefits would be incurred. The costs for purchasing and leasing an ocean quahog allocation would be between \$7 and \$8 (average \$7.5) and \$1, respectively (Wallace pers. comm.). Assuming that each participant would have to purchase allocation and that total landings would approximate those of 1996 (69,067 bushels) the total cost to the industry for the purchase of permanent allocation would be \$518,000 while the cost of leasing allocation for one year would be \$69,067.

Other costs associated with the production of ocean quahogs assuming that fishermen from Maine were to purchase or lease allocations would be: 1) cost of cages -- each vessel operator would have to purchase at least one cage (\$400 per cage) in which to off load the ocean quahogs. The total cost of purchasing cages on an industry wide basis would be \$33,200 (83 qualifying vessels x \$400). This total cost does not include delivery costs and potential additional costs associated with cage modification needed to handle the small size ocean quahog which is characteristic of the Maine fishery; 2) currently, none of the piers and docks at which the vessels in the fishery land are furnished with the equipment or infrastructure needed to handle the type of cage used in the industry. Therefore, vessels would be forced to unload cages at other distant ports which would increase fuel consumption and additional costs for other services (fork lift/small crane services, truck rental to take cage to the dealer, cage storage -- as many participants would want to keep cages close to the dock where they land, etc.), or piers and docks would have to be modernized in order to handle cages; 3) processors that currently handle ocean quahogs in Maine would likely have to acquire equipment and make structural changes to their operations in order to handle the number of cages that would be landed each day; and 4) additional enforcement and administrative costs for the NMFS would be required to monitor the fishery and enforce industry regulations.

The net benefits associated with the purchase or lease of allocations is not readily identifiable. Benefits would depend on the number of individuals that continue to participate in the fishery, and thus continue contributing to the productivity of the Nation. The costs associated with the production of ocean quahogs (assuming that fishermen from Maine were to purchase or lease allocation) and the general characteristics of the fishery (e.g., vessel size, infrastructure of landing facilities, etc.) are likely to force a number of participants to discontinue fishing for ocean quahogs. If this number is high and there is no alternative fishery for them to participate in, the net benefits are likely to be negative.

Most of the ocean quahogs landed in Maine are landed in Washington county. This county is one of the poorest in the Northeast United States (Section 8 of this Amendment). The imposition of the costs identified above would affect fishermen

and their communities in a negative manner. Furthermore, the imposition of those costs would not improve the conservation and management of the fishery.

If this Amendment is implemented, fishermen from the traditional ocean quahog Maine fishery would be able to continue their harvest of ocean quahogs in the EEZ much as they do now. That is, vessels participating in the Maine ocean quahog fishery would not be limited to operate only in state waters.

2) No action -- Amendment 8 regulations but allowance for conversion between bushels and cages -- is identical to the previous alternative except that in this case a cage could be converted to 32 bushel tags. This is the only alternative that allows cage to bushel conversion.

This alternative would maintain the integrity of the current ITQ system while allowing Maine boats to participate in the fishery. No new federal allocation would be necessary. There would be no increase in the annual quota for Maine. Fishermen would still incur the cost associated with obtaining allocations. Therefore, it will be more costly (similar to the no action above) and difficult for Maine fishermen to participate in the fishery from federal waters. This alternative also creates an incentive to report federal harvests as coming from state waters. The major cost is that it creates a potentially significant administrative burden in the issuance and tracking of thousands of new bushel tags. Convertibility would greatly increase the risk of overfishing Maine ocean quahog beds if large amounts of (relatively inexpensive) allocation from the rest of the EEZ were diverted to the more highly valued Maine ocean quahogs. Current allocation owners would benefit from any higher prices that might result from additional demand for their ITQs from Maine fishermen.

3) State of Maine's original position: state management north of the 43° 50' line -- This alternative creates a line with separate management north of 43° 50'. The fishery north of this line would be declared exempt from Amendment 8 regulations so long as it does not exceed 2% of total quota (2% of the current 4.317 million bushel quota is 86,340 bushels). All harvests from the zone would have to be landed in Maine. There would be additional gear restrictions (maximum 36 inch cutter bar) and a possible minimum size limit of 1.5 inches. No limitation on entry is considered. There would be no conversion between bushels and cages.

The major benefit of this alternative would be that Maine would be responsible for all management and thus no additional costs would be borne by the federal government.

The costs would include the fact that any fishermen would be precluded from fishing in the EEZ north of 43° 50' if their gear utilized a cutter bar greater than 36 inches. This would exclude virtually all non-Maine boats, and thus is likely to violate National Standard 4. This alternative does not address potential overcapitalization of the fishery, or the "dilution" of incomes which occurs as an increasing number of fishermen divide the earnings from a finite (and often declining) resource. Perhaps the biggest problem is that it is widely perceived as setting a precedent for state control of resources in federal waters, thereby abrogating federal responsibilities and allowing for preferential treatment of citizens of one state versus another.

This alternative was rejected because fishermen would be precluded from fishing in the EEZ if their gear utilized a cutter bar greater than 36". This action would exclude virtually all non-Maine boats, and thus is likely to violate National Standard 4. Furthermore, this alternative does not address the potential problems associated with overcapitalization of the industry and increases the risk of overfishing the resource.

4) NMFS 1993 secretarial Amendment preferred alternative -- would create a line of separate management north of the 43° 50' line (USDC 1993). There would be no annual quota. This new management zone would have additional gear restrictions, minimum size limit, and no limitation on entry. This alternative was rejected because the gear restrictions would exclude virtually all non-Maine boats, and thus is likely to violate National Standard 4. Costs would include the fact that fishermen would be precluded from fishing in the Maine EEZ if their gear utilized a cutter bar greater than 36 inches. All catches from the zone would have to be landed in Maine. There would be no convertibility between bushels and cages.

The largest benefit would be that management would be straightforward in that the Councils would not be at all involved. There would be no additional administrative or enforcement costs to the federal government since Maine would do everything.

This alternative does not address the potential problems associated with overcapitalization of the industry and increases the risk of overfishing the resource. It is widely perceived that the implementation of this alternative would set a precedent for state control of resources in federal waters. This would revoke federal responsibilities and allow for preferential treatment of citizens of one state versus another state. Finally the lack of a quota greatly increases the risk of overfishing.

5) Declare the Maine fishery as "de minimus" -- under this alternative the Maine fishery would be classified as *de minimus* as long as harvests from federal waters off Maine are less than 1% of the annual quota specified for the federal ITQ fishery. Landings in Maine in 1995 from both state and federal waters were reported at 37,912 bushels, or nearly 0.9% of the current EEZ quota. A moratorium on new entrants would be instituted. Annual evaluation for *de minimus* status is required. There would be no conversion between bushels and cages.

The benefits of this alternative would include the fact that this would be easily implemented and would require no additional expenditures in the short run. This alternative responds to the concern that developing a separate management infrastructure for such a small segment of the fishery may not be considered warranted. The moratorium reduces the risk of overcapitalization.

The costs are that this does not provide a long-term solution for the ocean quahog fishery in Maine. Once the 1% threshold is reached, a new plan Amendment would be needed to introduce new management measures. Maine DMR opposes a moratorium.

6) Individual transferable quotas (ITQ's) -- a provisional quota would be specified for the EEZ ocean quahog fishery off the coast of Maine. Percentage shares (ITQs) of the quota will be issued to the owners of vessels which have reported landings in

the experimental fishery. Shellfish sanitation tags with a special numbering system would replace the cage tags used in the non-Maine fishery. All temporary and permanent transfers of allocation would go through NMFS, Gloucester. There would be no conversion between bushels and cages. A moratorium on entrants to the fishery would not be necessary.

Non-Maine vessels which hold ITQs for ocean quahogs would not be prohibited from fishing in the federal waters off Maine. However, as with the experimental fishery, boats landing in Maine would be required to adhere to all State of Maine landings laws.

The benefits of this alternative would include the fact that no new separate management regime would need to be created. This provides the full benefits of ITQ management in the current plan, including:

- 1) Reduces the potential for overcapitalization, as fishermen use only as many boats as necessary to harvest their allocation.
- 2) Eliminates the "race for fish" which occurs when quotas are left in a common pool, with each individual competing for the largest share.
- 3) If some fishermen choose to sell their share of the fishery, those that remain are able to make a better living, as harvest revenues are spread out among fewer individuals.
- 4) The overall quota reduces the risk of overfishing.

The major cost is that of administering the temporary and permanent transfers of allocations which will increase administrative costs. The enforceability of bushel tags which are not permanently attached to bags (and hence might be used repeatedly) has not yet been demonstrated. Additionally, since Maine is not likely to regulate state waters similarly, there will be an incentive to report federal harvests as coming from state waters. New enforcement resources will be required, as NMFS currently has only two enforcement agents for the entire Maine coast. This alternative is opposed by Maine DMR.

7) Modify compromise position-quota assigned to Maine DMR-no transfer rights
-- this alternative is very similar to the preferred alternative except that there are no transfer rights. Maine would receive a provisional quota for the EEZ fishery off its shores. The quota would not be considered an ITQ, and hence Maine would not have the right to sell or transfer harvest rights to other institutions or individuals. No special tagging system would be needed. The federal fishery would be closed when the quota is reached. Trip limits could be used to spread the harvest through the season at Maine's discretion.

A moratorium would be placed on new entrants to the federal fishery. Non-Maine vessels which hold ITQs for ocean quahogs would not be prohibited from fishing in the federal waters off Maine. However, as with the experimental fishery, boats landing in Maine would be required to adhere to all State of Maine landings laws.

The benefits include the fact that the quota will reduce the likelihood of overfishing. If Maine were to enforce a joint quota for both state and federal waters, then there

would be no need to positively identify harvests as coming from either area, and eliminate any need for at-sea enforcement. Administrative costs would be minimal. A moratorium partially addresses the potential for overcapitalization.

Costs center on if a joint state/federal quota is not enforced, then federal harvests could be misreported as coming from state waters. It does not provide the benefits of ITQs. Maine DMR has expressed opposition to a moratorium.

8) Preferred public hearing alternative -- According to the April 1997 public hearing draft document, all participants in the Maine ocean quahog fishery would have been required to comply with the provisions of Amendment 8 except as modified by the following management measures:

1. The Governor of the State of Maine would have received an allocation for ocean quahogs landed in Maine from the EEZ.
2. The initial provisional EEZ quota (27,611 bushels) was the average of the first five full years (1991 - 1995) of the experimental fishery (as calculated from shellfish logbook reports).
3. The State of Maine would continue to test for and certify for (paralytic shellfish poisoning (PSP) in the ocean quahogs landed in their state, whether from the EEZ or Territorial Sea, to ensure the public health.
4. The status of the Maine allocation would have had the same legal status as ITQs for the remainder of the fishery. Just as those quota owners may make any financial arrangements they see fit (consistent with governing regulations) for the harvesting of their quota, so could have the Governor of Maine.
5. The State of Maine would have administered the EEZ quota, except that no program would exempt participants from any of the permitting and reporting requirements specified in this or prior Amendments to the FMP.
6. Non-Maine vessels which hold ITQs for ocean quahogs would not have been prohibited from fishing in the federal waters off Maine, but if they chose to land their catch in Maine, they would have been required to adhere to all state landing laws.
7. There was no provision to convert Maine allocation (bag tags) to cage tags or cage tags to bag tags.
8. Maine reporting was done in "bushels" through bag tags because of PSP.

During the public hearings it became painfully obvious that the quota estimates were inappropriate since many fishermen from 1994 through 1996 were reporting their ocean quahog landings not in the Federal Shellfish logbooks but rather in the Multispecies logbooks. This discrepancy muddied the public hearings significantly, to the point that many other pertinent issues were never able to be discussed. Several fishermen clearly informed the Council, both at the hearings and in written testimony, that they preferred ITQs. This was unacceptable to the State of Maine.

At its meeting in May of 1997, the MAFMC responded to concerns expressed about the open-access permit provision in the draft Amendment 10 and passed a motion directing "...NMFS, the State of Maine and our staff to work out an agreement for a plan that would protect the historical fishermen..." This most recent draft of Amendment 10 has been developed to fulfill this directive.

9) Quota alternative -- Other than the preferred quota alternative proposed in the Amendment, two other alternatives were considered for the eastern Maine ocean quahog quota.

The first non-preferred alternative would set the initial quota at 17,000 bushels (1,360,000 pounds). This quota would be similar to the recorded historical low landings in 1993 (Table 10). This initial quota would remain in effect until a resource survey and assessment is completed. The quota would be administered and monitored the same way as the preferred quota alternative. While this alternative would provide the maximum degree of resource protection until a resource survey and assessment is completed, it would not minimize significant economic impacts on small entities. An initial quota of 17,000 bushels would reduce landings of ocean quahogs by 52,067 bushels in 1998, compared to 1996. The effect on the overall ocean quahog exvessel price given the potential decrease in landings would depend on the elasticity of demand for ocean quahogs. Since no study has estimated the exvessel demand function for eastern Maine ocean quahogs, revenue changes from the implementation of this quota were calculated by taking exvessel price (value divided by bushels) for 1996, and multiplying this by the potential change in landings. In 1996, 69,067 bushels of Maine ocean quahogs were landed at an estimated exvessel price of \$28.85 per bushel. Assuming the 1996 exvessel price, this quota would decrease revenues by \$1,502,133 in 1998 compared to 1996. Assuming that this is the initial decrease in annual revenues for all participants in the fishery (43 vessels landed ocean quahog under the experimental fishery in 1996), each business unit would lose \$34,933. In reality, it would be expected that as the quantity of ocean quahog landings decrease, the exvessel price for this commodity would increase. Therefore, the decrease in revenues shown above may be lower than estimated above.

The second non-preferred alternative would set the initial quota at 125,000 bushels (10 million pounds). This quota would be similar to the recorded historical high landings in 1986 (Table 10). This initial maximum quota would remain in effect until a resource survey and assessment is completed. The quota would be administered and monitored the same way as the preferred quota alternative. While this alternative would potentially allow fishermen to harvest ocean quahogs at the highest historical landing level, it may not provide the maximum degree of resource protection. When Maine's ocean quahog landings climbed to historical highs in the mid 1980's, the market was saturated with ocean quahogs. This allowed the market to be more selective regarding the product that was purchased. This market saturation also lowered prices at the wholesale level as well as the retail level. Furthermore, a few years after the fishery recorded record landings, the resource indicated signs of depletion (Chenoweth and Dennison 1993). An initial quota of 125,000 bushels would increase landings of ocean quahogs by 55,933 bushels in 1998, compared to 1996. The effect on the overall ocean quahog exvessel price

given the potential decrease in landings would depend on the elasticity of demand for ocean quahogs. Since no study has estimated the exvessel demand function for eastern Maine ocean quahogs, revenue changes from the implementation of this quota were calculated by taking exvessel price (value divided by bushels) for 1996, and multiplying this by the potential change in landings. In 1996, 69,067 bushels of Maine ocean quahogs were landed at an estimated exvessel price of \$28.85 per bushel. Assuming the 1996 exvessel price, this quota would increase revenues by \$1,613,667. Assuming that this is the initial decrease in annual revenues for all participants in the fishery (43 vessels landed ocean quahogs under the experimental fishery in 1996), each business unit would lose \$37,527. In reality, it would be expected that as the quantity of ocean quahog landings increase, the exvessel price for this commodity would decrease. Therefore, the increase in revenues shown above may be lower than estimated above. While this alternative would maximize the level of landings, it may have adverse long-term economic effects due to market saturation and potential stock depletion.

5.5. Paperwork Reduction Act of 1995

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

One of the requirements of the experimental fishery was that dealers and vessels had to obtain permits and maintain and submit logbook reports. Therefore, there is no additional reporting burden hours associated with the dealer permit and reporting and vessel permit and reporting provisions. The Council proposes through this Amendment, to establish a moratorium permit criteria. The total burden associated with public requirements (collection of information, including time for reviewing instructions, completing and reviewing information, and appeals of permit denial) and government requirements (processing of submissions, appeals of permit denial) are estimated to be 134 hours.

5.6. Impacts of the Plan Relative to Federalism

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

APPENDIX 3. ENVIRONMENTAL ASSESSMENT

1. INTRODUCTION

The Mid-Atlantic Fishery Management Council (Council) has been involved in surfclam and ocean quahog management since its first meeting (September 1976), when it was discussed that the surfclam fishery should be the first for which a plan should be developed. The Council developed several Amendments dealing with numerous problems during the first decade of federal management.

Amendment 8 (MAFMC 1988) established an individual transferable quota (ITQ) system primarily to replace the regulated fishing time system in place in the Mid-Atlantic surfclam fishery. This fishery was operating under a moratorium on vessel permits. Allowable fishing time in this fishery went from 96 hours a week in 1978 to six 6 hour trips per quarter in 1988. The ITQ system essentially converted allowable fishing time into allowable individual levels of harvest. The Council had several alternatives under consideration during the development of Amendment 8 with respect to management of the New England surfclam fishery and the ocean quahog fishery. These fisheries were controlled through quotas prior to Amendment 8. The ocean quahog quota had never been fully harvested. Many felt that the Council should simply impose a moratorium on this fishery until such time as restraints on harvest were necessary. When such restraints were necessary, an ITQ system could have been imposed based on reported landings. The Council decided to bring the ocean quahog fishery under the ITQ system because it believed that the problems experienced in the surfclam fishery under the moratorium would simply be relived under a quahog moratorium. The vessel owners that received allocation under the ITQ system were those whose vessels had reported landings under the mandatory logbook requirement that had been in place since 1978.

Amendment 9 (MAFMC 1996a) brought the Fishery Management Plan for the Atlantic Surfclam and Ocean Quahog Fisheries (FMP) into compliance with the guidelines in 50 CFR 602 which mandate a quantifiable definition of overfishing in all FMPs. The FMP modified by Amendment 9 was implemented on 17 November 1996.

Amendment 9 did not change the MSYs, OYs, or quota setting process and, therefore, did not alter the FMP's consistency with any national standard. National Standard 1 was the only standard affected by the redefinition of overfishing produced through this Amendment and since the Council's time-horizon, quota-setting policy is more conservative than the preferred rate-based alternative overfishing definition, conservation and management measures for these resources will continue to prevent overfishing. The Council's quota setting policy will remain the annual "target" harvest level, while the new rate based overfishing level will be the "threshold" of harvest levels beyond which the long-term productive capability of the stock is jeopardized.

Amendment 10 is intended to fully integrate the historical Maine fishery into the Surfclam and Ocean Quahog FMP since the expiration of the experimental fishery on 30 September 1997. There is little known about the extent and abundance of the portion of the ocean quahog resource off of the coast of Maine, and because of this lack of knowledge this Amendment establishes an initial maximum quota for ocean

quahogs caught in a zone of both state and federal waters off the eastern coast of Maine north of 43° 50' north latitude. This initial maximum quota for this zone is not to exceed 100,000 Maine bushels, where 1 Maine bushel = 1.2445 cubic feet. Adjustments to the quota can be made in subsequent years within the range of 100,000 and 17,000 Maine bushels as part of the annual quota setting process. Once a survey and assessment has determined a long-term, biologically-sustainable quota for this zone, the FMP will be modified to reflect this new quota. This Amendment establishes a moratorium on entry to the Maine EEZ fishery zone. The moratorium is to be maintained until it is eliminated or replaced with an alternative management program in a subsequent Amendment. It is the Council's intention that such a change would preferably be made in concert with a new assessment-based quota. The Amendment establishes criteria for continued participation in this zone (north of 43° 50' north latitude) which requires that a vessel must have reported harvesting at least one bushel of ocean quahogs from this zone while participating at least once in the experimental fishery (October 1990 through September 1997). Vessels which have not participated in the experimental fishery or which have not landed at least one bushel of ocean quahogs from this zone during the past seven years, are eligible to fish in the State of Maine waters only or may use their ITQ allocation. Existing ITQ holders are permitted to fish within the EEZ portion of this zone as long as they use their ITQ allocation. All landings from moratorium permitted vessels and State of Maine only permitted vessels will count against the initial maximum quota. Landings of ITQ allocation will not count against the initial maximum quota. All State of Maine only permitted vessels and all moratorium permitted vessels must land in Maine and comply with all the State of Maine landing laws. This Amendment provides for the protection of public health by restricting harvesting of ocean quahogs in this zone to only those areas surveyed and certified to be free of the organisms which cause PSP. An ITQ vessel may land in Maine (and thus must comply with Maine laws) or may land outside of Maine, but must have the catch certified safe for human consumption through testing at facilities with a NMFS/FDA/state approved dockside Paralytic Shellfish Poisoning (PSP) testing protocol. The Amendment also establishes a Maine Ocean Quahog Advisory Panel to the MAFMC Surfclam and Ocean Quahog Committee. The principal intent of the Amendment is to allow the artisanal nature of this fishery to continue while promoting appropriate conservation and management of the resource.

2. PURPOSE OF AND NEED FOR ACTION

The purpose of Amendment 10 to the Surfclam and Ocean Quahog Fishery Management Plan (FMP) is to provide management measures for the small artisanal fishery for ocean quahogs off the northeast coast of Maine which has been operating as an experimental fishery since October 1990. As Individual Transferrable Quota (ITQ) management, through Amendment 8 in 1990, was implemented for surfclams and ocean quahogs, it was discovered that the Maine inshore ocean quahog, or "mahogany quahog," fishery that occurred on the same species (*Arctica islandica*) was moving out of state waters into the Exclusive Economic Zone (EEZ). This created a problem, in that the Magnuson-Stevens Fishery Management and Conservation Act mandates that "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" (National Standard 3). The

small-scale eastern Maine ocean quahog fishery differs profoundly from the large-scale industrial EEZ ocean quahog fishery that occurs south of Georges Bank in numerous respects. The management tools developed during the first twenty years of federal management for surfclams and ocean quahogs do not fit the Maine fishery well. In 1990, the Regional Administrator granted experimental status to the eastern Maine ocean quahog fishery in order to avoid the potential adverse impacts which would have resulted from the imposition of regulations which were not designed for a small artisanal fishery. The experimental fishery status was granted to the Maine ocean quahog fishery until a better and more permanent solution could be found.

3. MANAGEMENT OBJECTIVES

The objectives of the FMP are:

1. Conserve and rebuild Atlantic surfclam and ocean quahog resources by stabilizing annual harvest rates throughout the management unit in a way that minimizes short term economic dislocations.
2. Simplify to the maximum extent the regulatory requirement of surfclam and ocean quahog management to minimize the government and private cost of administering and complying with regulatory, reporting, enforcement, and research requirements of surfclam and ocean quahog management.
3. Provide the opportunity for industry to operate efficiently, consistent with the conservation of surfclam and ocean quahog resources, which will bring harvesting capacity in balance with processing and biological capacity and allow industry participants to achieve economic efficiency including efficient utilization of capital resources by the industry.
4. Provide a management regime and regulatory framework which is flexible and adaptive to unanticipated short term events or circumstances and consistent with overall plan objectives and long term industry planning and investment needs.

The additional objectives specifically for Amendment 10 to the Atlantic Surfclam and Ocean Quahog FMP are:

1. Protect the public health and safety by the continuation of the State of Maine's PSP monitoring program for ocean quahogs harvested from the historical eastern Maine fishery.
2. Conserve the historical eastern Maine portion of the ocean quahog resource.
3. Provide a framework that will allow the continuation of the eastern Maine artisanal fishery for ocean quahogs.
4. Provide a mechanism and process by which industry participants can work cooperatively with Federal and State management agencies to determine the future of the historical eastern Maine fishery.

4. MANAGEMENT UNIT

The management unit is all surfclams (*Spisula solidissima*) and all ocean quahogs (*Arctica islandica*) in the Atlantic EEZ. This Amendment establishes a management regime specific to the eastern Maine ocean quahog fishery for a zone north of 43° 50' north latitude that recognizes the fundamental social, economic and biological characteristics of this segment of the fishery.

5. ALTERNATIVES

The preferred option for Amendment 10 is presented in section 9.1 and evaluated in section 9.2 of the Amendment. The major management measures include:

1. The fishery in this zone north of 43° 50' will be managed under a quota administered by NMFS which would be separate from the traditional ITQ cage tag system quota. The initial quota will be a maximum of 100,000 Maine bushels (8 million pounds in the shell) and will include all harvests (except ITQ allocation) from both federal and State of Maine waters from this zone. The quota could be adjusted after a resource survey is performed and an assessment is conducted. The maximum initial quota could be decreased on advice from the Maine Ocean Quahog Advisory Panel through the Mid-Atlantic Surfclam and Ocean Quahog Committee. Any changes to the 100,000 bushel initial maximum quota will occur during the Council's annual review process for this FMP. The range of the initial quota, prior to a stock assessment, will set annually between a maximum of 100,000 bushels with a minimum of 17,000 bushels.
2. A moratorium on new entrants to the eastern Maine EEZ ocean quahog fishery is established. Vessels qualifying for an eastern Maine moratorium permit must have held a federal experimental ocean quahog fishery permit between the inception of the experimental fishery (October 1990) and September 1997 and the vessel must have landed at least one bushel of ocean quahogs from the zone north of 43° 50' as documented in either the Federal Multispecies or Shellfish logbooks. The moratorium is to be maintained until it is eliminated or replaced with an alternative management program in a subsequent Amendment. It is the Council's intention that such a change would preferably be made in concert with a new assessment-based quota.
3. The State of Maine will continue to test for paralytic shellfish poisoning (PSP) in designated areas in the Gulf of Maine, including both the Territorial Sea and the EEZ. All ocean quahogs harvested from this zone must come from areas certified to be free of PSP, and all non-ITQ vessels must land their catch in the State of Maine. An ITQ vessel may land in Maine (and thus must comply with Maine laws) or may land outside of Maine, but must have the catch certified safe for human consumption through testing at facilities with a NMFS/FDA/state approved dockside Paralytic Shellfish Poisoning (PSP) testing protocol. These measures are essential for the protection of the public health.
4. All vessels landings ocean quahogs in the State of Maine must comply with all applicable State laws and regulations (Appendix 6).

5. All federally licensed vessels and dealers participating in this fishery will be required to maintain and submit logbooks pursuant to CFR 648.7(b)(ii). Federally permitted vessels must report their ocean quahog landings in Federal Shellfish logbooks only. Vessels that do not qualify for a moratorium permit and that are fishing in State of Maine only waters will be required by the State of Maine to fill out logbooks with similar data elements.
6. Vessels which hold ITQs for ocean quahogs, and do not qualify for a moratorium permit, may fish in the EEZ areas north of 43° 50' north latitude that are certified free of PSP. Landings by vessels holding ITQs would be deducted from their ITQ and not counted against the eastern Maine quota.
7. A Maine Ocean Quahog Advisory Panel to the MAFMC Surfclam and Ocean Quahog Committee will be established to advise the Committee on the management of the eastern Maine ocean quahog fishery. The Advisory Panel will include representatives of harvesters, dealers and the Maine Department of Marine Resources.
8. An eastern Maine ocean quahog moratorium permit expires if the owner or operator retires the vessel from the fishery, on 31 December of each year, or when the ownership of the vessel changes; however the Regional Administrator may authorize continuation of a vessel permit for eastern Maine ocean quahog fishery if the new owner so requests and the vessel meets the relevant criteria of eligibility. This provision is similar to that in the FMP prior to Amendment 8 and implementation of ITQ management.
9. All federally permitted vessels fishing for ocean quahogs in this eastern Maine zone must notify NMFS prior to departure. This call in requirement is consistent with the rest of the fishery and provides additional assurance that harvests can be monitored for PSP. Federally permitted vessels must specify that they are fishing for "Maine mahogany ocean quahogs" as opposed to surfclams or other ocean quahogs. The Regional Administrator has the discretion to suspend this requirement for this Maine zone (if he believes it is not necessary for quota enforcement) after consultation with the State of Maine and upon notification of the MAFMC.

There are eight non-preferred alternatives that were considered to resolve this Maine EEZ fishery problem that are described in Appendix 1. These non-preferred alternatives include:

1. No Action -- Amendment 8 Regulations Take Over
2. Amendment 8 Regulations (No Action) but Allowing for Conversion between Bushels and Cages
3. Maine Position: State Management North of 43° 50'
4. NMFS 1993 Secretarial Amendment Preferred Alternative
5. *De Minimus*
6. ITQs
7. Modified Compromise Position - Quota Assigned to Maine DNR - No Transfer Rights
8. Hearing Draft Compromise Position - Quota Assigned to Maine DNR - With Transfer Rights.

There were also two options for quotas in the hearing draft. The preferred option was a quota based on the average landings of Maine ocean quahogs between 1991 and 1995, or 27,611 bushels. Maine advocated a quota based on the highest landings (37,912 bushels) during the experimental fishery.

During the April public hearings it became painfully obvious that the proposed quota estimates were inappropriate since many fishermen from 1994 through 1996 were reporting their ocean quahog landings not in the Federal Shellfish logbooks but rather in the Multispecies logbooks. This discrepancy muddied the public hearings significantly, to the point that many pertinent issues were never able to be discussed.

Other than the preferred initial maximum quota (100,000 Maine bushels) alternative proposed in the Amendment, two other alternatives were considered for the eastern Maine ocean quahog quota.

The first non-preferred alternative would set the initial quota at 17,000 bushels (1,360,000 pounds). This quota would be similar to the recorded historical low landings in 1993. This initial maximum quota would remain in effect until a resource survey and assessment is completed. The quota would be administered and monitored the same way as the preferred quota alternative. While this alternative would provide the maximum degree of resource protection until a resource survey and assessment is completed, it would not minimize significant economic impacts on small entities. An initial quota of 17,000 bushels would reduce landings of ocean quahogs by 52,000 bushels in 1998, compared to 1996.

The second non-preferred alternative would set the initial quota at 125,000 bushels (10 million pounds). This quota would be similar to the recorded historical high landings in 1986. This initial maximum quota would remain in effect until a resource survey and assessment is completed. The quota would be administered and monitored the same way as the preferred quota alternative. While this alternative would potentially allow fishermen to harvest ocean quahogs at the highest historical landing level, it may not provide the maximum degree of resource protection. When Maine's ocean quahog landings climbed to historical highs in the mid 1980's, the market was saturated with ocean quahogs. This allowed the market to be more selective regarding the product that was purchased. This market saturation also lowered prices at the wholesale level as well as the retail level. Furthermore, a few years after the fishery recorded record landings, the resource indicated signs of depletion (Chenoweth and Dennison 1993). An initial quota of 125,000 bushels would increase landings of ocean quahogs by 56,000 bushels in 1998, compared to 1996.

The impacts and effects of these two quota extremes as are all of the alternatives are evaluated in the Regulatory Impact Review (Appendix 2).

6. ENVIRONMENTAL IMPACTS

There are minimal environmental affects of bringing this experimental fishery into the overall FMP management of surfclams and ocean quahogs. This Amendment does not change the MSYs, OYs or quota setting processes for the vast majority of

the resource or fishery. The proposed maximum initial Maine ocean quahog quota for this zone is less than three percent of the overall quota. There could be quota increases only after a scientifically valid survey and peer-reviewed stock assessment of the biomass is completed.

The preferred alternative is similar to the past six year operation of the experimental fishery, with the exception that now there is the quota. It is possible that a few additional boats may enter the fishery since there is no way currently for the State of Maine to prohibit new entry into their Territorial Waters only, however the overall quota will be constraining. The non-preferred alternatives 2 through 8 listed above, and described in Appendix 1, would all have roughly similar environmental impacts in that they are all modifications to the experimental fishery. These latter non-preferred alternatives all would continue to have the small boat fishery, and the current small scale operations.

Under all of the alternatives considered there is a commonality of impacts with respect to the use of the gear in the fishery. The small vessels that comprise the fleet tow dry dredges across the ocean floor to collect ocean quahogs. These dredges cut into the muddy bottom and bring up a quantity of mud with the quahogs. There is a small measure of bottom damage that is unquantifiable. Given the nature and size of these dredges (Maine specifies a maximum 36 inch bar on the bottom of the dredge) one can conclude that they cause, at best, a very small fraction of the damage caused by the large hydraulic dredges in the ocean quahog fishery to the south that employ pumps to blow the ocean quahogs off the bottom and into the water column so they may be harvested. Not only do these dredges disturb the benthic environment, but they actually crush some ocean quahogs that are not collected in the dredge. Neither of these effects can reasonably be expected to result from the use of the dry dredge except to a very minimal degree.

The practice of washing the dredge in the prop wash to discharge mud and other debris will result in some temporary turbidity of the water column but not result in any silting out of any of the habitats of any of the creatures that are resident on the sea floor.

The small boat fleet that fishes for ocean quahogs is highly opportunistic. Thus, this fishery does not displace any other fishery or result in many gear conflicts. The occasional conflict with fixed gear lobster pots can be expected to a small degree. However, the lobster gear could easily be owned by the operator of the vessel towing the dry dredge or someone known to him/her given the small localized nature of the fishery. It is expected that the overwhelming majority of gear conflicts will be resolved in an amicable fashion.

Fishing for ocean quahogs is not expected to have a cumulative effect on the environment resulting from the discharge of bilge water or other contaminants or garbage. If these vessels were not fishing for ocean quahogs, they would be pursuing other species of fish. The enforcement of prohibitions on the discharge of oil and garbage should minimize their effect on the environment. The use of oil absorbent sponges in the bilge to collect oily discharge will also tend to reduce environmental contamination. The use of these devices seems to be increasing due

to the penalty levels for the discharge of oil (as evidenced by a sheen around the vessel). These sponges are disposed of on shore.

The no action alternative would have other unmeasurable impacts on the environment. Piers would have to be modified or constructed to handle a steel cage and the equipment necessary to move it for transport to a dealer. This could involve some localized dredging and pile driving. Nearby areas may have to be cleared of trees to enlarge dock/dealer facilities to handle cage transport and storage. The cage requirement may cause a number of vessels to steam to other ports, thereby consuming more fuel and emitting more exhaust. Overall, the impact of these activities on the environment should be minimal given the relatively small size of the fleet and the number of dealers involved.

The following analysis of impacts is conducted with specific reference to the guidance presented in NOAA Manual 216-6 regarding the determination of environmental significance. Section 13(b) presents 5 criteria against which the proposed action and any alternatives should be evaluated. These 5 criteria are:

6.1. WILL THE PROPOSED ACTION BE REASONABLY EXPECTED TO JEOPARDIZE THE LONG-TERM PRODUCTIVE CAPABILITY OF ANY STOCKS THAT MAY BE AFFECTED BY THE ACTION?

6.1.1. Proposed Action

Ocean quahogs are currently not overfished nor have the landings ever exceeded the MSY levels. The establishment of the maximum initial quota is risk averse and should prevent the possibility of overfishing. Other proposed actions provide for the acquisition of critical data and information to improve future management. A framework adjustment procedure is incorporated in the Amendment to allow changes to be made in the management measures as new and better information is acquired. It is important to note that the cooperation of the State of Maine government is essential for the successful management of this resource.

Other than the preferred initial maximum quota (100,000 Maine bushels) alternative proposed in the Amendment, two other alternatives were considered for the eastern Maine ocean quahog quota.

The first alternative would set the initial quota at 17,000 bushels (1,360,000 pounds). This quota would be similar to the recorded historical low landings in 1993. This initial maximum quota would remain in effect until a resource survey and assessment is completed. The quota would be administered and monitored the same way as the preferred quota alternative. While this alternative would provide the maximum degree of resource protection until a resource survey and assessment is completed, it would not minimize significant economic impacts on small entities. An initial quota of 17,000 bushels would reduce landings of ocean quahogs by 52,000 bushels in 1998, compared to 1996.

The second alternative would set the initial quota at 125,000 bushels (10 million pounds). This quota would be similar to the recorded historical high landings in

1986. This initial maximum quota would remain in effect until a resource survey and assessment is completed. The quota would be administered and monitored the same way as the preferred quota alternative. While this alternative would potentially allow fishermen to harvest ocean quahogs at the highest historical landing level, it may not provide the maximum degree of resource protection. When Maine's ocean quahog landings climbed to historical highs in the mid 1980's, the market was saturated with ocean quahogs. This allowed the market to be more selective regarding the product that was purchased. This market saturation also lowered prices at the wholesale level as well as the retail level. Furthermore, a few years after the fishery recorded record landings, the resource indicated signs of depletion (Chenoweth and Dennison 1993). An initial quota of 125,000 bushels would increase landings of ocean quahogs by 56,000 bushels in 1998, compared to 1996.

The economic impacts of the preferred quota and all other alternatives, as well as, these two quota alternatives are evaluated and discussed in the Regulatory Impact Review (Appendix 2) and are not repeated here.

None of the management measures proposed will promote or result in increased levels of bycatch relative to the status quo. This conclusion is based on data collected during the PSP sampling program by the Maine Department of Marine Resources indicate negligible bycatch in this fishery (McGowan pers. comm.).

The Council for Environmental Quality (CEQ)(1993) report lists six main factors that contribute to the decline of biodiversity. These six main factors are: physical alteration, pollution, overharvesting, introduction of exotic species, disruption of natural processes, and global climate change. Of course, these six factors all have the overpopulation problem at their root.

The importance of biological diversity cannot be understated. The synergistic effects of the sum of the world's biota is directly responsible for maintaining the gaseous composition of the atmosphere, regulating the world's hydrology, generating and maintaining soils and nutrients, detoxifying wastes, driving biogeochemical cycles, controlling pest epidemics, and providing plant pollination, thus making human life on Earth possible. In addition, select species are used by humans to enhance the quality of life. For example, many plants contain active ingredients which are used in pharmaceuticals. Humans also use species for food and shelter. Almost all of these "ecosystem services" are at present irreplaceable by technology. Technologies to replace lost elements of biological diversity are extremely limited if not non-existent (Atlantic Biodiversity Center 1994).

This FMP Amendment with its quota is designed to prevent the overharvesting of ocean quahogs in eastern Maine. The prevention of overfishing is the requirement of the first National Standard of the MFCMA and the only real factor that affects biodiversity that the Fishery Management Councils can control. The Councils make recommendations to the Secretary of Commerce in the FMPs for ways to minimize or stop the effects of pollution on the species managed, however at this time these are only recommendations. The other factors are really out of the purview of the fishery management process.

6.1.2. No Action.

The no action alternative does not have a separate quota for eastern Maine, and as such, would be less likely to jeopardize the long-term productive capability of ocean quahogs which could lead to a stock collapse. The no action alternative may also have negative impacts on other species and habitat as more effort could be directed on other species by those fishermen who cannot or chose not to participate in the ITQ fishery established under Amendment 8 to the FMP.

6.1.3. Other Alternatives.

Adoption of alternatives other than the proposed action may increase the likelihood that management measures may jeopardize the long-term productive capability of this resource and reduce biodiversity, especially those alternatives that do not have a quota. Annually the Council will evaluate the fishery relative to the target exploitation rates and make recommendations for the quota. The frameworked quota is the key to successful prevention of overfishing and is the item that will protect the long-term productive capability.

6.2. WILL THE PROPOSED ACTION BE REASONABLY EXPECTED TO ALLOW SUBSTANTIAL DAMAGE TO THE OCEAN AND COASTAL HABITATS?

6.2.1. Proposed Action.

The proposed action does not change any impacts to ocean or coastal habitats. While there is no information proving that ocean quahog dredging substantially affects habitats, there is ample evidence that other human activities affect ocean quahogs and their essential habitats. The description and identification portion of the Amendment necessary for essential fish habitats for ocean quahogs is scheduled for completion by NMFS for the spring of 1998. The Council anticipates that Amendment 11 of this FMP will be prepared and submitted to the Secretary by October 1998 in order to meet the new Magnuson-Stevens Act requirements.

Under all of the alternatives considered there is a commonality of impacts with respect to the use of the gear in the fishery. The small vessels that comprise the fleet tow dry dredges across the ocean floor to collect ocean quahogs. These dredges cut into the muddy bottom and bring up a quantity of mud with the quahogs. There is a small measure of bottom damage that is unquantifiable. Given the nature and size of these dredges (Maine specifies a maximum 36 inch bar on the bottom of the dredge) one can conclude that they cause, at best, a very small fraction of the damage caused by the large hydraulic dredges in the ocean quahog fishery to the south that employ pumps to blow the ocean quahogs off the bottom and into the water column so they may be harvested. Not only do these dredges disturb the benthic environment, but they actually crush some ocean quahogs that are not collected in the dredge. Neither of these effects can reasonably be expected to result from the use of the dry dredge except to a very minimal degree.

The practice of washing the dredge in the prop wash to discharge mud and other debris will result in some temporary turbidity of the water column but not result in

any silting out of any of the habitats of any of the creatures that are resident on the sea floor.

The small boat fleet that fishes for ocean quahogs is highly opportunistic. Thus, this fishery does not displace any other fishery or result in many gear conflicts. The occasional conflict with fixed gear lobster pots can be expected to a small degree. However, the lobster gear could easily be owned by the operator of the vessel towing the dry dredge or someone known to him/her given the small localized nature of the fishery. It is expected that the overwhelming majority of gear conflicts will be resolved in an amicable fashion.

Fishing for ocean quahogs is not expected to have a cumulative effect on the environment resulting from the discharge of bilge water or other contaminants or garbage. If these vessels were not fishing for ocean quahogs, they would be pursuing other species of fish. The enforcement of prohibitions on the discharge of oil and garbage should minimize their effect on the environment. The use of oil absorbent sponges in the bilge to collect oily discharge will also tend to reduce environmental contamination. The use of these devices seems to be increasing due to the penalty levels for the discharge of oil (as evidenced by a sheen around the vessel). These sponges are disposed of on shore.

The no action alternative would have other unmeasurable impacts on the environment. Piers would have to be modified or constructed to handle a steel cage and the equipment necessary to move it for transport to a dealer. This could involve some localized dredging and pile driving. Nearby areas may have to be cleared of trees to enlarge dock/dealer facilities to handle cage transport and storage. The cage requirement may cause a number of vessels to steam to other ports, thereby consuming more fuel and emitting more exhaust. Overall, the impact of these activities on the environment should be minimal given the relatively small size of the fleet and the number of dealers involved.

In general, habitat alteration by the fishing activities themselves is perhaps the least understood of the important environmental effects of fishing (National Research Council 1994). Alterations to resource habitats due to fishing may result from the loss of habitats of non-target species, such as species encrusting cobbles, or of other epibenthic habitats, which may be important nursery areas for juvenile fish; from the alteration of nutrient levels and bottom sediment, including destruction of habitat by bottom trawling, dredging, and other fishing and processing operations; and from the generation of suspended debris that can have lethal effects long after fishing activities have ceased.

6.2.2. Other Alternatives.

None of the other alternatives are expected to allow substantial damage to the ocean and coastal habitats. Most of the preferred and non-preferred management measures (i.e. permitting, reporting, maximum quota, etc.) simply do not affect ocean and coastal habitats.

6.3. WILL THE PROPOSED ACTION BE REASONABLY EXPECTED TO HAVE A SUBSTANTIAL ADVERSE IMPACT ON PUBLIC HEALTH AND SAFETY?

The proposed action will not create situations that would have an adverse impact on public health and safety.

Vessels will only be permitted to harvest ocean quahogs from areas which have been certified by the State of Maine to be PSP-free. Vessels holding only State of Maine ocean quahog licenses would be restricted to fishing only in state waters. All ocean quahogs harvested from this zone by non-ITQ vessels would be required to be landed in the State of Maine. An ITQ vessel may land in Maine (and thus must comply with Maine laws) or may land outside of Maine, but must have the catch certified safe for human consumption through testing at facilities with a NMFS/FDA/state approved dockside Paralytic Shellfish Poisoning (PSP) testing protocol. The significant occurrence of PSP both in state waters and the EEZ off the coast of Maine require that such measures be taken. Unacceptable risk to the public and the fishery would occur if these procedures were circumvented.

The no action alternative and alternatives 2, 5, 6, and 8 would allow fishing in areas not tested for the PSP toxin. While landings from these areas would be prohibited in the State of Maine, they would not be prohibited in other states as is done by the preferred alternative. There could be a substantially negative impact on the human environment from unrestricted harvest and transit of animals that could potentially be carrying the PSP toxin. Along with the personal losses associated with shellfish poisoning (i.e., suffering, lost income, hospital costs, insurance costs, litigation costs), public confidence in the quality of shellfish could cause a marked decline in market acceptance with concomitant lost income to those dependent on or associated with the fishery. In the case of widespread shellfish poisoning or death resulting from the consumption of contaminated shellfish, the public loss of confidence could affect not only look alike products but seafood in general. If this latter phenomenon were to occur, it could easily result in the loss of millions of dollars and seriously affect employment in the seafood industry.

None of the management measures proposed in this preferred alternative will promote or result in increased levels of unsafe behavior at sea relative to the status quo. Therefore, the Council has concluded that the proposed Amendment will not affect the safety of vessels fishing in this fishery. If anything, continuing to impose Amendment 8 regulations on the eastern Maine fishery could increase risk to life and property. Cages would be much more unsafe for these small vessels than requiring landings of the resource in bags. Thus, this Amendment is actually promoting safety at sea.

6.4. WILL THE PROPOSED ACTION BE REASONABLY EXPECTED TO ADVERSELY AFFECT AN ENDANGERED OR THREATENED SPECIES OR MARINE MAMMAL POPULATION?

6.4.1. Proposed Action.

The proposed action, because of the control placed on unrestricted growth of fishing activity will tend to reduce contacts with endangered and threatened turtle species and marine mammals.

Numerous species of marine mammals and sea turtles occur in the northwest Atlantic Ocean. The most recent comprehensive survey in this region was done from 1979-1982 by the Cetacean and Turtle Assessment Program (CETAP), at the University of Rhode Island (University of Rhode Island 1982), under contract to the Minerals Management Service (MMS), Department of the Interior. The following is a summary of some of the information gathered in that study, which covered the area from Cape Sable, Nova Scotia, to Cape Hatteras, North Carolina, from the coastline to 5 nautical miles seaward of the 1,000 fathom isobath.

Four hundred and seventy one large whale sightings, 1547 small whale sightings and 1172 sea turtles were encountered in the surveys (Table 14). The "estimated minimum population number" for each mammal and turtle, as well as those species the area currently included under the Endangered Species Act were also tabulated. The CETAP concluded that both large and small cetaceans are widely distributed throughout the study area in all four seasons, and grouped the 13 most commonly seen species into three categories, based on geographical distribution. The first group contains only the harbor porpoise, which is distributed only over the shelf and throughout the Gulf of Maine, Cape Cod, and Georges Bank, and infrequently south to Virginia. The second group contains the most frequently encountered baleen whales (fin, humpback, minke, and right whales) and the white-sided dolphin. These are found in the same areas as the harbor porpoise, and also occasionally over the shelf at least to Florida or out to the shelf edge. The third group "shows a strong tendency for association with the shelf edge" and includes the grampus, striped, spotted, saddleback, and bottlenose dolphins, and the sperm and pilot whales.

Loggerhead turtles were found throughout the study area, but appear to migrate north to about Massachusetts in summer and south in winter. Leatherbacks appear to have a more northerly distribution. The CETAP hypothesized a northward migration in the Gulf Stream with a southward return in continental shelf waters nearer to shore. Both species usually were found over the shoreward half of the slope and in depths less than 200 feet. The study area may be important for sea turtle feeding or migrations, but the nesting areas for these species generally are in the South Atlantic and Gulf of Mexico.

The only other endangered species occurring in the northwest Atlantic is the shortnose sturgeon (*Acipenser brevirostrum*). The Council urges fishermen to report any incidental catches of this species to the Regional Administrator, NMFS, One Blackburn Drive, Gloucester, MA 01930, who can forward the information to the active sturgeon data base.

The range of surfclams and ocean quahogs and the above marine mammals and endangered species overlap to a large degree, and there always exists some very limited potential for an incidental kill. Except in unique situations (e.g., tuna-porpoise in the central Pacific), such accidental catches should have a negligible

impact on marine mammal/endangered species abundances, and the Council does not believe that implementation of this scientific research program will have any adverse impact upon these populations. While marine mammals and endangered species may occur near surfclam and ocean quahog beds, it is highly unlikely any significant conflict between the fishermen managed by this proposal and these species would occur. Clam vessels dredge at very slow speeds and healthy animals should have no difficulty avoiding these vessels. Additionally, surfclams and ocean quahogs are benthic organisms, while marine mammals and marine turtles are pelagic and spend nearly all of their time up in the water column or near the surface. The realized reduction in the number of fishing vessels resulting from Amendment 8 reduced the potential for the capture of endangered species from a minimal to a very minimal level.

6.4.2. Other Alternatives.

It is likely that none of the non-preferred alternatives will pose a direct substantial damage to threatened or endangered species. Adoption of some of the non-preferred alternatives other than the proposed action could possibly inhibit the continued existence of any of the threatened or endangered species mentioned above because there will be uncontrolled, unlimited fishing pressures. More fishermen (i.e. without the moratorium) rushing for limited resources may definitely have negative impacts on threatened and endangered marine life.

6.5. WILL THE PROPOSED ACTION BE REASONABLY EXPECTED TO RESULT IN CUMULATIVE ADVERSE EFFECTS THAT COULD HAVE A SUBSTANTIAL EFFECT ON THE TARGET RESOURCE SPECIES OR ANY RELATED STOCKS THAT MAY BE AFFECTED BY THE ACTION?

6.5.1. Proposed Action

The proposed action will be expected to result in cumulative beneficial effects on the target resource and perhaps other associated non targeted species. Given the Congressional mandate (National Standard 1 of the MFCMA) to prevent overfishing the conservation and management of this resource must occur. The increasing level of fishing that has been gradually occurring during the past decade, and which could greatly increase with the addition of numerous New England groundfish boats could lead to local recruitment overfishing. The maximum sustainable yields would then not be achievable. The human impacts should be insignificant. However, with the population not overfished, and harvesting occurring around MSY, the maximum long term economic gains to the Nation, will be achieved.

The proposed action has been selected to reduce short and long term impacts on the resource. The management measures will prevent excessive mortality and improve stock health. Related activities directed to State and Federal regulatory agencies may offer indirect benefits to essential habitats for these species.

The socio-economic impacts of the proposed action should not be significant (section 9 Fishery Impact Statement). This is merely a result of the stabilization of

fishing mortality necessary to prevent overfishing. However, the management system incorporated in the proposed action is flexible so that management measures may be adjusted annually. Further, the moratorium on entry of additional commercial vessels will enable the fishermen who absorb the impact of the management regime to make predictive management decisions under the stock stabilization, rather than having benefits dissipated among new entrants, as is always the case in an open access fishery.

6.5.2. No Action.

The no action alternative means that Amendment 8 regulations would take effect and the small scale eastern Maine fishery would be significantly affected. Another impact of forcing vessels to fish under ITQs is that the marginal boats that could not get ITQs may move to other fisheries and negatively impact overfished stocks such as scallops, lobsters, and groundfish.

6.5.3. Other Alternatives.

A critical aspect of the preferred management measure is the frameworked nature of the commercial quota that will encourage an assessment after a research survey that will prevent overfishing and lead to long-term sustainability.

7. MANAGEMENT COSTS

A reporting system has been implemented by the NMFS. This system was designed to collect information for various fisheries according to their respective FMP's. The logbook data collected in the experimental fishery will continue to be collected by the federal government while the State of Maine will continue their data collection for PSP monitoring.

Resources dedicated to enforcement are optimal when the marginal cost of those resources is equal to the marginal benefit of those resources. Monitoring for PSP and other State regulations for ocean quahogs are currently already in effect and are being enforced. Maine may incur some additional costs in requiring not federally permitted (moratorium) vessels to report.

It is expected than since most of the Maine vessel's operators already submit logbook reports in the experimental fishery program or under the Northeast Multispecies, Scallop, and Summer Flounder FMPs, the implementation of this plan would not affect the reporting process of most vessel operators to any additional significant extent.

8. TRADEOFFS BETWEEN THE BENEFICIAL AND ADVERSE IMPACTS OF THE AMENDMENT

The impacts of options are presented in section 9.2 of the Amendment and Appendices 1 (Alternatives) and 2 (Regulatory Impact Review).

9. EFFECT ON THE COASTAL ZONE

The relationships among this Amendment and various existing applicable laws and policies are fully described in section 9.3 of the Amendment. Section 9.3.3.1 addresses marine mammals and endangered species, while 9.3.4.4 deals with coastal zone management program consistency.

The FMP was reviewed relative to CZM programs of Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, and North Carolina. Letters were sent to all of the States listed above stating that the Council concluded that the Amendment is consistent to the maximum extent practicable with the State's CZM program as understood by the Council.

10. EFFECTS ON FLOOD PLAINS OR WETLANDS

The adopted management measures or their alternatives will not adversely affect flood plains or wetlands, and trails and rivers listed or eligible for listing on the National Trails and Nationwide Inventory of Rivers. Federal management of these two bivalves is in the EEZ only except for this zone north of 43° 50' which is a combination of State and Federal waters.

11. LIST OF AGENCIES AND PERSONS CONSULTED IN FORMULATING THE PROPOSED ACTION

In preparing the Amendment, the Council consulted with the NMFS, the New England Fishery Management Council, the South Atlantic Fishery Management Council, the Fish and Wildlife Service, the Department of State, and the States of New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia and North Carolina through their membership on the Council. In addition to the States that are members of this Council, Maine, New Hampshire, Massachusetts, Rhode Island, and Connecticut, were also consulted through the Coastal Zone Management Program consistency process. The State of Maine has been intimately involved in the solution of this problem throughout the years of deliberations.

12. LIST OF PREPARERS OF ENVIRONMENTAL ASSESSMENT

The Amendment was prepared by a team of fishery managers and scientists with special expertise in surfclam and ocean quahog resources including:

MAFMC staff - David R. Keifer, Dr. Thomas B. Hoff, José L. Montañez, and Clayton E. Heaton.

Dr. Linda Mercer and Mr. Chris Finlayson of the State of Maine assisted significantly.

13. FINDINGS OF NO SIGNIFICANT ENVIRONMENTAL IMPACT

For the reasons discussed above, it is hereby determined that neither approval and implementation of the proposed action nor the alternatives would affect significantly the quality of the human environment, and that the preparation of an environmental impact statement on the Amendment is not required by section 102(2)(c) of the National Environmental Policy Act nor its implementing regulations.

Assistant Administrator for Fisheries, NOAA

Date

APPENDIX 4 PUBLIC HEARING COMMENTS AND RESPONSES

The Mid-Atlantic Council conducted three public hearings on Amendment 10 to the Surfclam and Ocean Quahog Fishery Management Plan -- 8 April (Machias, ME), 9 April (Ellsworth, ME), 14 April (Cape May, NJ) 1997. Hearing summaries are attached.

Five comment letters (attached) were received. The Honorable Senator Olympia Snowe wrote on 12 May. Two mid-Atlantic industry participants wrote on 21 and 28 April, while a Maine processor wrote on 8 May. The NMFS provided their significant comments on 7 May 1997. The Maine Department of Marine Resources also wrote all their permitted fishermen and received 60 responses which were provided the Council on 13 May (attached). A segment of the Maine industry in favor of ITQs also coordinated responses from 18 individuals which were provided to the Council on 13 May (attached).

A number of concerns with the hearing draft Preferred Alternative were voiced during the hearings (attached summaries) and provided in written form. These comments focused on two main issues (quota and ITQ alternative) and are included:

1) The proposed annual quota is too small to sustain the vessels in the fishery, or to supply their markets. Actual landings were much higher than those presented by the Council.

The problem was that analyses were run on Federal Shellfish logbook only data since MAFMC nor State of Maine staff did not know that Maine fishermen were reporting in Federal Multispecies logbooks also. Staffs of MAFMC, NMFS and the State of Maine worked diligently this spring and early summer to cross match the various data sets and the results are the new proposed initial maximum quota of 100,000 bushels.

2) Numerous individuals expressed support (at the hearings and in writing) for ITQs (non-preferred alternative 6) which would be issued to fishermen, and not the State of Maine.

During the public hearings many individuals supported ITQs being issued to fishermen. Staff recommended to the Council at the May 1997 meeting that the preferred alternative be changed to fishermen ITQs. Eighteen Federally Permitted Experimental Ocean Quahog Fishermen provided written responses that they favored this position (attached). The State of Maine countered with the results of their questionnaire where 49 of the 60 respondents favored Maine receiving the allocation and only 10 respondents favored fishermen ITQs. The Honorable Senator Snowe also supported Maine receiving the allocation. The Council at its May meeting directed the staffs of MAFMC, NMFS, and Maine to work out a compromise that would protect the historical participants. The current preferred alternative meets those criteria.

3) No one spoke in favor of any other non-preferred alternative.

4) Numerous Maine ocean quahog fishermen expressed concern that there were many boats poised to enter the fishery, and that Maine officials would not act to protect the historical ocean quahog fishermen nor the ocean quahog resource.

The compromise position that was developed during the past six months and will be implemented with this version of this Amendment imposes a moratorium on entry of additional vessels north of 43° 50' in the EEZ zone. The State of Maine will not currently prevent additional fishermen from entering the fishery but those new individuals will be restricted to fishing in Maine waters only.

5) The Maine bushel size as described in section 9.1.1.11 was wrong.

The volume (1075 cubic inches) used in the draft is for the typical "onion bag" rather than the standard bushel. Maine law specifies that there are 2150.4 cubic inches in a bushel. Thus, two onion bags equal one bushel. Landings have been reported in bushels, despite the fact that bag tags for PSP are placed on each onion bag. This inconsistency was easily corrected and reporting from this eastern Maine zone will continue to be in Maine bushels.

Comment letter

Doreen Morehouse
1362 Lake Forest Court
Reston, Virginia 20194

via facsimile

April 21, 1997

David R. Keifer
Mid-Atlantic Fishery Management Council
Room 2115 Federal Building
300 South New Street
Dover, Delaware 19904-6790

Dear David:

As a member of the Mid-Atlantic fishery, Frank Marriner and I attended the April 14, 1997 public hearing on Amendment 10 to the Fishery Management Plan for the Atlantic Surfclam and Ocean Quahog Fishery. After reading the draft plan and hearing comments during the public hearing, we are writing to show our support of Amendment 10. However, we recommend the separate unit of ocean quahog quota (27,611 bushels) be allocated directly to the fisherman for the following reasons.

1. Consistency. This change mirrors the existing ITQ system for surf clams and ocean quahogs under Amendment 8. Commercial fisherman, not the individual states, were given allocation percentages based on average historical catch and vessel size.
2. Sustainability. Full-time fisherman, who rely on the continued harvesting of ocean quahogs, have more of an interest in conserving the fishery than the State of Maine. Additionally, they are more attuned to the changes in local quahog resources than the State or fisherman who harvest quahogs only during market peaks.

Thank you for your consideration of our written comments.

Sincerely,



Doreen Morehouse

WALLACE & ASSOCIATES

Comment letter

April 28, 1997

Mr. David R. Keifer, Executive Director
Mid-Atlantic Fishery Management Council
Room 2115, Frear Federal Building
300 South New Street
Dover, DE 19904-6790

Dear David:

On behalf of the North Atlantic Clam Association (NACA), I would like to express our appreciation for a job well done on Amendment 10 to the surfclam and ocean quahog FMP.

I am well aware of the enormous task of meshing the interests of the commercial clammers of the Mid-Atlantic region and the clammers of the state of Maine. Not only are there separate interests, but there is also a large geographical separation. I feel the Mid-Atlantic Council has gone to great lengths to make Amendment 10 as workable and as easy to manage as possible and at the same time answer the needs of the clammers from the state of Maine.

Our members have always believed that the active participants in the quahog fishery for the years 1991 through 1995 should be given direct allocation. It is now and has always been our intention not to cause harm or dislocation to the Maine quahog fishermen. With the experimental fishery being terminated, forcing the Maine clammers to come in under Amendment 8 to the present plan would cause an unnecessary hardship. Therefore, we changed our position to accommodate the state of Maine. We continue to support the compromise between Maine and ourselves to move Amendment 10 forward. We are distressed, however, that during the public hearing process Maine did not openly support the compromise that they had agreed to with us, which is the preferred alternative in the hearing document.

P.O. Box 1895
Salisbury, MD 21802

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The other two issues addressed in Amendment 10 are very important for the long term well-being of the clam fishery. Operator permits will help to maintain responsible action on the part of the vessel owners and their crews. At the same time, enforcement will be enhanced by NMFS' ability to know who is fishing on what vessel. A vessel tracking system (VTS) will ensure that vessels are operating when and where they are supposed to be. Most importantly, a VTS is a beneficial safety device allowing for a quick response to a distress call in time of need. The VTS will also allow for the vessel owners to be released from the burden of the vessel call-in system.

The NACA members have long been on record as favoring both the VTS and operator permits.

If our association can be of any service to you, please do not hesitate to call.

Sincerely,


David H. Wallace

Allan R. Merchant
P. O. Box 186
Jonesport, Maine 04649
Home Phone 207 497 5431

May 07, 1997

Mid-Atlantic Fishery Management Council
Room 2115 Federal Building
300 South New Street
Dover, Delaware 19904-6790

To Whom It May Concern,

This is to verify that the below named Federal Permitted Quahog Fisherman does not agree with the allocation being turned over to the State of Maine. Rather, the below named fisherman is in favor of the allocation being turned over to the fisherman, believing in the JTO system. Not being able to attend this meeting, this letter is to be turned over to the council in support of the JTO system. Logbook entries were filled out during the years of the experimental fishery, 1991-1995.

Fisherman's Name: *Rodney Scott Perry*

Federal Quahog Permit #: *25 1247*

Fisherman's Signature: *Rodney Scott Perry*

Allan R. Merchant
P. O. Box 186
Jonesport, Maine 04649
Home Phone 207 497 5431

May 07, 1997

Mid-Atlantic Fishery Management Council
Room 2115 Federal Building
300 South New Street
Dover, Delaware 19904-6790

To Whom It May Concern,

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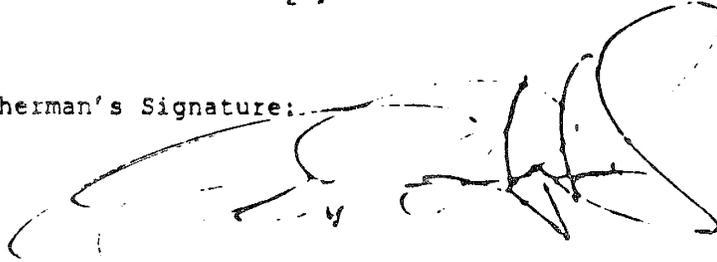
Fisherman's Name:

ELLIOTT GOSWELL

Federal Quahog Permit #:

221911

Fisherman's Signature:

A handwritten signature in black ink, appearing to read 'Elliott Goswell', written over a horizontal line. The signature is stylized and somewhat cursive.

Allan R. Merchant
P. O. Box 186
Jonesport, Maine 04649
Home Phone 207 497 5431

May 07, 1997

Mid-Atlantic Fishery Management Council
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Dover, Delaware 19904-6790

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Fisherman's Name: JAMES S. BAILEY

Federal Quahog Permit #: 112588

Fisherman's Signature:

James S. Bailey

Allan R. Merchant
P. O. Box 186
Jonesport, Maine 04649
Home Phone 207 497 5431

April 19, 1997

Mid-Atlantic Fishery Management Council
Room 2115 Federal Building
300 South New Street
Dover, Delaware 19904-6790

To Whom It May Concern,

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Fisherman's Name: *Troy A. Stanwood*

Federal Quahog Permit #: *124018*
135713

Fisherman's Signature:

Troy A. Stanwood

Allan R. Merchant
P. O. Box 186
Jonesport, Maine 04649
Home Phone 207 497 5431

May 07, 1997

Mid-Atlantic Fishery Management Council
Room 2115 Federal Building
300 South New Street
Dover, Delaware 19904-6790

To Whom It May Concern,

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Fisherman's Name:

TERRY A. HUTCHINS

Federal Quahog Permit #:

129153

Fisherman's Signature:



Allan R. Merchant
P. O. Box 188
Jonesport, Maine 04649
Home Phone 207 497 5431

May 07, 1997

Mid-Atlantic Fishery Management Council
Room 2115 Federal Building
300 South New Street
Dover, Delaware 19904-6790

To Whom It May Concern,

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Fisherman's Name: *Allan R. Merchant*

Federal Quahog Permit #: *124304*

Fisherman's Signature: *Allan R. Merchant*

Allan R. Merchant
P. O. Box 186
Jonesport, Maine 04649
Home Phone 207 497 5431

May 10, 1997

Mid-Atlantic Fishery Management Council
Room 2115 Federal Building
300 South New Street
Dover, Delaware 19904-6790

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Fisherman's Name: *HERBERT R. LAUKINGHAM*

Federal Quahog Permit #: *126733*

Fisherman's Signature: *Herbert R. Laukingham*

Allan R. Merchant
P. O. Box 186
Jonesport, Maine 04649
Home Phone 207 497 5431

May 07, 1997

Mid-Atlantic Fishery Management Council
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Fisherman's Name:

Raynard Alley

Federal Quahog Permit #:

120664

Fisherman's Signature:

Raynard Alley

Allan R. Merchant
P. O. Box 186
Jonesport, Maine 04649
Home Phone 207 497 5431

May 07, 1997

Mid-Atlantic Fishery Management Council
Room 2115 Federal Building
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Fisherman's Name: *Benjamin F Cracker Jr*

Federal Quahog Permit #: *120137*

Fisherman's Signature:

Benjamin F Cracker Jr

Allan R. Merchant
P. O. Box 186
Jonesport, Maine 04649
Home Phone 207 497 5431

May 10, 1997

Mid-Atlantic Fishery Management Council
Room 2115 Federal Building
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Dover, Delaware 19904-6790

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Fisherman's Name: *Richard E. Gupthill*

Federal Quahog Permit #: *119870*

Fisherman's Signature:



Allan R. Merchant
P. O. Box 186
Jonesport, Maine 04649
Home Phone 207 497 5431

May 07, 1997

Mid-Atlantic Fishery Management Council
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Fisherman's Name: *Benjamin F. Crocker Sr*

Federal Quahog Permit #: *124433*

Fisherman's Signature: *Benjamin F. Crocker Sr.*

Allan R. Merchant
P. O. Box 186
Jonesport, Maine 04849
Home Phone 207 497 5431

May 10, 1997

Mid-Atlantic Fishery Management Council
Room 2115 Federal Building
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Dover, Delaware 19904-6790

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Fisherman's Name:

Dean R. Crowley

Federal Quahog Permit #:

120540

Fisherman's Signature:

Dean R. Crowley

Allan R. Merchant
P. O. Box 186
Jonesport, Maine 04649
Home Phone 207 497 5431

May 07, 1997

Mid-Atlantic Fishery Management Council
Room 2115 Federal Building
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Fisherman's Name:

Dean W. Alley

Federal Quahog Permit #:

240175

Fisherman's Signature:

Dean W. Alley

Allan R. Merchant
P. O. Box 186
Jonesport, Maine 04649
Home Phone 207 497 5431

May 07, 1997

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Room 2115 Federal Building
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Fisherman's Name: *William E. Moore*

Federal Quahog Permit #: *137698*

Fisherman's Signature:

William E. Moore

Allan R. Merchant
P. O. Box 186
Jonesport, Maine 04649
Home Phone 207 497 5431

May 10, 1997

Mid-Atlantic Fishery Management Council
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Fisherman's Name: *David C. Lock*

Federal Quahog Permit #: *124232*

Fisherman's Signature: *David C. Lock*

Allan R. Merchant
P. O. Box 186
Jonesport, Maine 04649
Home Phone 207 497 5431

May 10, 1997

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Fisherman's Name:

Robert W Johnson

Federal Quahog Permit #:

250303

Fisherman's Signature:

Robert W Johnson

Allan R. Merchant
P. O. Box 188
Jonesport, Maine 04849
Home Phone 207 497 5431

May 10, 1997

Mid-Atlantic Fishery Management Council
Room 2115 Federal Building
300 South New Street
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Fisherman's Name: *Dean B. Crowley*

Federal Quahog Permit #: *220615*

Fisherman's Signature:

Dean B. Crowley

Allan R. Merchant
P. O. Box 186
Jonesport, Maine 04649
Home Phone 207 497 5431

May 10, 1997

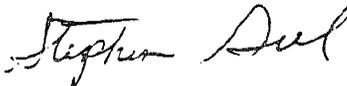
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Fisherman's Name: Stephen Geel

Federal Quahog Permit #: 180540

Fisherman's Signature: 

CNW SEAFOOD

P.O. BOX 61
WHITING, ME. 04691
WASHINGTON COUNTY

Phone (207) 733-4416
Fax (207) 733-6962

May 08, 1997

Mr. David R. Keifer, Executive Director
Mid-Atlantic Fishery Management Council
Room 2115 Federal Building
300 South New Street
Dover Delaware 19904-6790

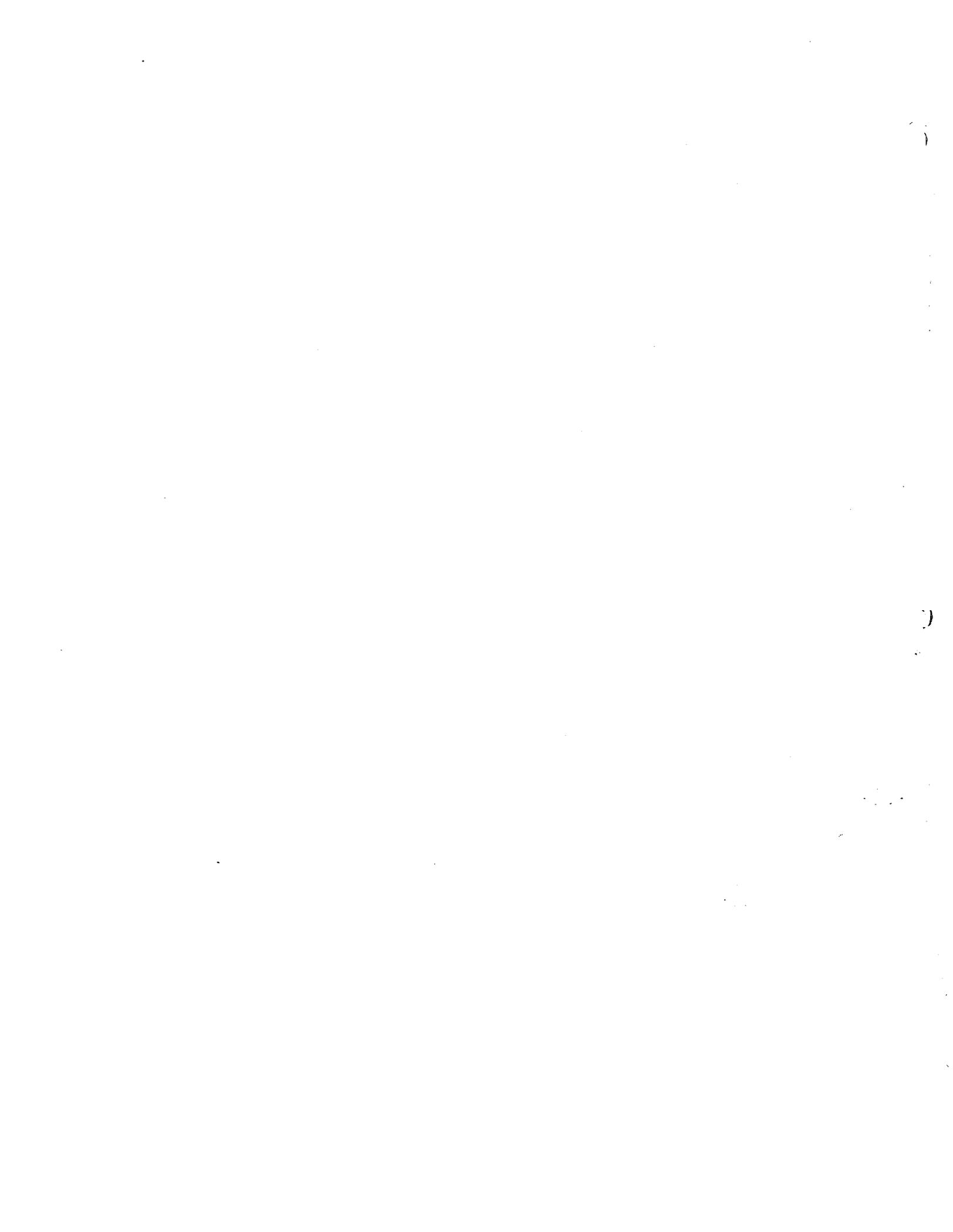
MAINE OCEAN QUAHOG INDUSTRY

Dear Mr Keifer

As a Maine Certified dealer in ocean quahogs, I would like to express my views on Amendment 10. On the subject of maintaining a viable supply of clams, I hope you are aware of all the factors we in Maine deal with. 1st, like your industry, our markets determine how much and when we harvest. Typically, we have much more product than the market can consume, hence the fluctuation in landing price. 2nd, That same market does not want the good clams, or the large clams, which I believe, is best for a continued supply. 3rd, Closures, always the threat of PCP's. I have seen a season of no closing to a closing of several months, also with smaller fishing boats, the weather gives harvesters more days off than any other single thing. 4th, You have heard how our harvesters are reasonably Cooperative with lobster fisherman and placement of gear which limits where we can harvest certain times of the year.

Sustainability, Yes we must do more to protect our full time fishermen and we can work with the state of Maine to produce a solution. But as a dealer, if our livelihood counts as part of your equation, You must be made aware that in peak season, There is not enough full time harvesters to supply us all!!! Remember the product availability is not a problem. The cost to maintain a certified dealers license with new State and Federal regulations has been considerable. And I and others can't give up a substantial part of our hard fought for market and income, because of limited harvesters in peak seasons. Don't be so quick to rule out the quota for the state of Maine, as this industry, which has been said many times, is very different then your own, and we need some flexibility, to find solutions that will be acceptable to the council and cause the least harm to the industry in Maine. Give us a reasonable quota of (+or-) 100,000 bu, and observe our progress and we together can sustain this industry in Maine.

Yours truly,
CECIL N WOOD





Angus S. King, Jr.
Governor

Robin Alden
Commissioner

DEPARTMENT OF MARINE RESOURCES

Telephone (207) 624-6550

FAX (207) 624-6024

May 5, 1997

URGENT: PLEASE READ AND RESPOND

To All Maine Mahogany Quahog Fishermen:

Many of you recently attended public hearings in Machias and Ellsworth for Amendment 10 to the Surf Clam and Ocean Quahog FMP of the Mid-Atlantic Fishery Management Council. This letter is to alert you that the preferred alternative which was supported by most Maine mahogany clam fishermen may **not** go forward!

The fishery for mahogany clams in federal waters has been operating as an experimental fishery since 1990. The National Marine Fisheries Service has said that they will not renew the experimental fishery permits when they expire September 30, 1997. Unless the Surf Clam and Ocean Quahog FMP of the MAFMC is amended to accommodate the Maine mahogany fishery, all vessels fishing in the EEZ would have to comply with the Amendment 8 regulations which established the ITQ clam fishery in the mid-Atlantic. You would have to:

- Buy or rent quota from a current owner in the mid-Atlantic fishery
- Land your clams in 32 bushel steel cages
- Install a vessel tracking system (VTS) on your boat

The Department has worked very hard to hammer out the compromise with the MAFMC and the mid-Atlantic industry (Amendment 10, the subject of the public hearings) which would technically be an ITQ system but would allow the Maine mahogany fishery to continue almost exactly as it does now. That compromise plan would:

- Create a new and separate quota for the Maine mahogany fishery
- The quota would apply only to clams from the EEZ
- That quota would be issued to the State of Maine, administered as an open fishery capped by the EEZ quota
- In the first year (1998), the quota would be set at the total reported landings from 1995
- In following years the quota would be set at a sustainable harvest rate based upon a stock assessment to be conducted jointly by the Department and the Maine industry
- Because the assessment area is the entire Gulf of Maine north of Georges Bank, it is expected that the sustainable yield will be many times what the markets will absorb

The MAFMC is scheduled to have its final vote on Amendment 10 on May 14. We have just received a copy of a memo from their Council staff recommending that Council reject the compromise in favor of issuing Individual Transferable Quotas to each fisherman based upon their average annual reported landings for the years 1990-1995. The staff has made this profound change based upon the testimony of three Maine fishermen at the Amendment 10 public hearings and written testimony from those same three fishermen.

I strongly oppose ITQs for this fishery because they create classes of “haves and have nots:” those who own a right to fish and those who do not. Anyone wishing to enter an ITQ fishery must purchase or rent that right from someone else. This can be an insurmountable barrier to people trying to work their way up in the fishery and is completely incompatible with the nature of the fishery in Washington County. If a fisherman does not have the money to buy quota as well as a boat and gear, he or she will always be a crewman for someone who does.

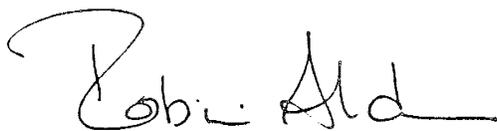
This is of most critical importance for young people trying to get started in their fishing career and to the future of their communities.

In a competitive fishery, the best fishermen and the hardest workers make the most money. In an ITQ fishery, the quota owner makes most of the money. In the mid-Atlantic fishery, most of the quota is owned by banks and corporations who hire vessel owners and fishermen to catch it for them.

Chris Finlayson from the Department will be attending the MAFMC meeting next week. He will try to convince them to honor their agreement on the compromise outlined above. To ensure that he is successful, we need your help. Please immediately fill out, sign and return the enclosed brief questionnaire indicating whether you support a quota for the State of Maine or ITQs. We must receive your replies by Monday, May 12. If you have access to a FAX machine you may send us your reply that way. FAX: 207-624-6024.

On Wednesday, May 14 the MAFMC will make a decision which will determine the future of your fishery for many many years to come. Your support is essential to ensure that the rights to fish for Maine mahoganies serve the long-term interests of the whole downeast fishing community, rather than those of a few individuals.

Sincerely,

A handwritten signature in black ink that reads "Robin Alden". The signature is written in a cursive style with a large, looping initial "R".

Robin Alden,
Commissioner

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

- I support the Maine State quota
- I support Individual Transferable quotas

Please print your name: _____

Signature _____

Comments:

Fax # - 207-624-6024

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

- I support the Maine State quota
 I support Individual Transferable quotas

Please print your name: Dean W. Alley

Signature Dean W. Alley

Dear Mrs. Alden,
 Comments: If you and Mr. Finlayson believe that the quota you are proposing will bring a yield that will be "many times what the market will absorb", it is clear that neither of you have been doing your homework. If you compare the log books to the records of the dealers who buy quahogs from the boats, you will find quite a difference. There were a lot more quahogs sold to dealers than were reported on log books for any and all of the years you are using for the purpose of this survey. My Question is this: Why should my family & I be penalized for being honest & hard working and others be rewarded for being dishonest, by being given a cut of a quota that they didn't contribute to?

As far as creating classes of "haves & have nots", the State & Federal governments are surely the experts on that subject, you all have been doing it for years!

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

- I support the Maine State quota
 I support Individual Transferable quotas

Please print your name: RAYNARD F. ALLEY

Signature Raynard F. Alley

Comments: I support the ITQ's because I feel it would be in my best interests. I myself have been dragging for quite a few years, and every spring when scalloping and urchin diving and dragging get done there are at least 20 more boats that just hop in, cut prices or whatever they have to do to sell them, that in my opinion is sitting my and the guys that drag all the time Throats right or wrong? When the moratorium was put on for urchins, I didn't have a license the year before so I was therefore shut out of that fishery. But the guys that reaped the cream of the urchin boom can still go hogging, you have shut the door.

FROM:

BEALS LOBSTER CO., INC.
P.O. BOX 121
BEALS ME 04611-0121

TO ATT. OF
CHRIS FINLAYSON

207 497 2666

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

- I support the Maine State quota
- I support Individual Transferable quotas

Please print your name: Bernard Beal

Signature Bernard Beal

Comments:

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

- I support the Maine State quota
 I support Individual Transferable quotas

Please print your name: Christopher T. Beal

Signature Christopher T. Beal

Comments:

I believe that the NMFS is only looking out for the big business. They could care less about the small time fishermen that are barely getting by.

This fishery was just fine until they stuck their money grubbing, big business fingers into it. They have no idea what this business is about. They are just basing it on the surf clam fishery that is completely different.

I see nothing wrong with a Maine State Quota; but the ITQ will be just too much for my pocketbook. I'm sure there are a lot more fishermen in just my situation but a lot of them will not speak up.

We need a helping hand to save our fishery from big business. Please do your best to save our way of life.

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota
 I support Individual Transferable quotas

Please print your name: Farrell E Beal

Signature Farrell E Beal

Comments: I do not support quotas!

I strongly oppose ITQs for this fishery because they create classes of have and have nots those who own a right to fish and those who do not.

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota
- I support Individual Transferable quotas

Please print your name: ISAAC K. BEAL

Signature Isaac K. Beal

Comments:

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

- I support the Maine State quota
 I support Individual Transferable quotas

Please print your name: OSSIE BEAL SR. - POX 125, Beals 04611

Signature Ossie Beal Sr.

Comments:

I am concerned about the low state quota - should be at least 100,000 bu.

Will there be a per-bushel surcharge?

How fast can DMR do a stock/sustainable yield analysis to raise the quota?

→ A fishery w/ a cap should not be open-entry; some sort of ^{legal} protection should be given to the few quahoggers who have built the industry & complied w/ regulations.

Thanks to DMR for your efforts on our behalf!

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota
- I support Individual Transferable quotas

Please print your name: Mitchell W Beal

Signature: Mitchell W Beal

Comments: F/O Owner - Cpr 14 Jor

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

- I support the Maine State quota
- I support Individual Transferable quotas

Please print your name:

Willis A. Beal

Signature

Willis A. Beal

Comments:

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota *Better Buyer Management*
- I support Individual Transferable quotas *NO*

Please print your name: *Edmund Bridges*

Signature *Edmund Bridges*

Comments:

5-8-97

Ms Alden:

My name is Edmund Bridges from Machiasport. I can't just mark one of those boxes. I do not agree with ITA, but in a way we all ready have that going on in our area.

Randy Ramsdell of Machias Bay Seafood, has 2 boats he uses all the time. Ten (10) of us went to him in April to see if he would use us as "hog" boats this year. Oh yes, I can use you. 2 of the 10 boats have gone "hogging" and supplied the market. That isn't fair to the rest of us. Why not put us on a limit, but let us all make a little bit to pay our bills!

Also his bushel is now 3 buckets per bushel at a price of \$28 compared to a 2 bucket bushel at \$40. So 2 boats go for a bigger measure and lower price. This does not make sense to me. I have sold products to this man for 16 years or more. I just don't believe it is fair when we all buy our licenses that all the market is given to 2 boats. We all ready have a quota or ITA going on here.

The summer of 1995 I put my new boat together. I sold my old wooden boat so I had nothing in the water to work from. ~~1996~~ 1996 I tried to get a small hog market. I would have been happy with 1 or 2 days a week. I couldn't even get that. The same 2 boats that are dragging this year had last year's market all to themselves.

1997 - I am trying again to get a small market. Like I said 1 or 2 days a week. I have payments too and I would like to be able to work. So would the other boats that were told yes they would be used this year.

The only fair way I see for Quahogging is to put the boats on a limit so more boats can go. Some of us haven't had a chance to go for 3 or 4 years but it doesn't mean we didn't want to. So many bushel per landing would be good. But let all of us have some market.

If the buyer let all of the boats go, for a limit, maybe that would help put the price back up to within a better range. 2 boats maintaining a market does not give any reason for the buyer to even look at his price.

Thanks for your time

Edmund Frazier

HCR 70 #298

Machisport

Maine 04655

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota
- I support Individual Transferable quotas

Please print your name: Dwight H. Carver

Signature: Dwight H. Carver

Comments: I fear I T Q's. Only a few will be allowed to continue fishing.

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota
 I support Individual Transferable quotas

Please print your name: Chris W. Burke

Signature Chris W. Burke

Comments: The first year I started fishing for quahogs was spring of 1996. I've worked very hard trying to establish market and I'm making alot of progress. I could tell right away that the other draggess didn't like to see another boat cutting in on their markets, but how many people that own a business do not have any competition. It was a selfish act on their part to suggest ITQ's. I've made a large investment in the quahog industry and I'm banking on my future income for my families security. However ITQ's would destroy my business.

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota
- I support Individual Transferable quotas

Please print your name: David M. Cline

Signature David M. Cline

Comments:

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota
- I support Individual Transferable quotas

Please print your name: Benjamin F Crocker Sr

Signature Benjamin F Crocker Sr

Comments:

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota
- I support Individual Transferable quotas

Please print your name: Brent M Crowley

Signature Brent M. Crowley

Comments:

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota
- I support Individual Transferable quotas

Please print your name: Daniel M. Curtis ^{owner} ~~operator~~ F/V Lady D.

Signature Daniel M. Curtis NMFS permit # 136403

Comments:

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

I support the Maine State quota

I support Individual Transferable quotas

Please print your name:

Michael R. Danforth

Signature

Michael R. Danforth

Comments:

I personally like the idea of federal rules with some state input. I don't think this fishery should be controlled by just a few individuals with the largest share of the current markets.

I support the Maine State quota

I support Individual Transferable quotas

Please print your name:

HERBERT FAULKNERHAM

Signature:

Herbert Faulknerham

Comments:

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota
- I support Individual Transferable quotas

Please print your name: Leigh H. Freney

Signature Leigh H. Freney

Comments: *I feel the state quota should be spread among those of us who are already licensed and who complied with the log book.*

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota
- I support Individual Transferable quotas

Please print your name: EWOTT COUPILL

Signature 

Comments:

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota
- I support Individual Transferable quotas

Please print your name: Richard E Gault

Signature 

Comments:

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota
 I support Individual Transferable quotas

Please print your name: TERRY A. HUTCHIN'S

Signature 

Comments: IF MAFMC DOES NOT CHOSE TO DO AS AGREED THEN I FEEL THEY SHOULD BASE THE ITR'S ON THE BOATS THAT ARE NOW FISHING.

SOME BOATS THAT WOULD BE GIVEN A QUOTA HAVE NOT FISHED IN THE PAST YEAR (1996) OR EVEN 1995. MY BOAT ON THE OTHER HAND HAS FISHED SOLEY FOR QUANOGS AND NO OTHER FISHERY IN THESE YEARS.

I HAVE SPENT A GREAT DEAL OF MONEY TO SET THE BOAT UP FOR THIS FISHERY AND DO NOT FEEL ANYONE HAS THE RIGHT TO TAKE MYSELF OR ANYONE ELSE OUT OF THIS FISHERY THAT HAS DONE THE SAME.

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

- I support the Maine State quota
- I support Individual Transferable quotas

Please print your name: Douglas Ireland

Signature Douglas Ireland

Comments:

skipper Owner F/o Roamer
Quehopper

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

- I support the Maine State quota
 I support Individual Transferable quotas

Please print your name: DAVID C. LOOK

Signature David C. Look

Comments:

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota
- I support Individual Transferable quotas

Please print your name: Timothy J. Manning

Signature Timothy J. Manning

Comments:

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota
 I support Individual Transferable quotas

Please print your name: Milton R. Merchant

Signature Milton R. Merchant

Comments: I have just invested in a dragger. I purchased it in May 1996. If the ITO goes through I have no landings for 1990-1995, therefore I would not be able to quahog and get my feet under me. I would very well have to get out at a loss. It is hard enough trying to get a boat and the needed equipment and licenses without the added expense of purchasing or renting the right to quahog from someone else. This would make it nearly impossible for people just trying to get started.

.....

I support the Maine State quota

I support Individual Transferable quotas

Please print your name: BRUCE N MOORE

Signature Bruce N Moore

Comments:

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota
- I support Individual Transferable quotas

Please print your name: Horace W. Moore

Signature Horace W. Moore

Comments:

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

- I support the Maine State quota
- I support Individual Transferable quotas

Please print your name: Charles Peabody

Signature Charles Peabody

Comments:

I am completely against ITQ's. I am a new fisherman, and with all the rules and regulations already in use, it is hard for me to make a living. If ITQ's were used, since I am a new fisherman I would get to go less than I already do.

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota
- I support Individual Transferable quotas

Please print your name: B. Scott Perry

Signature Rodney Scott Perry

Comments: I am completely in favor of the ITQ system. I was one of the four fishermen who attended the meeting in New Jersey. The State of Maine, who obviously attaches little significance to our problem, did not even dispatch a representative to this meeting.

Furthermore, we are going to be faced with a quota no matter the outcome. Another point I would like to make is that we, the fishermen who actually complied with the EEZ experiment and helped the government by filling out and filing our logbooks should be given the first and fair shake in this matter and have our wishes count for something. Also, I feel the matter needs to be addressed that not even 50% of the fishermen participating in the EEZ program bothered to fill out their logbooks and file them, so an accurate picture cannot be made as to a yearly catch. This will make the quota per year disastrously low and along with everyone, even those who did not fill out logbooks, the ones who did comply will suffer.

In the State of Maine this is still an open fishery, and if we have a quota on top of that, every person could buy a boat and gear and jump into this market, cutting out of our quota for the year. Most other fisheries in this state are closed fisheries, making it impossible for us to turn to another fishery to supplement our livelihood if the quota should be cut in on. The end result of this is going to be more Maine fishermen out of business and not able to support their families.

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota
- I support Individual Transferable quotas

Please print your name: BRUCE W PORTER

Signature Bruce Porter

Comments: *State of Maine should make
The Mahogany Quabog fishery a Limited
Entry Fishery*

Bruce Porter

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

- I support the Maine State quota
 I support Individual Transferable quotas

Please print your name: KRISTAN POTTER

Signature 

Comments: A FISHERY THAT IS CONTROLLED BY A LANDINGS QUOTA CAN NOT SURVIVE AS AN OPEN ACCESS FISHERY. PLEASE GIVE CONSIDERATION TO EXISTING FISHERS and INTRODUCE LEGISLATION TO CONTROL ENTRY INTO THIS FISHERY.
CONTACT ME IF YOU NEED ANYTHING.

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota
 I support Individual Transferable quotas

Please print your name:

JOHN DE FOUTILOFF

Signature

John De Foutiloff

Comments:

Quotaing as we call it is different from most other fisheries because of the big factor "market." Market is the ability to sell your product. Some boats have a good "market."

That mean they can fish often for they can sell them. Other boats may have a small market or just a holiday market.

That doesn't mean that the boats with the small markets or no market at all wouldn't like to be working more often.

It sounds to me, like the boats with the "market" will get the biggest quotas and be guaranteed no future competition.

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota
 I support Individual Transferable quotas

Please print your name: Ivory Lee Preston

Signature Ivory Lee Preston

Comments:

My Comments concerning the ITQ's are - NO - I do not want to see ITQ's because these 3 fishermen mentioned in your letter supplied most of the markets during 1990-1995, by selling at a lower price and by holding a large supply of quahogs that ended up being floated for a long period of time, then had to be picked over several times before being able to be sold. This left weak quahogs with a much shorter shelf life going to market. This is the main reason we have no quahog market today.

I really feel that the FDA should investigate the people floating quahogs and am sure floating them would be outlawed if this was investigated.

I sincerely support the quota for the State of Maine and feel this would make it fair for the men that drag quahogs. And feel this is the route to take.

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota
 I support Individual Transferable quotas

Please print your name: Keith Robinson

Signature Keith Robinson

Comments: I think that Quotas of any kind is not necessary. The way the Quoting market is these days would regulate it self. I feel that Quotas would make ~~some people~~ ^{a certain number of} people very happy and wealthy, and it will be the ones that don't need it the most. It seems like this ~~sort~~ ^{sort} of thing is happening in all areas of the Fishing Industry.

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

I support the Maine State quota

I support Individual Transferable quotas ← THIS IS A VERY BAD WAY TO GO

Please print your name: CHARLES SAUNDERS F/V MARY ELLEN

Signature Charles Saunders

Comments:

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota
 I support Individual Transferable quotas

Please print your name: Thomas F. Shortill

Signature Thomas F. Shortill

Comments:

I oppose ITQ's for this fishery. The best fishermen and not the quota owners should make the most. ITQ's are incompatible with the nature of the fishery.

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota
- I support Individual Transferable quotas

Please print your name: Dale W. Smith

Signature Dale W. Smith

Comments: F/U OWNER (Quotas) for

Chris Finlayson 627-6024

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

- I support the Maine State quota
- I support Individual Transferable quotas

Please print your name: ADAM L STANWOOD

Signature Adam Stanwood

Comments:

I am twenty five years old. I'm married and have three children. My wife stays at home with our children, while my place is in the workforce. I've worked hard to build a future for my family, and to have a better life. With all the rules and regulations, I am not able to get a NE multispecies or a full time scallop permit. Because of my age I was not fishing at the time the limits were set.

My dream, ever since I was a boy, was to own my own boat and be able to fish it. Now that I do, laws are coming into effect to protect the same men which were responsible for ruining the ocean in the first place. I am not asking for protection against declined fishing stocks. I knew the consequences I would suffer if I couldn't find enough product to make a living. Every man has a choice. Why should it be your decision to tell me what I can do for a living? The things that made this country so great in the first place, like justice and liberty for ALL, are being

~~taken away from the victims of the... and our... and...~~

Every man, woman and child, who support our government by paying taxes, has a right to fish the ocean that the Lord God created. The government is willing to take the tax dollars from our fishing, yet says that we can't fish. It doesn't make too much sense. This is dictatorship in its fullest form. That a man (a government official) can lay down such rules to take away another man's living, and still expect him to pay taxes.

My son has a boat and gear that purchased recently. He has a lot of money invested. He has a wife and three small boys to feed. The ITQs will deny my son the chance to do the thing he loves the most, which is fishing. You say that we are a free nation, yet you, the government, are dictating who can fish and who can't.

My advice to you is: Do not listen to the voice of men who want control of the fishing industry for money or power. Listen to the voice of the working class, who simply want to make a living for their families. If you listen to the wrong voice you will be condemned along with the one you listened to and supported. Hear the voice of the Lord and be blessed. The destiny of our nation and our people is in your hands. Man will be ruled by God or controlled by tyrants. Please do not let our nation go into tyranny.

Sincerely yours,

Clifford Stanwood
A concerned citizen of Acadia

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

- I support the Maine State quotas
- I support Individual Transferable quotas

Please print your name: Clifford David Stanwood

Signature Clifford Stanwood

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota
- I support Individual Transferable quotas

Please print your name: GARY J. STARWOOD

Signature Gary J. Starwood

Comments:

I SUPPORT THE MAINE STATE QUOTA

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota
 I support Individual Transferable quotas

Please print your name: JAMES W. WEST

Signature James W. West

Comments:

I haven't fished for Mahogany quahogs for a few years, but would like to have the right to drag for them in the future.

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

- I support the Maine State quota
 I support Individual Transferable quotas

Please print your name: Craig A Wood

Signature Craig Wood

Comments: I haven't fished for 6 or 7 years due to machines but that doesn't mean that I shouldn't be allowed to drag my share of quotas !!

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

- I support the Maine State quota
- I support Individual Transferable quotas

Please print your name: Larry D Wood

Signature Larry D Wood

Comments:

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

I support the Maine State quota

I support Individual Transferable quotas

Please print your name: Tony L Wood

Signature Tony L Wood

Comments:

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota
- I support Individual Transferable quotas

Please print your name: ARCHE M. FALEY III _____

Signature Archie M. Faley III _____

Comments:

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota
- I support Individual Transferable quotas

Please print your name: Donnie Alley _____

Signature: Donnie Alley _____

Comments: Stevenson Quaker

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota
- I support Individual Transferable quotas

Please print your name: GAREN E. ALLEY

Signature Garen E. Alley

Comments: Skinner Flu Pirates Penny

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota
- I support Individual Transferable quotas

Please print your name: Rocky Alley -----

Signature Rocky Alley -----

Comments: I feel that if ITQ is passed I will be put out of a job that I have been doing for a living for the past 4 years as a quarry dragger. I do not think it is fair for a few to be able to

you for a few minutes
decide what a lot of people's jobs
will depend on.

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

- I support the Maine State quota
- I support Individual Transferable quotas

Please print your name: SCOTT ALLEY

Signature Scott Alley

Comments: Stern man Overhugged

- I support the Maine State quota
- I support Individual Transferable quotas

Please print your name: Cecil N. Wood

Signature Cecil N. Wood

Comments: I would like to see the State of Maine keep as much control of the industry as possible, and also try to find a way to limit entry, because as the other fisheries decrease landings, Quahogging is unprotected.

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota
- I support Individual Transferable quotas

Please print your name: George M Davis _____

Signature George M Davis _____

Comments:

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

- I support the Maine State quota
- I support Individual Transferable quotas

Please print your name: Larry Emerson Jr.

Signature Larry Emerson Jr.

Comments:

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota
- I support Individual Transferable quotas

Please print your name: Clifford F. Johnson III

Signature Clifford F. Johnson III

Comments: Stevenson Cawhogs

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quotas
- I support Individual Transferable quotas

Please print your name: Darrell K.E. Kelley

Signature Darrell K.E. Kelley

Comments: skipper FlU Life's Treasures
Quahogger

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota
- I support Individual Transferable quotas

Please print your name: Bertram E. Peabody

Signature Bertram E. Peabody

Comments:

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

I support the Maine State quota

I support Individual Transferable quotas

Please print your name: Christine Peabody _____

Signature Christine Peabody _____

Comments:

I am the wife of a stern man who works on a Quahog boat. If the existing quota pass my husband will be out of a job he has had for four years. Which is our only income.

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota
 I support Individual Transferable quotas

Please print your name: Gregory Allan Peabody

Signature Gregory Allan Peabody

Comments:

I am a stern man and if
Individual quotas go through I am out
a job.

Please complete the following questionnaire and return it immediately to the Department in the enclosed stamped envelope.

.....

- I support the Maine State quota
- I support Individual Transferable quotas

Please print your name: Dorrough Taylor _____

Signature Dorrough Taylor _____

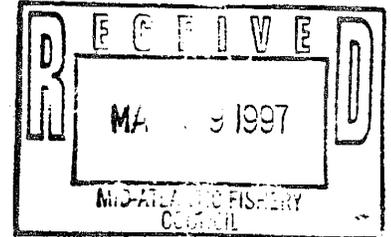
Comments:

OLYMPIA J. SNOWE
MAINE
COUNSEL TO THE ASSISTANT
MAJORITY LEADER
250 RUSSELL SENATE OFFICE BUILDING
(202) 224-5344

United States Senate
WASHINGTON, DC 20510-1903

COMMITTEES
ARMED SERVICES
BUDGET
COMMERCE, SCIENCE, AND
TRANSPORTATION
CHAIR OF
OCEANS AND FISHERIES
SUBCOMMITTEE
SMALL BUSINESS

May 12, 1997



Dr. James H. Gilford, Chairman
Mid-Atlantic Fishery Management Council
Room 2115, Federal Building
300 South New Street
Dover, Delaware 19904-6790

Dear Dr. Gilford:

I am writing to express my strong support for the original preferred alternative for Amendment 10 to the Atlantic Surf Clam and Ocean Quahog Fishery Management Plan. I understand this alternative, negotiated with the State of Maine, would have provided the State with a quota for mahogany quahogs to be distributed in accordance with State policies. Unfortunately, it has come to my attention that the Mid-Atlantic Fishery Management Council (MAFMC) may be seriously considering another alternative that would impose an individual transferable quota (ITQ) regime on this Downeast Maine fishery. I would strongly oppose any such alternative.

As you may be aware, during the recent reauthorization of the Magnuson-Stevens Act, I sponsored an amendment which exempted the Surf Clam and Ocean Quahog fishery, including mahogany quahogs, from the Act's moratorium on individual fishing quota programs (see Section 303(d)(2)(B)). I did so solely because I understood that the MAFMC and the State of Maine had been able to resolve past differences on this issue and craft a creative and fair compromise, which was reflected in the original preferred alternative.

A withdrawal of the Council's support for that preferred alternative in favor of full ITQs for mahogany quahogs would contravene the spirit and intent of my amendment, and would seriously undermine the goodwill and trust built over the last year between Maine and the Council on this issue. Further, the proposed change to ITQs would have no plausible biological or conservation rationale. Its only purpose would be the allocation of economic benefits from the fishery, which I believe is most appropriately determined by the State of Maine, given that this is a small, Eastern Maine fishery. This allocation of exclusive harvest rights to a few individuals would exclude the rest of the fishermen in Downeast communities and effectively deny them the opportunity to benefit from the harvest of a public resource now or anytime in the future. This is not a fair and equitable means of allocating the mahogany quahog resource.

AUBURN
TWO GREAT FALLS PLAZA
SUITE 7B
AUBURN, ME 04210
(207) 786-2451

AUGUSTA
68 SEWALL STREET, SUITE 101C
AUGUSTA, ME 04330
(207) 622-8292

BANGOR
ONE CUMBERLAND PLACE, SUITE 306
BANGOR, ME 04401
(207) 945-0432

BIDDEFORD
231 MAIN STREET, SUITE 2
BIDDEFORD, ME 04005
(207) 282-4144

PORTLAND
3 CANAL PLAZA, SUITE 601
P.O. BOX 188
PORTLAND, ME 04112
(207) 874-0883
MAINE RELAY SERVICE
TDD 1-955-3323

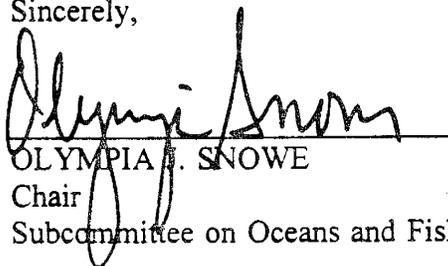
PRESQUE ISLE
189 ACADEMY STREET, SUITE 3
PRESQUE ISLE, ME 04769
(207) 764-5124

The preservation of the mahogany quahog fishery as it is currently administered is a matter of significant concern for the State. Maine has a healthy fishery which is helping to sustain the most impoverished county in it. The State commits resources to test the quahogs prior to marketing, and is now willing to administer a quota fishery under the auspices of the MAFMC. Maine is willing to play such an active role in the management of the fishery because it makes a critical difference to the health and survival of these communities that utilize and depend upon the resource..

I urge the Council to maintain support for the original preferred alternative providing the State of Maine with a quota in lieu of an ITQ plan that very few people in Maine support. It was clearly the expectation of the framers of the Magnuson-Stevens reauthorization bill that the State quota plan would be adopted by the Council.

Thank you for your consideration of my comments.

Sincerely,



OLYMPIA J. SNOWE

Chair

Subcommittee on Oceans and Fisheries

OJS/ktw

APPENDIX 5. DRAFT PROPOSED REGULATIONS

50 CFR PART 648--FISHERIES OF THE NORTHEASTERN UNITED STATES

Authority: 16 U.S.C. 1801 et seq.

Subpart A--General Provisions

Sec.

- 648.1 Purpose and scope.
- 648.2 Definitions.
- 648.3 Relation to other laws.
- 648.4 Vessel permits.
- 648.5 Operator permits.
- 648.6 Dealer/processor permits.
- 648.7 Recordkeeping and reporting requirements.
- 648.8 Vessel identification.
- 648.9 VTS requirements.
- 648.10 DAS notification requirements.
- 648.11 At-sea sea sampler/observer coverage.
- 648.12 Experimental fishing.
- 648.13 Transfers at sea.
- 648.14 Prohibitions.
- 648.15 Facilitation of enforcement.
- 648.16 Penalties.

Subpart E--Management Measures for the Atlantic Surf Clam and Ocean Quahog Fisheries

Sec.

- 648.70 Annual individual allocations.
- 648.71 Catch quotas.
- 648.72 Minimum surf clam size.
- 648.73 Closed areas.
- 648.74 Shucking at sea.
- 648.75 Cage identification.

Subpart A--General Provisions

Sec. 648.4 Vessel permits. This section is revised (in bold) to include the eastern Maine ocean quahog fishery north of 43° 50'.

(a) Fishery specific vessel permit information. (1) NE multispecies vessels. Any vessel of the United States, including a charter or party boat, must have been issued

and have on board a valid multispecies permit to fish for, possess or land multispecies in or from the EEZ. Recreational vessels and vessels fishing for NE multispecies exclusively in state waters are exempt from this requirement.

(i) *Limited access multispecies permits--(A) Eligibility.* To be eligible to apply for a limited access multispecies permit, as specified in Sec. 648.82, in 1996 and thereafter, a vessel must have been issued a limited access multispecies permit for the preceding year, must be replacing a vessel that was issued a limited access multispecies permit for the preceding year, or must qualify for a 1996 limited access multispecies hook-gear permit under this paragraph (a)(1)(i). Vessels qualifying for 1996 limited access multispecies hook-gear permits are qualified only for that limited access permit category. A vessel is eligible for a 1996 limited access multispecies hook-gear permit, provided:

(1) The vessel was issued a 1995 open access multispecies hook-gear permit and the owner or operator of the vessel submitted to the Regional Director, no later than January 26, 1996, fishing log reports dated between June 1, 1994, and June 1, 1995, when fishing with hook gear under the open access hook-gear permit, documenting landings of at least 500 lb (226.8 kg) of NE multispecies finfish, or its equivalent in numbers of fish; or

(2) The vessel is replacing such a vessel.

(B) *Application/renewal restrictions.* Owners of vessels must apply for a limited access multispecies hook-gear permit before September 1, 1996, to receive an automatic mailing of an application to renew their permit in 1997 and to be assured that their permit application will be processed within 30 days. Vessel owners applying after December 31, 1996, will be ineligible to apply for an initial limited access multispecies hook-gear permit. To renew or apply for a limited access multispecies permit, a completed application must be received by the Regional Director by the first day of the fishing year for which the permit is required. Failure to renew a limited access multispecies permit in any year bars the renewal of the permit in subsequent years.

(C) *Qualification restriction.* Unless the Regional Director determines to the contrary, no more than one vessel may qualify, at any one time, for a limited access permit based on that or another vessel's fishing and permit history. If more than one vessel owner claims eligibility for a limited access permit, based on one vessel's fishing and permit history, the Regional Director will determine who is entitled to qualify for the permit and the DAS allocation according to paragraph (a)(1)(i)(D) of this section.

(D) *Change in ownership.* The fishing and permit history of a vessel is presumed to transfer with the vessel whenever it is bought, sold, or otherwise transferred, unless there is a written agreement, signed by the transferor/seller and transferee/buyer, or other credible written evidence, verifying that the transferor/seller is retaining the vessel's fishing and permit history for purposes of replacing the vessel.

(E) *Replacement vessels.* To be eligible for a limited access permit under this section, the replacement vessel must meet the following criteria and any applicable criteria under paragraph (a)(1)(i)(F) of this section:

(1) The replacement vessel's horsepower may not exceed by more than 20 percent the horsepower of the vessel that was initially issued a limited access permit as of the date the initial vessel applied for such permit.

(2) The replacement vessel's length, GRT, and NT may not exceed by more than

10 percent the length, GRT, and NT of the vessel that was initially issued a limited access permit as of the date the initial vessel applied for such permit. For purposes of this paragraph (a)(1)(i)(E)(2), a vessel not required to be documented under title 46 U.S.C. will be considered to be 5 NT. For undocumented vessels, GRT does not apply.

(F) *Upgraded vessel.* A vessel may be upgraded, whether through refitting or replacement, and still be eligible for or be eligible to retain or renew a limited access permit, only if the upgrade complies with the following:

(1) The vessel's horsepower may be increased, whether through refitting or replacement, only once. Such an increase may not exceed 20 percent of the horsepower of the vessel initially issued a limited access permit as of the date the initial vessel applied for such permit.

(2) The vessel's length, GRT, and NT may be increased, whether through refitting or replacement, only once. Any increase in any of these three specifications of vessel size may not exceed 10 percent of the respective specification of the vessel initially issued a limited access permit as of the date the initial vessel applied for such permit. If any of these three specifications is increased, any increase in the other two must be performed at the same time. This type of upgrade may be done separately from an engine horsepower upgrade.

(G) *Consolidation restriction.* Limited access permits and DAS allocations may not be combined or consolidated.

(H) *Appeal of denial of permit.* (1) *Eligibility.* Any applicant eligible to apply for an initial limited access multispecies hook-gear permit who is denied such permit may appeal the denial to the Regional Director within 30 days of the notice of denial. Any such appeal must be based on one or more of the following grounds, must be in writing, and must state the grounds for the appeal:

(i) The information used by the Regional Director was based on mistaken or incorrect data.

(ii) The applicant was prevented by circumstances beyond his/her control from meeting relevant criteria.

(iii) The applicant has new or additional information.

(2) *Appeal review.* The Regional Director will appoint a designee who will make the initial decision on the appeal. The appellant may request a review of the initial decision by the Regional Director by so requesting in writing within 30 days of the notice of the initial decision. If the appellant does not request a review of the initial decision within 30 days, the initial decision shall become the final administrative action of the Department of Commerce. Such review will be conducted by a hearing officer appointed by the Regional Director. The hearing officer shall make findings and a recommendation to the Regional Director which shall be advisory only. Upon receiving the findings and a recommendation, the Regional Director will issue a final decision on the appeal. The Regional Director's decision is the final administrative action of the Department of Commerce.

(3) *Status of vessels pending appeal.* A vessel denied a limited access multispecies hook-gear permit may fish under the limited access multispecies hook-gear category, provided that the denial has been appealed, the appeal is pending, and the vessel has on board a letter from the Regional Director authorizing the vessel to fish under the limited access hook-gear category. The Regional Director will issue such a letter for the pendency of any appeal. Any such decision is the final administrative action of the Department of Commerce on allowable fishing activity,

pending a final decision on the appeal. The letter of authorization must be carried on board the vessel. If the appeal is finally denied, the Regional Director shall send a notice of final denial to the vessel owner; the authorizing letter becomes invalid 5 days after receipt of the notice of denial.

(I) *Limited access permit restrictions.* (1) A vessel may be issued a limited access multispecies permit in only one category during a fishing year. Vessels may not change limited access multispecies permit categories during the fishing year, except as provided in paragraph (a)(1)(i)(I)(2) of this section. A vessel issued a limited access multispecies hook-gear permit may not change its limited access permit category at any time.

(2) The owner of a vessel issued a limited access multispecies permit may request a change in permit category, unless otherwise restricted by paragraph (a)(1)(i)(I)(1) of this section. In 1996, a vessel owner has one opportunity to request a change in permit category by submitting an application to the Regional Director by August 14, 1996. If a complete application is not submitted by that date, the vessel must fish only in the DAS program assigned for the remainder of the 1996 fishing year. Any DAS that a vessel uses prior to a change in permit category will be counted against its allocation received under any subsequent permit category. For 1997 and beyond, the owner of a limited access multispecies vessel eligible to request a change in permit category must elect a category prior to the start of each fishing year and will have one opportunity to request a change in permit category by submitting an application to the Regional Director within 45 days of issuance of the vessel's permit. After that date, the vessel must remain in that permit category for the duration of the fishing year.

(3) With the exception of combination vessels, sea scallop dredge vessels are not eligible for limited access multispecies permits.

(J) *Confirmation of Permit History.* Notwithstanding any other provisions of this part, a person who does not currently own a fishing vessel, but who has owned a qualifying vessel that has sunk, been destroyed, or transferred to another person, may apply for and receive a Confirmation of Permit History (CPH) if the fishing and permit history of such vessel has been retained lawfully by the applicant. To be eligible to obtain a CPH, the applicant must show that the qualifying vessel meets the eligibility requirements, as applicable, in this part. Issuance of a valid and current CPH preserves the eligibility of the applicant to apply for or renew a limited access permit for a replacement vessel based on the qualifying vessel's fishing and permit history at a subsequent time, subject to the replacement provisions specified in this section. A CPH must be applied for and received on an annual basis in order for the applicant to preserve the fishing rights and limited access eligibility of the qualifying vessel. If fishing privileges have been assigned or allocated previously under this part, based on the qualifying vessel's fishing and permit history, the CPH also preserves such fishing privileges. Any decision regarding the issuance of a CPH for a qualifying vessel that has applied for or been issued previously a limited access permit is a final agency action subject to judicial review under 5 U.S.C. 704. An application for a CPH must be received by the Regional Director by the beginning of the fishing year for which it is required. Information requirements for the CPH application are the same as those for a limited access permit with any request for information about the vessel being applicable to the qualifying vessel that has been sunk, destroyed, or transferred. Vessel permit applicants who have been issued a CPH and who wish to obtain a vessel permit for a replacement vessel based upon

the previous vessel history may do so pursuant to this paragraph (a)(1)(i)(J).

(K) *Abandonment or voluntary relinquishment of permits.* If a vessel's limited access permit for a particular fishery is voluntarily relinquished to the Regional Director, or abandoned through failure to renew or otherwise, no limited access permit for that fishery may be re-issued or renewed based on that vessel's history or to any vessel relying on that vessel's history.

(L) *Restriction on permit splitting.* A limited access multispecies permit may not be issued to a vessel or its replacement, or remain valid, if the vessel's permit or fishing history has been used to qualify another vessel for another Federal fishery.

(ii) *Open access permits.* Subject to the restrictions in Sec. 648.88, a U.S. vessel that has not been issued a limited access multispecies permit is eligible for an open access multispecies handgear or charter/party permit. A U.S. vessel that has been issued a valid limited access scallop permit, but that has not been issued a limited access multispecies permit, is eligible for an open access scallop multispecies possession limit permit. The owner of a vessel issued an open access permit may request a different open access permit category by submitting an application to the Regional Director at any time.

(2) *Atlantic sea scallop vessels*--Any vessel of the United States that fishes for, possesses, or lands Atlantic sea scallops in quantities greater than 40 lb (18.14 kg) shucked, or 5 bu (176.2 L) of in-shell scallops per trip, except vessels that fish exclusively in state waters for scallops, must have been issued and carry on board a valid scallop permit.

(i) *Limited access scallop permits.* Any vessel of the United States that possesses or lands more than 400 lb (181.44 kg) of shucked, or the equivalent amount of in-shell scallops (50 bu (176.2 L)) per trip, except vessels that fish exclusively in state waters for scallops, must have been issued and carry on board a valid limited access scallop permit.

(A) *Eligibility.* To be eligible to apply for a limited access scallop permit, a vessel must have been issued a limited access scallop permit for the preceding year, or the vessel must be replacing a vessel that has been issued a limited access scallop permit for the preceding year.

(B) *Application/renewal restrictions.* To renew or apply for a limited access scallop permit, a completed application must be received by the Regional Director by the first day of the fishing year for which the permit is required. Failure to renew a limited access scallop permit in any year bars the renewal of the permit in subsequent years.

(C) *Qualification restriction.* See paragraph (a)(1)(i)(C) of this section.

(D) *Change in ownership.* See paragraph (a)(1)(i)(D) of this section.

(E) *Replacement vessels.* See paragraph (a)(1)(i)(E) of this section.

(F) *Upgraded vessel.* See paragraph (a)(1)(i)(F) of this section.

(G) *Consolidation restriction.* See paragraph (a)(1)(i)(G) of this section.

(H) *Percentage ownership restrictions.* (1) For any vessel acquired after March 1, 1994, a vessel owner is not eligible to be issued a limited access scallop permit for the vessel if the issuance of the permit will result in the vessel owner, or any person who is a shareholder or partner of the vessel owner, having an ownership interest in limited access scallop vessels in excess of 5 percent of the number of all limited access scallop vessels at the time of permit application.

(2) Vessel owners who were initially issued a 1994 limited access scallop permit, or were issued or renewed a limited access scallop permit for a vessel in 1995 and thereafter in compliance with the ownership restrictions in paragraph (a)(2)(i)(H)(1) of

this section, are eligible to renew such permit(s), regardless of whether the renewal of the permits will result in the 5 percent ownership restriction being exceeded.

(3) Having an ownership interest includes, but is not limited to, persons who are shareholders in a vessel owned by a corporation, who are partners (general or limited) to a vessel owner, or who, in any way, partly own a vessel.

(I) *Limited access permit restrictions.* A vessel may be issued a limited access scallop permit in only one category during a fishing year. The owner of a vessel issued a limited access scallop permit must elect a permit category for that vessel prior to the start of each fishing year and will have one opportunity to request a change in permit category by submitting an application to the Regional Director within 45 days of issuance of the vessel's permit. After this date, the vessel must remain in that permit category for the duration of the fishing year. Any DAS that a vessel uses prior to a change in permit category will be counted against its allocation received under any subsequent permit category.

(J) *Confirmation of Permit History.* See paragraph (a)(1)(i)(J) of this section.

(K) *Abandonment or voluntary relinquishment of permits.* See paragraph (a)(1)(i)(K) of this section.

(ii) *General scallop permit.* Any vessel of the United States that is not in possession of a limited access scallop permit, and that possesses, or lands per trip, more than 40 lb (18.14 kg) and less than or including 400 lb (181.44 kg) of shucked meats, or the equivalent amount of in-shell scallops (5 and 50 bu (176.2 L and 176.2 L), respectively), except vessels that fish exclusively in state waters for scallops, must carry on board a valid general scallop permit.

(3) *Summer flounder vessels.* Any vessel of the United States that fishes for or retains summer flounder in the EEZ must have been issued and carry on board a valid summer flounder permit, except for vessels other than party or charter vessels that observe the possession limit set forth in Sec. 648.105.

(i) *Moratorium permits (applicable through 1997).* (A) *Eligibility.* To be eligible to apply for a moratorium permit to fish for and retain summer flounder in excess of the possession limit in Sec. 648.105 in the EEZ, a vessel must have been issued a summer flounder moratorium permit in a previous year or be replacing a vessel that was issued a moratorium permit for a previous year.

(B) *Application/renewal restriction.* No one may apply for a summer flounder moratorium permit for a vessel after:

(1) The owner retires the vessel from the fishery.

(2) The vessel fails to land any summer flounder at least once within any 52-consecutive-week period.

(C) *Replacement vessels.* To be eligible for a moratorium permit, the replacement vessel must be replacing a vessel of substantially similar harvesting capacity that is judged unseaworthy by the USCG, for reasons other than lack of maintenance, or that involuntarily left the fishery during the moratorium. Both the entering and replaced vessels must be owned by the same person. Vessel permits issued to vessels that involuntarily leave the fishery may not be combined to create larger replacement vessels.

(ii) *Party and charter boat permits.* Any party or charter boat is eligible for a permit to fish for summer flounder, other than a summer flounder moratorium permit, if it is carrying passengers for hire. Such vessel must observe the possession limits specified in Sec. 648.105.

(iii) *Exemption permits.* Owners of summer flounder vessels seeking an exemption

from the minimum mesh requirement under the provisions of Sec. 648.104(b)(1) must apply to the Regional Director under paragraph (c) of this section at least 7 days prior to the date they wish the permit to become effective. The applicant must mark "Exemption Permit Request" on the permit application at the top. A permit issued under this paragraph (a)(3)(iii) does not meet the requirements of paragraph (a)(3)(i) of this section, but is subject to the other provisions of this section. Persons issued an exemption permit must surrender it to the Regional Director at least 1 day prior to the date they wish to fish not subject to the exemption. The Regional Director may impose temporary additional procedural requirements by publishing a notification in the Federal Register.

(4) *Surf clam and ocean quahog vessels.*--Any vessel of the United States that fishes for surf clams or ocean quahogs, except vessels taking surf clams and ocean quahogs for personal use or fishing exclusively within state waters, must have been issued and carry on board a valid surf clam or ocean quahog permit, respectively.

(i) *Moratorium permits.* A moratorium on new entrants to the eastern Maine EEZ ocean quahog fishery is established.

(A) *Eligibility.* To be eligible to apply for a moratorium permit to fish for and to retain ocean quahogs in excess of personal use or fishing exclusively within State of Maine waters, a vessel must have held a federal experimental ocean quahog fishery permit between the inception of the experimental fishery (October 1990) and September 1997 and the vessel must have landed at least one bushel of ocean quahogs from the zone north of 43° 50' as documented in either the Federal Multispecies or Shellfish Logbooks.

(B) *Application/renewal restriction.* No one may apply for an eastern Maine ocean quahog moratorium permit for a vessel after the owner retires the vessel from the fishery.

(C) *Replacement vessels.* To be eligible for a moratorium permit, the replacement vessel must be replacing a vessel of substantially similar harvesting capacity that is judged unseaworthy by the USCG, for reasons other than lack of maintenance, or that involuntarily left the fishery during the moratorium. Both the entering and replaced vessels must be owned by the same person. Vessel permits issued to vessels that involuntarily leave the fishery may not be combined to create larger replacement vessels.

(ii) *ITQ vessels.* Vessels which hold ITQs for ocean quahogs, and do not qualify for a moratorium permit, may fish in the EEZ areas north of 43° 50' north latitude that are certified free of PSP. These ITQ vessels would be required to land their catch in Maine, or if they land outside of Maine, they must have the catch certified safe for human consumption through testing at a facility with a NMFS/FDA/ state approved dockside PSP testing protocol.

(5) *Mackerel, squid, and butterfish vessels.*--Beginning on January 1, 1997, any vessel of the United States, including party or charter vessels, that fishes for, possesses, or lands mackerel, squid, or butterfish in or from the EEZ, must have been issued and carry on board a valid *Loligo* and butterfish moratorium permit, incidental catch permit, mackerel and *Illlex* permit or party/charter permit. This requirement does not apply to recreational fishing vessels. Until January 1, 1997, vessels that have been issued 1995 Federal mackerel, squid, and butterfish permits and are not otherwise subject to permit sanctions due to enforcement proceedings, may fish for, possess, or land mackerel, squid, or butterfish in or from the EEZ.

(i) *Loligo squid and butterfish moratorium permits.* (A) *Eligibility.* A vessel is

eligible for a moratorium permit to fish for and retain *Loligo* squid or butterfish in excess of the incidental catch allowance specified in paragraph (a)(5)(i) of this section, if it meets any of the following criteria:

(1) The vessel landed and sold at least 20,000 lb (9.07 mt) of *Loligo* squid or butterfish in any 30 consecutive day period between August 13, 1981, and August 13, 1993.

(2) The vessel is replacing such a vessel and meets the requirements of paragraph (a)(3)(i)(C) of this section.

(B) *Application/renewal restrictions.* No one may apply for an initial *Loligo* squid and butterfish moratorium permit for a vessel after:

(1) May 2, 1997.

(2) The owner retires the vessel from the fishery.

(C) *Replacement vessels.* See paragraph (a)(3)(i)(C) of this section.

(D) *Appeal of denial of permit.* (1) Any applicant denied a moratorium permit may appeal to the Regional Director within 30 days of the notice of denial. Any such appeal shall be in writing. The only ground for appeal is that the Regional Director erred in concluding that the vessel did not meet the criteria in paragraph (a)(5)(i)(A)(1) of this section. The appeal shall set forth the basis for the applicant's belief that the Regional Director's decision was made in error.

(2) The appeal may be presented, at the option of the applicant, at a hearing before an officer appointed by the Regional Director.

(3) The hearing officer shall make a recommendation to the Regional Director.

(4) The decision on the appeal by the Regional Director is the final decision of the Department of Commerce.

(ii) *Incidental catch permits.* Any vessel of the United States may obtain a permit to fish for or retain up to 2,500 lb (1.13 mt) of *Loligo* squid or butterfish as an incidental catch in another directed fishery. The incidental catch allowance may be revised by the Regional Director, based upon a recommendation by the Council, following the procedure set forth in Sec. 648.21.

(iii) *Mackerel and *Illex* squid permits.* Any vessel of the United States may obtain a permit under this section to fish for or retain Atlantic mackerel or *Illex* squid in or from the EEZ.

(iv) *Party and charter boat permits.* The owner of any party or charter boat must obtain a permit to fish for or retain in or from the EEZ mackerel, squid, or butterfish while carrying passengers for hire. (b) *Permit conditions.* Vessel owners who apply for a fishing vessel permit under this section must agree as a condition of the permit that the vessel and vessel's fishing activity, catch, and pertinent gear (without regard to whether such fishing occurs in the EEZ or landward of the EEZ, and without regard to where such fish or gear are possessed, taken, or landed), are subject to all requirements of this part, unless exempted from such requirements under this part. All such fishing activities, catch, and pertinent gear will remain subject to all applicable state requirements. Except as otherwise provided in this part, if a requirement of this part and a management measure required by a state or local law differ, any vessel owner permitted to fish in the EEZ for any species managed under this part must comply with the more restrictive requirement. Owners and operators of vessels fishing under the terms of a summer flounder moratorium permit must also agree, as a condition of the permit, not to land summer flounder in any state that the Regional Director has determined no longer has commercial quota available. A state not receiving an allocation of summer flounder shall be deemed to have no

commercial quota available. Owners or operators fishing for surf clams and ocean quahogs within waters under the jurisdiction of any state that requires cage tags are not subject to any conflicting Federal minimum size or tagging requirements. If a surf clam and ocean quahog requirement of this part differs from a surf clam and ocean quahog management measure required by a state that does not require cage tagging, any vessel owner or operator permitted to fish in the EEZ for surf clams and ocean quahogs must comply with the more restrictive requirement while fishing in state waters. However, surrender of a surf clam and ocean quahog vessel permit by the owner by certified mail addressed to the Regional Director allows an individual to comply with the less restrictive state minimum size requirement, so long as fishing is conducted exclusively within state waters.

(c) *Vessel permit applications*—(1) *General*. Applicants for a permit under this section must submit a completed application on an appropriate form obtained from the Regional Director. The application must be signed by the owner of the vessel, or the owner's authorized representative, and be submitted to the Regional Director at least 30 days before the date on which the applicant desires to have the permit made effective. The Regional Director will notify the applicant of any deficiency in the application pursuant to this section. Vessel owners who are eligible to apply for limited access or moratorium permits under this part shall provide information with the application sufficient for the Regional Director to determine whether the vessel meets the applicable eligibility requirements specified in this section.

(2) *Information requirements*. (i) An application for a permit issued under this section, in addition to the information specified in paragraph (c)(1) of this section, also must contain at least the following information, and any other information required by the Regional Director: Vessel name; owner name, mailing address, and telephone number; USCG documentation number and a copy of the vessel's current USCG documentation or, for a vessel not required to be documented under title 46 U.S.C., the vessel's state registration number and a copy of the current state registration; a copy of the vessel's current party/charter boat license (if applicable); home port and principal port of landing; length overall; GRT; NT; engine horsepower; year the vessel was built; type of construction; type of propulsion; approximate fish hold capacity; type of fishing gear used by the vessel; number of crew; number of party or charter passengers licensed to carry (if applicable); permit category; if the owner is a corporation, a copy of the current Certificate of Incorporation or other corporate papers showing the date of incorporation and the names of the current officers of the corporation, and the names and addresses of all shareholders owning 25 percent or more of the corporation's shares; if the owner is a partnership, a copy of the current Partnership Agreement and the names and addresses of all partners; if there is more than one owner, names of all owners having a 25-percent interest or more; the name and signature of the owner or the owner's authorized representative; and permit number of any current or, if expired, previous Federal fishery permit issued to the vessel.

(ii) An application for an initial limited access multispecies hook-gear permit must also contain the following information:

(A) If the engine horsepower was changed or a contract to change the engine horsepower had been entered into prior to May 1, 1996, such that it is different from that stated in the vessel's most recent application for a Federal fisheries permit before May 1, 1996, sufficient documentation to ascertain the different engine horsepower. However, the engine replacement must be completed within 1 year of

the date of when the contract for the replacement engine was signed.

(B) If the length, GRT, or NT was changed or a contract to change the length, GRT, or NT been entered into prior to May 1, 1996, such that it is different from that stated in the vessel's most recent application for a Federal fisheries permit, sufficient documentation to ascertain the different length, GRT, or NT. However, the upgrade must be completed within 1 year from the date when the contract for the upgrade was signed. (iii) An application for a multispecies permit must also contain a copy of the vendor installation receipt from a NMFS certified VTS vendor as described in Sec. 648.9, if the vessel has been issued a limited access multispecies Combination Vessel permit or individual DAS category permit, or if the applicant elects to use a VTS unit, although not required.

(iv) An application for a limited access scallop permit must also contain the following information:

(A) For every person named by applicants for limited access scallop permits pursuant to paragraph (c)(2)(i) of this section, the names of all other vessels in which that person has an ownership interest and for which a limited access scallop permit has been issued or applied for.

(B) If applying for full-time or part-time limited access scallop permit, or if opting to use a VTS unit, though not required, a copy of the vendor installation receipt from a NMFS-approved VTS vendor as described in Sec. 648.9.

(C) If applying to fish under the small dredge program set forth under Sec. 648.51(e), an annual declaration into the program.

(v) An application for a surf clam and ocean quahog permit must also contain the pump horsepower.

(d) *Fees.* The Regional Director may charge a fee to recover administrative expenses of issuing a permit required under this section. The amount of the fee is calculated in accordance with the procedures of the NOAA Finance Handbook, available from the Regional Director, for determining administrative costs of each special product or service. The fee may not exceed such costs and is specified with each application form. The appropriate fee must accompany each application; if it does not, the application will be considered incomplete for purposes of paragraph (e) of this section. Any fee paid by an insufficiently funded commercial instrument shall render any permit issued on the basis thereof null and void.

(e) *Issuance.* (1) Except as provided in subpart D of 15 CFR part 904, the Regional Director shall issue a permit within 30 days of receipt of the application, unless the application is deemed incomplete for the following reasons:

(i) The applicant has failed to submit a complete application. An application is complete when all requested forms, information, documentation, and fees, if applicable, have been received and the applicant has submitted all applicable reports specified in Sec. 648.7;

(ii) The application was not received by the Regional Director by the applicable deadline set forth in this section;

(iii) The applicant and applicant's vessel failed to meet all applicable eligibility requirements set forth in this section;

(iv) The applicant applying for a limited access multispecies combination vessel or individual DAS permit, a full-time or part-time limited access scallop permit, or electing to use a VTS, has failed to meet all of the VTS requirements specified in Secs. 648.9 and 648.10; or

(v) The applicant has failed to meet any other application requirements stated in

this part.

(2) *Incomplete applications.* Upon receipt of an incomplete or improperly executed application for any permit under this part, the Regional Director shall notify the applicant of the deficiency in the application. If the applicant fails to correct the deficiency within 30 days following the date of notification, the application will be considered abandoned.

(f) *Change in permit information.* Any change in the information specified in paragraph (c)(2) of this section must be submitted by the applicant in writing to the Regional Director within 15 days of the change, or the permit is void.

(g) *Expiration.* A permit expires upon the renewal date specified in the permit.

(h) *Duration.* A permit will continue in effect unless it is revoked, suspended, or modified under 15 CFR part 904, or otherwise expires, or ownership changes, or the applicant has failed to report any change in the information on the permit application to the Regional Director as specified in paragraph (f) of this section. However, the Regional Director may authorize the continuation of a permit if the new owner so requests. Applications for permit continuations must be addressed to the Regional Director.

(i) *Alteration.* Any permit that has been altered, erased, or mutilated is invalid.

(j) *Reissuance.* Permits may be issued by the Regional Director when requested in writing by the owner, stating the need for reissuance, the name of the vessel, and the fishing permit number assigned. An application for a reissued permit will not be considered a new application. The fee for a reissued permit shall be the same as for an initial permit.

(k) *Transfer.* Permits issued under this part are not transferable or assignable. A permit will be valid only for the fishing vessel and owner for which it is issued.

(l) *Display.* The permit must be carried, at all times, on board the vessel for which it is issued, and must be maintained in legible condition. The permit shall be subject to inspection upon request by any authorized official.

(m) *Sanctions.* The Assistant Administrator may suspend, revoke, or modify, any permit issued or sought under this section. Procedures governing enforcement-related permit sanctions or denials are found at subpart D of 15 CFR part 904.

Sec. 648.6 Dealer/processor permits. This section is not modified by this Amendment but is included so that Maine dealers and processors are fully informed of their responsibilities.

(a) *General.* All NE multispecies, sea scallop, summer flounder, surf clam and ocean quahog dealers, and surf clam and ocean quahog processors must have been issued and have in their possession a permit for such species issued under this section. As of January 1, 1997, all mackerel, squid, or butterfish dealers and all scup dealers must have been issued and have in their possession a valid dealers permit for those species.

(b) *Dealer/processor permit applications.* Same as Sec. 648.5(b).

(c) *Information requirements.* Applications must contain at least the following information, and any other information required by the Regional Director: Company name, place(s) of business (principal place of business if applying for a surf clam and ocean quahog permit), mailing address(es) and telephone number(s), owner's name, dealer permit number (if a renewal), name and signature of the person responsible for the truth and accuracy of the application, a copy of the certificate of incorporation

if the business is a corporation, and a copy of the Partnership Agreement and the names and addresses of all partners if the business is a partnership.

(d) *Fees.* Same as Sec. 648.4(d).

(e) *Issuance.* Except as provided in subpart D of 15 CFR part 904, the Regional Director will issue a permit at any time during the fishing year to an applicant, unless the applicant fails to submit a completed application. An application is complete when all requested forms, information, and documentation have been received and the applicant has submitted all applicable reports specified in Sec. 648.7 during the 12 months immediately preceding the application. Upon receipt of an incomplete or improperly executed application, the Regional Director will notify the applicant of the deficiency in the application. If the applicant fails to correct the deficiency within 30 days following the date of notification, the application will be considered abandoned.

(f) *Expiration.* Same as Sec. 648.4(g).

(g) *Duration.* A permit is valid until it is revoked, suspended, or modified under 15 CFR part 904, or otherwise expires, or ownership changes, or the applicant has failed to report any change in the information on the permit application to the Regional Director as required by paragraph (j) of this section.

(h) *Reissuance.* Reissued permits, for otherwise valid permits, may be issued by the Regional Director when requested in writing by the applicant, stating the need for reissuance and the Federal dealer permit number assigned. An application for a reissued permit will not be considered a new application. An appropriate fee may be charged.

(i) *Transfer.* Permits issued under this part are not transferable or assignable. A permit is valid only for the person to whom, or other business entity to which, it is issued.

(j) *Change in application information.* Same as Sec. 648.5(k).

(k) *Alteration.* Same as Sec. 648.4(i).

(l) *Display.* Same as Sec. 648.5(m).

(m) *Federal versus state requirements.* If a requirement of this part differs from a fisheries management measure required by state law, any dealer issued a Federal dealer permit must comply with the more restrictive requirement.

(n) *Sanctions.* Same as Sec. 648.4(m).

Sec. 648.7 Recordkeeping and reporting requirements. This section is not modified by this Amendment but is included so that Maine fishermen, dealers, and processors are fully informed of their responsibilities.

(a) *Dealers--(1) Weekly report.* Federally-permitted dealers must send by mail to the Regional Director, or official designee, on a weekly basis on forms supplied by or approved by the Regional Director a report of fish purchases, except that surf clam and ocean quahog dealers or processors are required only to report surf clam and ocean quahog purchases. If authorized in writing by the Regional Director, dealers may submit reports electronically or through other media. The following information, and any other information required by the Regional Director, must be provided in the report:

(i) Summer flounder, scallop, NE multispecies, and, as of January 1, 1997, mackerel, squid or butterfish, and scup dealers must provide: Name and mailing address of dealer, dealer number, name and permit number of the vessels from which fish are landed or received, dates of purchases, pounds by species, price by

species, and port landed. If no fish are purchased during the week, a report so stating must be submitted. All report forms must be signed by the dealer or other authorized individual.

(ii) Surf clam and ocean quahog processors and dealers must provide: Date of purchase or receipt; name, permit number and mailing address; number of bushels by species; cage tag numbers; allocation permit number; vessel name and permit number; price per bushel by species. Dealers must also report disposition of surf clams or ocean quahogs, including name and permit number of recipients.

Processors must also report size distribution and meat yield per bushel by species.

(2) *Annual report.* All persons required to submit reports under paragraph (a)(1) of this section are required to submit the following information on an annual basis, on forms supplied by the Regional Director:

(i) Summer flounder, scallop, NE multispecies, and, as of January 1, 1997, mackerel, squid, or butterfish, and scup dealers must complete the "Employment Data" section of the Annual Processed Products Reports; completion of the other sections of that form is voluntary. Reports must be submitted to the address supplied by the Regional Director.

(ii) Surf clam and ocean quahog processors and dealers must provide the average number of processing plant employees during each month of the year just ended; average number of employees engaged in production of processed surf clam and ocean quahog products, by species, during each month of the year just ended; plant capacity to process surf clam and ocean quahog shellstock, or to process surf clam and ocean quahog meats into finished products, by species; an estimate, for the next year, of such processing capacities; and total payroll for surf clam and ocean quahog processing, by month. If the plant processing capacities described in this paragraph (a)(2)(ii) change more than 10 percent during any year, the processor shall promptly notify the Regional Director.

(b) *Vessel owners--(1) Fishing Vessel Log Reports--* (i) Owners of vessels issued a moratorium permit for summer flounder, mackerel, squid, or butterfish, or scup, or a permit for sea scallop, or multispecies. The owner or operator of any vessel issued a moratorium vessel permit for summer flounder, or, as of January 1, 1997, for mackerel, squid, or butterfish, or scup, or a permit for sea scallops, or NE multispecies, must maintain on board the vessel, and submit, an accurate daily fishing log report for all fishing trips, regardless of species fished for or taken, on forms supplied by or approved by the Regional Director. If authorized in writing by the Regional Director, vessel owners or operators may submit reports electronically, for example by using a VTS or other media. At least the following information, and any other information required by the Regional Director, must be provided: Vessel name; USCG documentation number (or state registration number, if undocumented); permit number; date/time sailed; date/time landed; trip type; number of crew; number of anglers (if a charter or party boat); gear fished; quantity and size of gear; mesh/ring size; chart area fished; average depth; latitude/longitude (or loran station and bearings); total hauls per area fished; average tow time duration; pounds, by species, of all species landed or discarded; dealer permit number; dealer name; date sold; port and state landed; and vessel operator's name, signature, and operator permit number (if applicable).

(ii) Surf clam and ocean quahog vessel owners and operators. The owner or operator of any vessel conducting any surf clam and ocean quahog fishing operations, except those conducted exclusively in waters of a state that requires cage

tags or when he/she has surrendered the surf clam and ocean quahog fishing vessel permit, shall maintain, on board the vessel, an accurate daily fishing log for each fishing trip, on forms supplied by the Regional Director, showing at least: Name and permit number of the vessel, total amount in bushels of each species taken, date(s) caught, time at sea, duration of fishing time, locality fished, crew size, crew share by percentage, landing port, date sold, price per bushel, buyer, tag numbers from cages used, quantity of surf clams and ocean quahogs discarded, and allocation permit number.

(iii) Owners of party and charter boats. The owner of any party or charter boat issued a summer flounder or scup permit other than a moratorium permit and carrying passengers for hire shall maintain on board the vessel, and submit, an accurate daily fishing log report for each charter or party fishing trip that lands summer flounder or scup, unless such a vessel is also issued a moratorium permit for summer flounder, a permit for sea scallops or multispecies, or, as of January 1, 1997, a moratorium permit for mackerel, squid, or butterfish, or scup, in which case a fishing log report is required for each trip regardless of species retained. If authorized in writing by the Regional Director, vessel owners may submit reports electronically, for example, by using a VTS or other media. At least the following information, and any other information required by the Regional Director, must be provided: Vessel name; USGC documentation number (or state registration number, if undocumented); permit number; date/time sailed; date/time landed; trip type; number of crew; number of anglers; gear fished; quantity and size of gear; chart area fished; average depth; latitude/longitude (or loran station and bearings); average tow time duration; count, by species, of all species landed or discarded; port and state landed; and vessel operator's name, signature, and operator permit number (if applicable).

(c) *When to fill out a log report.* Log reports required by paragraph (b)(1)(i) of this section must be filled out, except for information required but not yet ascertainable, before offloading or landing has begun. All information must be filled out before starting the next fishing trip. Log reports required by paragraph (b)(1)(ii) of this section must be filled out before landing any surf clams or ocean quahogs. Log reports required by paragraph (b)(1)(iii) of this section must be filled out, except for information required but not yet ascertainable, before offloading or landing has begun. All information required in paragraph (b)(1)(iii) of this section must be filled out for each fishing trip by the end of each fishing trip.

(d) *Inspection.* All persons required to submit reports under this section, upon the request of an authorized officer, or by an employee of NMFS designated by the Regional Director to make such inspections, must make immediately available for inspection copies of the required reports that have been submitted, or should have been submitted, and the records upon which the reports were based. At any time during or after a trip, owners and operators must make immediately available for inspection the fishing log reports currently in use, or to be submitted.

(e) *Record retention.* Copies of reports, and records upon which the reports were based, must be retained and be available for review for 1 year after the date of the last entry on the report. Copies of fishing log reports must be retained and available for review for 1 year after the date of the last entry on the log. Dealers must retain required reports and records at their principal place of business.

(f) *Submitting reports--(1) Dealer or processor reports.* Weekly dealer or processor reports must be received or postmarked, if mailed, within 3 days after the end of each reporting week. Each dealer will be sent forms and instructions, including the address

to which to submit reports, shortly after receipt of a dealer permit. If no fish or fish product was purchased during a week, a report so stating must be submitted. Annual reports for a calendar year must be submitted to NMFS Statistics, and must be postmarked by February 10 of the following year. Contact the Regional Director for the address of NMFS Statistics.

(2) *Fishing vessel log reports.* Fishing log reports must be received or postmarked, if mailed, within 15 days after the end of the reporting month. Each owner will be sent forms and instructions, including the address to which to submit reports, shortly after receipt of a Federal fisheries permit. If no fishing trip is made during a month, a report so stating must be submitted. Annual reports must be submitted to NMFS Statistics and must be postmarked by February 10 of the following year.

(3) *At-sea purchasers, receivers, or processors.* At-sea purchasers, receivers, or processors. All persons purchasing, receiving, or processing any summer flounder, or, as of January 1, 1997, mackerel, squid, or butterfish, or scup, at sea for landing at any port of the United States must submit information identical to that required by paragraph (a)(1) or (a)(2) of this section, as applicable, and provide those reports to the Regional Director or a designee on the same frequency basis.

Sec. 648.14 Prohibitions. This section is revised (**in bold**) to include ocean quahogs landed in the State of Maine or by ITQ vessels that have fished the eastern Maine zone and choose to land in another state.

(a) In addition to the general prohibitions specified in Sec. 600.725 of this chapter, it is unlawful for any person to do any of the following:

(1) Fail to report to the Regional Director within 15 days any change in the information contained in an applicable vessel, operator, or dealer/processor permit application.

(2) Falsify or fail to affix and maintain vessel markings as required by Sec. 648.8.

(3) Make any false statement in connection with an application, declaration, or report under this part.

(4) Fail to comply in an accurate and timely fashion with the log report, reporting, record retention, inspection, and other requirements of Sec. 648.7, or submit or maintain false information in records and reports required to be kept or filed under Sec. 648.7.

(5) Alter, erase, or mutilate any permit issued under this part.

(6) Alter, erase, mutilate, duplicate or cause to be duplicated, or steal any cage tag issued under this part.

(7) Tamper with, damage, destroy, alter, or in any way distort, render useless, inoperative, ineffective, or inaccurate the VTS, VTS unit, or VTS signal required to be installed on or transmitted by vessel owners or operators required to use a VTS by this part.

(8) Assault, resist, oppose, impede, harass, intimidate, or interfere with or bar by command, impediment, threat, or coercion either a NMFS-approved observer or sea sampler aboard a vessel conducting his or her duties aboard a vessel, or an authorized officer conducting any search, inspection, investigation, or seizure in connection with enforcement of this part.

(9) Refuse to carry an observer or sea sampler if requested to do so by the Regional Director.

(10) To refuse reasonable assistance to either a NMFS-approved observer or sea sampler conducting his or her duties aboard a vessel.

(11) Fish for surf clams or ocean quahogs in any area closed to surf clam or ocean quahog fishing.

(12) Fish for, take, catch, harvest or land any species of fish regulated by this part in or from the EEZ, unless the vessel has a valid and appropriate permit issued under this part and the permit is on board the vessel and has not been surrendered, revoked, or suspended.

(13) Purchase, possess or receive for a commercial purpose or attempt to purchase possess or receive for a commercial purpose any species regulated under this part unless in possession of a valid dealer permit issued under this part, except that this prohibition does not apply to species that are purchased or received from a vessel not issued a permit under this part and fishing exclusively in state waters.

(14) Produce, or cause to be produced, cage tags required under this part without written authorization from the Regional Director.

(15) Tag a cage with a tag that has been rendered null and void or with a tag that has been previously used.

(16) Tag a cage of surf clams with an ocean quahog cage tag or tag a cage of ocean quahogs with a surf clam cage tag.

(17) Possess, import, export, transfer, land, have custody or control of any species of fish regulated pursuant to this part that do not meet the minimum size provisions in this part, unless such species were harvested exclusively within state waters by a vessel not issued a permit under this part or whose permit has been surrendered in accordance with applicable regulations.

(18) Possess an empty cage to which a cage tag required by Sec. 648.75 is affixed or possess any cage that does not contain surf clams or ocean quahogs and to which a cage tag required by Sec. 648.75 is affixed.

(19) Land or possess, after offloading, any cage holding surf clams or ocean quahogs without a cage tag or tags required by Sec. 648.75, unless the person can demonstrate the inapplicability of the presumption set forth in Sec. 648.75(t)(1)(iii).

(20) Sell null and void tags.

(21) Shuck surf clams or ocean quahogs harvested in or from the EEZ at sea, unless permitted by the Regional Director under the terms of Sec. 648.74.

(22) Receive for a commercial purpose other than transport, surf clams or ocean quahogs harvested in or from the EEZ, whether or not they are landed under an allocation under Sec. 648.70, unless issued a dealer/processor permit under this part.

(23) Land unshucked surf clams or ocean quahogs harvested in or from the EEZ in containers other than cages from vessels capable of carrying cages.

(24) Offload unshucked surf clams or ocean quahogs harvested in or from the EEZ from vessels not capable of carrying cages other than directly into cages. **The exception to this prohibition is ocean quahogs from the eastern Maine zone north of 43° 50' from which all landings must comply with Maine landing laws, or for ITQ vessels that fish this zone and choose not to land in Maine, they must land their catch where it can be certified safe for human consumption through testing at facilities with a NMFS/FDA/state approved dockside PSP testing protocol. These measures are essential for the protection of the public health and are appropriate for ocean quahogs that are more often consumed raw rather than processed.**

(25) Fish for surf clams or ocean quahogs in the EEZ without giving prior

notification, or fail to comply with any of the notification requirements specified in Sec. 648.15(b).

(26) Fish for, retain, or land both surf clams and ocean quahogs in or from the EEZ on the same trip.

(27) Fish for, retain, or land ocean quahogs in or from the EEZ on a trip designated as a surf clam fishing trip under Sec. 648.15(b), or fish for, retain, or land surf clams in or from the EEZ on a trip designated as an ocean quahog fishing trip under Sec. 648.15(b).

(28) Fail to offload any surf clams or ocean quahogs harvested in the EEZ from a trip discontinued pursuant to Sec. 648.15(b) prior to commencing fishing operations in waters under the jurisdiction of any state, **with the exception of the State of Maine where mixed (joint EEZ and Territorial Sea) trips are allowed.**

(29) Land or possess any surf clams or ocean quahogs harvested in or from the EEZ in excess of, or without, an individual allocation.

(30) Transfer any surf clams or ocean quahogs harvested in or from the EEZ to any person for a commercial purpose, other than transport, without a surf clam or ocean quahog processor or dealer permit.

(31) Fish for, possess, or land NE multispecies, unless:

Sec. 648.15 Facilitation of enforcement. This section is revised (**in bold**) to include ocean quahogs landed in the State of Maine.

(a) *General.* See Sec. 600.504 of this chapter.

(b) *Special notification requirements applicable to surf clam and ocean quahog vessel owners and operators.* (1) Vessel owners or operators are required to call the NMFS Office of Law Enforcement nearest to the point of offloading (contact the Regional Director for locations and phone numbers) and accurately provide the following information prior to the departure of their vessel from the dock to fish for surf clams or ocean quahogs in the EEZ: Name of the vessel; NMFS permit number assigned to the vessel; expected date and time of departure from port; whether the trip will be directed on surf clams, ocean quahogs, or **Maine ocean quahogs**; expected date, time, and location of landing; and name of the individual providing notice. **The Regional Administrator has the discretion to suspend this requirement for the Maine zone (if he believes it is not necessary for quota enhancement) after consultation with the State of Maine and upon notification of the Mid-Atlantic Fishery Management Council.**

(2) Owners or operators that have given notification of a fishing trip under this paragraph (b) who decide to cancel or postpone the trip prior to departure must immediately provide notice of cancellation by telephone to the Office of Law Enforcement to which the original notification was provided. A separate notification shall be provided for the next fishing trip. Owners or operators that discontinue a fishing trip in the EEZ must immediately provide notice of discontinuance by telephone to the Office of Law Enforcement to which the original notification was provided. The owner or operator providing notice of discontinuance shall advise of any changes in landing time or port of landing. The owner or operator discontinuing a fishing trip in the EEZ must return to port and offload any surf clams or ocean quahogs prior to commencing fishing operations in the waters under the jurisdiction of any state.

(3) The vessel permits, the vessel, its gear, and catch shall be subject to

inspection upon request by an authorized officer.

Subpart E--Management Measures for the Atlantic Surf Clam and Ocean Quahog Fisheries

Sec. 648.70 Annual individual allocations.

(a) *General.* (1) For each fishing year, the Regional Director shall determine the allocation of surf clams and ocean quahogs for each vessel owner issued an allocation for the preceding fishing year, by multiplying the quotas specified for each species by the Regional Director under Sec. 648.71 by the allocation percentage, specified for that owner on the allocation permit for the preceding fishing year, adjusted to account for any transfer pursuant to paragraph (b) of this section. These allocations shall be made in the form of an allocation permit specifying for each species the allocation percentage and the allocation in bushels. Such permits shall be issued on or before December 15, to the registered holders who were assigned an allocation by November 1. The total number of bushels of allocation shall be divided by 32 to determine the appropriate number of cage tags to be issued or acquired under Sec. 648.75. Amounts of allocation 0.5 or smaller created by this division shall be rounded downward to the nearest whole number and amounts of allocation greater than 0.5 created by this division shall be rounded upward to the nearest whole number so that allocations are specified in whole cages. An allocation permit is only valid for the entity for which it is issued.

(2) The Regional Director may, after publication of a fee notification in the Federal Register, charge a permit fee before issuance of the permit to recover administrative expenses. Failure to pay the fee will preclude issuance of the permit.

(b) *Transfers--*(1) *Allocation percentage.* Subject to the approval of the Regional Director, part or all of an allocation percentage may be transferred, in amounts equivalent to not less than 160 bu (8,500 L) (i.e., 5 cages) in the year in which the transfer is made, to any person eligible to own a documented vessel under the terms of 46 U.S.C. 12102(a). Approval of a transfer by the Regional Director and for a new allocation permit reflecting that transfer may be requested by submitting a written application for approval of the transfer and for issuance of a new allocation permit to the Regional Director at least 10 days before the date on which the applicant desires the transfer to be effective, in the form of a completed transfer log supplied by the Regional Director. The transfer is not effective until the new holder receives a new or revised annual allocation permit from the Regional Director. An application for transfer may not be made between October 15 and December 31 of each year.

(2) *Cage tags.* Cage tags issued pursuant to Sec. 648.75 may be transferred in quantities of not less than 5 tags at any one time, subject to the restrictions and procedure specified in paragraph (b)(1) of this section; provided that application for such cage tag transfers may be made at any time before December 10 of each year and the transfer is effective upon the receipt by the transferee of written authorization from the Regional Director.

(3) *Review.* If the Regional Director determines that the applicant has been issued a Notice of Permit Sanction for a violation of the Magnuson Act that has not been resolved, he/she may decline to approve such transfer pending resolution of the matter.

Sec. 648.71 Catch quotas. This section is revised (**in bold**) to include ocean quahogs in the eastern Maine zone.

(a) *Surf clams.* The amount of surf clams that may be caught annually by fishing vessels subject to these regulations will be specified by the Assistant Administrator, on or about December 1 of each year, within the range of 1.85 to 3.4 million bu (98.5 to 181 million L).

(1) *Establishing quotas.* (i) Prior to the beginning of each year, the MAFMC, following an opportunity for public comment, will recommend to the Assistant Administrator quotas and estimates of DAH and DAP within the ranges specified. In selecting the quota, the MAFMC shall consider current stock assessments, catch reports, and other relevant information concerning:

(A) Exploitable and spawning biomass relative to the OY.

(B) Fishing mortality rates relative to the OY.

(C) Magnitude of incoming recruitment.

(D) Projected effort and corresponding catches.

(E) Geographical distribution of the catch relative to the geographical distribution of the resource.

(F) Status of areas previously closed to surf clam fishing that are to be opened during the year and areas likely to be closed to fishing during the year.

(ii) The quota shall be set at that amount that is most consistent with the objectives of the Atlantic Surf Clam and Ocean Quahog FMP. The Assistant Administrator may set quotas at quantities different from the MAFMC's recommendations only if he/she can demonstrate that the MAFMC's recommendations violate the national standards of the Magnuson Act and the objectives of the Atlantic Surf Clam and Ocean Quahog FMP.

(2) *Report.* Prior to the beginning of each year, the Regional Director shall prepare a written report, based on the latest available stock assessment report prepared by NMFS, data reported by harvesters and processors according to these regulations, and other relevant data. The report will include consideration of:

(i) Exploitable biomass and spawning biomass relative to OY.

(ii) Fishing mortality rates relative to OY.

(iii) Magnitude of incoming recruitment.

(iv) Projected effort and corresponding catches.

(v) Status of areas previously closed to surf clams fishing that are to be opened during the year and areas likely to be closed to fishing during the year.

(vi) Geographical distribution of the catch relative to the geographical distribution of the resource.

(3) *Public review.* Based on the information presented in the report, and in consultation with the MAFMC, the Assistant Administrator shall propose an annual surf clam quota and an annual ocean quahog quota and shall publish them in the Federal Register. Comments on the proposed annual quotas may be submitted to the Regional Director within 30 days after publication. The Assistant Administrator shall consider all comments, determine the appropriate annual quotas, and publish the annual quotas in the Federal Register on or about December 1 of each year.

(b) *Ocean quahogs.* The amount of ocean quahogs that may be caught by fishing vessels subject to these regulations shall be specified annually by the Assistant Administrator, on or about December 1, within the range of 4 to 6 million bu (213 to

319.4 million L), following the same procedures set forth in paragraph (a) of this section for surf clams.

(c) **The eastern Maine ocean quahog fishery for a zone north of 43° 50' will be managed under a separate (from the traditional ITQ cage tag system identified immediately above in b) quota system to be administered by the National Marine Fisheries Service (NMFS). The initial quota will be a maximum of 100,000 bushels (8 million pounds in the shell) and will include all harvests (except ITQ allocation) from both federal and State of Maine waters from this zone. The quota could be adjusted (increased or decreased) after a resource survey is performed and an assessment is conducted. Any changes to the 100,000 bushel initial maximum quota will occur during the Council's annual review process for this FMP. The range of the initial quota (until an assessment is conducted) will set annually between a maximum of 100,000 bushels with a minimum of 17,000 bushels.**

(d) ITQ vessels landing from this eastern Maine zone would count towards the overall ocean quahog quota identified in (b) above and not towards the eastern Maine quota (c).

Sec. 648.72 Minimum surf clam size.

(a) *Minimum length.* The minimum length for surf clams is 4.75 inches (12.065 cm).

(b) *Determination of compliance.* No more than 50 surf clams in any cage may be less than 4.75 inches (12.065 cm) in length. If more than 50 surf clams in any inspected cage of surf clams are less than 4.75 inches (12.065 cm) in length, all cages landed by the same vessel from the same trip are deemed to be in violation of the minimum size restriction.

(c) *Suspension.* Upon the recommendation of the MAFMC, the Regional Director may suspend annually, by publication in the Federal Register, the minimum shell-height standard, unless discard, catch, and survey data indicate that 30 percent of the surf clams are smaller than 4.75 inches (12.065 cm) and the overall reduced shell height is not attributable to beds where the growth of individual surf clams has been reduced because of density dependent factors.

(d) *Measurement.* Length is measured at the longest dimension of the surf clam shell.

Sec. 648.73 Closed areas. This section is revised (**in bold**) to include ocean quahogs in the eastern Maine zone.

(a) *Areas closed because of environmental degradation.* Certain areas are closed to all surf clam and ocean quahog fishing because of adverse environmental conditions. These areas will remain closed until the Assistant Administrator determines that the adverse environmental conditions no longer exist. If additional areas are identified by the Assistant Administrator as being contaminated by the introduction or presence of hazardous materials or pollutants, they may be closed by the Assistant Administrator in accordance with paragraph (c) of this section. The areas closed are:

(1) *Boston Foul Ground.* The waste disposal site known as the "Boston Foul Ground" and located at 42 deg.25'36" N. lat., 70 deg.35'00" W. long., with a radius of

1 nm in every direction from that point.

(2) *New York Bight*. The polluted area and waste disposal site known as the "New York Bight Closure" and located at 40 deg.25'04" N. lat., 73 deg.42'38" W. long., and with a radius of 6 nm in every direction from that point, extending farther northwestward, westward, and southwestward between a line from a point on the arc at 40 deg.31'00" N. lat., 73 deg.43'38" W. long., directly toward Atlantic Beach Light in New York to the limit of state territorial waters of New York; and a line from a point on the arc at 40 deg.19'48" N. lat., 73 deg.45'42" W. long., to a point at the limit of the state territorial waters of New Jersey at 40 deg.14'00" N. lat., 73 deg.55'42" W. long.

(3) *106 Dumpsite*. The toxic industrial dump site known as the "106 Dumpsite" and located between 38 deg.40'00" and 39 deg.00'00" N. lat. and between 72 deg.00'00" and 72 deg.30'00" W. long.

(4) The State of Maine, or any other State with a PSP monitoring program certified under the National Shellfish Sanitation Act may prohibit landings of EEZ caught ocean quahogs because of unsafe levels of PSP.

(b) *Areas closed because of small surf clams*. Areas may be closed because they contain small surf clams.

(1) *Closure*. The Assistant Administrator may close an area to surf clams and ocean quahog fishing if he/she determines, based on logbook entries, processors' reports, survey cruises, or other information, that the area contains surf clams of which:

(i) Sixty percent or more are smaller than the minimum size (4.5 inches (11.43 cm)); and

(ii) Not more than 15 percent are larger than 5.5 inches (13.97 cm) in size.

(2) *Reopening*. The Assistant Administrator may reopen areas or parts of areas closed under paragraph (b)(1) of this section if he/she determines, based on survey cruises or other information, that:

(i) The average length of the dominant (in terms of weight) size class in the area to be reopened is equal to or greater than 4.75 inches (12.065 cm); or

(ii) The yield or rate of growth of the dominant shell-height class in the area to be reopened would be significantly enhanced through selective, controlled, or limited harvest of surf clams in the area.

(c) *Procedure*. (1) The Regional Director may hold a public hearing on the proposed closure or reopening of any area under paragraph (a) or (b) of this section. The Assistant Administrator shall publish notification in the Federal Register of any proposed area closure or reopening, including any restrictions on harvest in a reopened area. Comments on the proposed closure or reopening may be submitted to the Regional Director within 30 days after publication. The Assistant Administrator shall consider all comments and publish the final notification of closure or reopening, and any restrictions on harvest, in the Federal Register. Any adjustment to harvest restrictions in a reopened area shall be made by notification in the Federal Register. The Regional Director shall send notice of any action under this paragraph (c)(1) to each surf clam and ocean quahog processor and to each surf clam and ocean quahog permit holder.

(2) If the Regional Director determines, as the result of testing by state, Federal, or private entities, that a closure of an area under paragraph (a) of this section is necessary to prevent any adverse effects fishing may have on the public health, he/she may close the area for 60 days by publication of notification in the Federal

Register, without prior comment or public hearing. If an extension of the 60-day closure period is necessary to protect the public health, the hearing and notice requirements of paragraph (c)(1) of this section shall be followed.

Sec. 648.74 Shucking at sea.

(a) *Observers.* (1) The Regional Director may allow the shucking of surf clams or ocean quahogs at sea if he/she determines that an observer carried aboard the vessel can measure accurately the total amount of surf clams and ocean quahogs harvested in the shell prior to shucking.

(2) Any vessel owner may apply in writing to the Regional Director to shuck surf clams or ocean quahogs at sea. The application shall specify: Name and address of the applicant, permit number of the vessel, method of calculating the amount of surf clams or ocean quahogs harvested in the shell, vessel dimensions and accommodations, and length of fishing trip.

(3) The Regional Director shall provide an observer to any vessel owner whose application is approved. The owner shall pay all reasonable expenses of carrying the observer on board the vessel.

(4) Any observer shall certify at the end of each trip the amount of surf clams or ocean quahogs harvested in the shell by the vessel. Such certification shall be made by the observer's signature on the daily fishing log required by Sec. 648.7.

(b) *Conversion factor.* (1) Based on the recommendation of the MAFMC, the Regional Director may allow shucking at sea of surf clams or ocean quahogs, with or without an observer, if he/she determines a conversion factor for shucked meats to calculate accurately the amount of surf clams or ocean quahogs harvested in the shell.

(2) The Regional Director shall publish notification in the Federal Register specifying a conversion factor together with the data used in its calculation for a 30-day comment period. After consideration of the public comments and any other relevant data, the Regional Director may publish final notification in the Federal Register specifying the conversion factor.

(3) If the Regional Director makes the determination specified in paragraph (b)(1) of this section, he/she may authorize the vessel owner to shuck surf clams or ocean quahogs at sea. Such authorization shall be in writing and be carried aboard the vessel.

Sec. 648.75 Cage identification. This section is revised (**in bold**) to include ocean quahogs in the eastern Maine zone.

(a) *Tagging.* Before offloading, all cages that contain surf clams or ocean quahogs must be tagged with tags acquired annually under paragraph (b) of this section. A tag must be fixed on or as near as possible to the upper crossbar of the cage for every 60 ft (1,700 L), or portion thereof, of the cage. A tag or tags must not be removed until the cage is emptied by the processor, at which time the processor must promptly remove and retain the tag(s) for collection or disposal as specified by the Regional Director. **The exception to this is landings from the eastern Maine ocean quahog zone fishery where all ocean quahogs must meet Maine landing laws and comply with the State of Maine bag tag requirements to meet the PSP monitoring to ensure the public safety relative to PSP and are thus exempt from**

the cage tag requirements. Vessels which hold ITQs for ocean quahogs, and do not qualify for a moratorium permit, may fish in the EEZ areas north of 43° 50' north latitude that are certified free of PSP, but these vessels would be required to land their catch in Maine, or if they land outside of Maine, they must have the catch certified safe for human consumption through testing at a facility with a NMFS/FDA/state approved dockside PSP testing protocol. If these vessels land outside of the State of Maine they too may land in small quantities of bushels rather than cages which is consistent with the market for raw consumption rather than processed product.

(b) *Issuance.* The Regional Director will issue a supply of tags to each individual vessel owner qualifying for an allocation under Sec. 648.70 prior to the beginning of each fishing year or he/she may specify, in the Federal Register, a vendor from whom the tags shall be purchased. The number of tags will be based on the owner's allocation. Each tag represents 32 bu (1,700 L) of allocation.

(c) *Expiration.* Tags will expire at the end of the fishing year for which they are issued, or if rendered null and void in accordance with 15 CFR part 904.

(d) *Return.* Tags that have been rendered null and void must be returned to the Regional Director, if possible.

(e) *Loss.* Loss or theft of tags must be reported by the owner, numerically identifying the tags to the Regional Director by telephone as soon as the loss or theft is discovered and in writing within 24 hours. Thereafter, the reported tags shall no longer be valid for use under this part.

(f) *Replacement.* Lost or stolen tags may be replaced by the Regional Director if proper notice of the loss is provided by the person to whom the tags were issued. Replacement tags may be purchased from the Regional Director or a vendor with a written authorization from the Regional Director.

(g) *Transfer.* See Sec. 648.70(b)(2).

(h) *Presumptions.* Surf clams and ocean quahogs found in cages without a valid state tag are deemed to have been harvested in the EEZ and to be part of an individual's allocation, unless the individual demonstrates that he/she has surrendered his/her Federal vessel permit issued under Sec. 648.4(a)(4) and conducted fishing operations exclusively within waters under the jurisdiction of any state. Surf clams and ocean quahogs in cages with a Federal tag or tags, issued and still valid pursuant to this section, affixed thereto are deemed to have been harvested by the individual allocation holder to whom the tags were issued under Sec. 648.75(b) or transferred under Sec. 648.70(b).

APPENDIX 6 MAINE MARINE RESOURCES LAWS AND REGULATIONS

Sec. 6856. Shellfish sanitation and certificate

1. **Certified activities.** A shellfish certificate authorizes a wholesale seafood license holder or a shellfish transportation license holder to undertake the activities expressly authorized therein, which may include buying and selling, shipping, transporting, shucking or other processing of shellfish. A wholesale seafood license or shellfish transportation license shall also be necessary to undertake the activities authorized under those licenses.

2. **Express authorizations.** The commissioner shall expressly state the authorized activities on each shellfish certificate. The activities authorized shall be sufficient to allow the holder to carry out his wholesale or transportation operations, provided they may be limited to the extent required to protect the public health.

3. **Depuration certificate.** The commissioner may issue a depuration certificate to a wholesale seafood license holder that authorizes the holder to take shellfish from closed areas for depuration, processing and transportation. The certificate must establish limits on harvesting, depurating and processing methods and any other provisions required to assure the public safety. The commissioner may permit depuration of shellfish not contaminated by paralytic shellfish poisoning if it is established that the water used during depuration will not contaminate the shellfish with paralytic shellfish poisoning. To ensure consistency with municipal shellfish conservation programs, established pursuant to section 6671, the commissioner must consult with a municipal shellfish conservation committee before taking action to open an area within that municipality for depuration digging. The commissioner may continue to issue controlled purification certificates for areas that were restricted to depuration digging on September 1, 1989, without consulting municipalities.

4. **Regulations.** The commissioner may adopt or amend regulations concerning:

- A. The procedures for issuing certificates and the required qualifications for each type of certificate;
- B. The minimum sanitation standards for establishments and vehicles;
- C. The sanitation and quality control standards for shellfish and their products;
- D. The methods for taking, handling, shipping, transporting and processing of shellfish taken from closed areas;
- E. The records and reports of takings, purchases, processing, sales, shipping and transporting of shellfish;
- F. The labeling or marking of shipments of shellfish; and
- G. Other regulations necessary to the public health.

The regulations shall be based on the particular operational requirements of each activity, the most recently adopted federal sanitation standards and the most recent generally accepted research data, in a manner so as to protect the public health and

safety while allowing reasonable use of the state s shellfish.

5. Right of entry. Whenever a certificate has been issued under this section, the commissioner, or his agent, shall have access to any establishment or part thereof for the purpose of inspection or collection of samples. Denial of access shall be grounds for suspension or revocation of any certificate or license under the provisions of section 6373.

6. Products embargoed and condemned. The commissioner, or his agent, shall indefinitely embargo, condemn or order to be destroyed any shellfish or shellfish product in any establishment whenever it is determined that the product is of unsound quality, contains any filthy, decomposed or putrid substance, or may be poisonous or deleterious to health, or otherwise unsafe. The commissioner and his agent shall cooperate with those state and federal agencies, having similar responsibility, in the protection of public health and in enforcing the order to embargo, condemn or destroy.

In the event that any shellfish or shellfish product in any establishment is embargoed, condemned or ordered destroyed, the commissioner, or his agent shall, as soon thereafter as practical, notify the owner in writing of the amount and kind of shellfish or shellfish product embargoed, condemned or destroyed.

ARTICLE 1--Licenses

Sec. 6731. Mahogany quahogs

1. License required. Except as provided in subsection 3, it is unlawful for any person to engage in the activities authorized under this section without a current mahogany quahog license.

2. Licensed activities. The holder of a mahogany quahog license may:

- A. Fish for or take mahogany quahogs in any harvesting area indicated on the license;
- B. Possess, ship or transport mahogany quahogs within the State;
- C. Sell mahogany quahogs that the holder has taken.

The license authorizes crew members aboard the licensee s boat to undertake these activities when engaged in dragging for mahogany quahogs if the licensee is present.

3. Personal use exception. Any person may take or possess no more than 3 bushels of mahogany quahogs for personal use in one day without a license.

4. Fee. The fee for a mahogany quahog license is \$89. Fees collected pursuant to this section must be deposited in the General Fund.

5. Conditions. Each licensee may participate in the monitoring program established in section 6731-A within the harvest area indicated on the license. The holder of a mahogany quahog license shall comply with all other conditions of licensing established by the commissioner.

1982, c. 550; 1990, c. 828, 1, 2 & 3; 1991, c. 390, 8; 1991, c. 591, T-9.

Sec. 6731-A. Mahogany quahog monitoring program

The department shall establish a program to protect the public health by monitoring the levels of paralytic shellfish toxin in mahogany quahogs. The department shall identify harvesting areas, sampling areas and stations needed to achieve this goal in accordance with the following provisions.

- 1. Harvesting areas.** The department shall establish harvesting areas that reflect the demand for taking mahogany quahogs by harvesters from the various regions of the State and the relative location of mahogany quahog beds.
- 2. Industry groups.** For each harvesting area the department shall establish a volunteer industry-based group to select mahogany quahog harvesters to collect samples and transport department personnel to and from sampling areas. Each group shall select and notify the department of the mahogany quahog harvesters who have volunteered for each month's sampling duty in the harvesting area.
- 3. Sampling.** The department shall schedule all sampling runs. A department observer shall be on board each vessel engaged in the sampling activity. The department shall notify the harvester in advance as to the time, location and number of samples to be collected. In the event weekly collection of samples is not feasible, an alternative sampling date may be established by the department. The department shall test for the presence of paralytic shellfish toxin in the samples.
- 4. Rules.** The commissioner may adopt rules, in accordance with the Maine Administrative Procedure Act, necessary to achieve the intent of this section.
- 5. Toxin Monitoring Fund.** The Toxin Monitoring Fund is established within the department. The commissioner shall use any money credited to the Toxin Monitoring Fund exclusively for the collection of samples required under this section to monitor the level of paralytic shellfish toxin in mahogany quahogs. All money in the Toxin Monitoring Fund is subject to allocation by the Legislature. The Toxin Monitoring Fund may not lapse but must carry forward to be used for the same purpose. Nothing in this subsection prohibits the commissioner from using other funds budgeted by the department to carry out the purposes of this section.

1990, c. 828, 4; 1991, c. 561, 1.

MAHOGANY QUAHOG TAX

36 M.R.S.A. Chapter 714

Sec. 4711. Definitions

As used in this chapter, unless the context indicates otherwise, the following terms have the following meanings:

1. Bushel. "Bushel" means a unit of dry capacity equivalent to 2150.4 cubic inches. For the purposes of this chapter, the conversion figure for pounds of whole shell stock per bushel shall be 80.

2. Dealer. "Dealer" means a person who holds a wholesale seafood license, a shellfish transportation license or a shellfish certificate and who buys mahogany quahogs from a harvester and distributes that species in wholesale channels of trade.

3. Mahogany quahog. "Mahogany quahog" means a marine mollusk, also known as ocean quahog, *Arctica islandica*, landed in this State and subject to the authority and provisions of this chapter.

Sec. 4712. Rate of tax.

An excise tax of \$1.20 per bushel of mahogany quahogs is levied upon the dealer and imposed at the point of first sale of this species.

Sec. 4713. Dealer application for mahogany quahog certificate

Every dealer shall file an application with the State Tax Assessor on forms prescribed and furnished by the State Tax Assessor which shall contain the name under which such dealer is transacting business within the State, the place or places of business, the dealer's social security or tax identification number and names and addresses of the persons constituting a firm or partnership and, if a corporation, the corporate name and the names and addresses of its principal officers and agents within the State and the Federal Employer Identification Number. Upon receipt of this information, the State Tax Assessor shall issue a mahogany quahog certificate to the dealer. No dealer may conduct business until the certificate required by this section is furnished. The mahogany quahog certificate is not a license within the meaning of that term in the Maine Administrative Procedure Act, Title 5, chapter 375.

Sec. 4714. Certificate required for license

The Department of Marine Resources shall not issue or renew a wholesale seafood license as set forth in Title 12, section 6851; a shellfish transportation license as set forth in Title 12, section 6855; or a shellfish certificate as set forth in Title 12, section 6856, for the purpose of dealing in mahogany quahogs without proof of certification by the State Tax Assessor, as required by this chapter. The Department of Marine Resources shall make available to the State Tax Assessor any licensing information necessary to implement this section.

Sec. 4715. Dealer reports of purchases and payment of taxes

Every dealer shall keep, as a part of permanent records, a record of all mahogany quahogs purchased at point of first sale. These records must be open for inspection by the State Tax Assessor at all times. Every dealer shall, on or before the last day of each month, render a report to the State Tax Assessor, stating the number of bushels purchased by the dealer during the preceding calendar month, on

forms to be furnished by the State Tax Assessor, and, at the same time, shall pay to the State Tax Assessor the tax of \$1.20 per bushel on all mahogany quahogs reported as purchased. If it appears to the State Tax Assessor from inspection of records or otherwise that an additional tax is due or overpayment of tax has been made, additional assessments or refunds must be made by the State Tax Assessor to the dealer.

Sec. 4716. Review

The joint standing committee of the Legislature having jurisdiction over marine resources shall review the program established in this chapter and shall make its report, including any necessary legislation, to the First Regular Session of the 114th Legislature.

1987, c. 513.

Sec. 4717. Abatement and credit

1. Tax not assessed. No tax may be assessed under section 4712 for the period between June 29, 1987, and September 30, 1987.

2. Taxes collected or assessed. Any tax collected or assessed under this chapter for the period between June 29, 1987, and September 30, 1987, shall be abated. The Bureau of Taxation shall credit any tax paid to the account of the taxpayer or send the taxpayer a refund.

1987, c. 551.

Sec. 4718. Contributions; Toxin Monitoring Fund

The State Tax Assessor shall determine annually the total amount of tax revenue collected under this chapter. The State Tax Assessor shall deduct the cost of administering the mahogany quahog tax from those revenues and report the remainder to the Treasurer of State, who shall credit that amount to the Toxin Monitoring Fund established in Title 12, section 6731-A, subsection 5, except that not more than \$16,000 may be credited to the fund in any year. Revenues collected that are in excess of \$16,000 must be credited to the General Fund.

1991, c. 561, 2.

Maine Marine Resources Regulations:

Chapter 10.03 Method of taking Surf, Hen Clams or Quahogs

It shall be unlawful to fish for or take any surf, hen clams or quahogs by any method of dredging or dragging with any combination of dredge or drag with any cutter bar that exceeds 36" in overall width except that in the area between the Spurwink River in Scarborough and Fletcher's Neck in Biddeford Pool, the cutter bar shall not exceed 24" in overall width.

15.07 Shellfish Contamination Standards - Paralytic Shellfish Poisoning

A. It shall be unlawful to buy, receive, sell, possess, ship, transport, shuck or otherwise process shellfish in any form, regardless of origin where the shellfish exceed 80 ug/100 mg toxin, the action levels established by The NSSP, Manual of Operations, Part I, Appendix D.

B. Sampling. The department shall collect samples of shucked shellfish and shellstock from each shellfish certificate holder periodically to determine if shellfish meet the contamination standards, described in paragraph A. The department shall also collect samples from shellfish shipped or transported into this state by shellfish dealers from other states or countries to determine if those shellfish comply with the contamination standards, described in paragraph A.

C. Embargo of Shellfish. When shellfish samples indicate that those shellfish contain bacteria or toxin levels exceeding those described in 15.06 A and 15.07 A or the shellfish are suspected of being contaminated or of unsound quality or deleterious to the public health, the Commissioner may embargo the contaminated shellfish, as well as any other shellfish which are likely to be contaminated in the same vehicle or facility, in accordance with the embargo powers granted to the to the Commissioner of Marine Resources in 12 M.R.S.A. 6856(6).

15.08 Shellfish Labeling Requirements

TAGGING

A. All shellfish shipped, transported or trans-shipped into, out of, or within the state of Maine must be transported or shipped directly from a shellfish dealer who has been certified in accordance with the provisions of the National Shellfish Sanitation Program in his state or nation of residency, and/or who is listed as a certified shellfish shipper by the Food and Drug Administration of the U.S. Public Health Service. It shall be unlawful to ship or transport shellfish unless the container of such shellfish bears, at all times while in shipment or transportation, a waterproof label or tag as described below.

1. Each container of shellstock shall bear an approved, durable, waterproof, printed label or tag of minimal size (2-5/8" x 5-1/4") legibly marked with the following information:
 - a. The dealer's name, address and assigned certification number;
 - b. The original shipper's certification number including the state abbreviation;
 - c. Date of harvest;
 - d. Most precise identification of harvest area;
 - e. Type and quantity of shellstock;
 - f. The following statement will appear in bold capitalized type

"THIS TAG IS REQUIRED TO BE ATTACHED UNTIL CONTAINER IS EMPTY AND THEREAFTER KEPT ON FILE FOR 90 DAYS".

2. Each container of shucked shellfish shall bear a permanent printed label legibly marked with the following information:
 - a. The packer's, distributor's, and/or original shucker's name and address;
 - b. The packer's, distributor's, and or original shucker's certificate number preceded by the abbreviated name of the state;
 - c. The words DATE SHUCKED must appear on both the lid and the sidewall of durable containers;
 - d. The type and quantity of shucked shellfish in the container.

3. Independent Carrier Contractor Exception. Any person who ships or transports shellfish as an independent carrier contractor and who does not buy or take ownership of the shellfish being transported shall not be required to affix his own tag or label. However, all shellfish transported must be tagged with the name of the consignor and consignee, as required by sub-section 1 above, and the consignor or other owner of the shellfish shall remain liable for the quality of the shellfish being transported and their conformity with these regulations.

B. Duty of Maine Shellfish Certificate Holders. It shall be unlawful for the holder of a Maine shellfish certificate to receive, buy, possess, sell, ship, or transport shellfish unless the shellfish bears a label or tag as required by 15.08 A.

1. Exception: This shall not apply to a lot of shellstock purchased directly from harvesters that need to be graded, culled, and washed prior to packing and storing in a cooler. Each container shall be labeled as to date and area of harvest.

C. Absence of Labels or Tags. The absence of labels or tags as required by Paragraph A above shall be prima facie evidence of violation of these regulations. The absence of required labels or tags shall be grounds for the immediate embargo and/or destruction of the untagged or unlabeled shellfish, in that the uncertain origin of the shellfish necessarily indicates that the shellfish are of uncertain quality, and therefore, unsafe.

15.14 Shellfish Reports

A. Every holder of a shellfish certificate issued by the department shall report all purchases and sales of shellfish, including the date and quantity of each purchase and sale, on forms supplied by the Commissioner. The shellfish certificate holder shall submit these forms to the Commissioner on a monthly basis. The deadline for submission of each monthly report shall be the 10th day of the following month, for example, shellfish reports for the month of January must be submitted by the certificate holder in time for the report to arrive at the Department of Marine Resources by February 10th. The shellfish certificate holder shall be in violation of these reporting requirements if the department does not receive a monthly shellfish report from the shellfish certificate holder by the 10th day following the reporting month.

B. If a shellfish certificate or depuration authorization holder has failed to submit monthly shellfish reports in a timely manner or has failed to submit complete monthly shellfish reports, the Commissioner may refuse to issue or reissue a shellfish certificate to that person for the following year, in accordance with 15.17.

APPENDIX 7. GLOSSARY OF TECHNICAL TERMS AND ACRONYMS

Act (MSFCMA) - the Magnuson-Stevens Fishery Conservation and Management Act of 1976, as amended, 16 USC 1801 *et seq.*

bushel (bu) - a standard unit of measure presumed to hold 1.88 cubic feet of surf clams or ocean quahogs in the shell (1 bu. of offshore surf clams = 17 lbs. of meats) (1 bu. of ocean quahogs = 10 lbs. of meats).

cage - a container with a standard unit of measure containing 60 cubic feet. The outside dimensions of a standard cage generally are 3' wide, 4' long and 5' high.

CFR - Code of Federal Regulations.

Council (MAFMC) - the Mid-Atlantic Fishery Management Council.

CPUE - catch per unit of effort.

Dealer - a person who receives surf clams and ocean quahogs for a commercial purpose other than transport on land and who does not remove them from the cage.

Exclusive Economic Zone (EEZ) - the zone contiguous to the territorial sea of the US, the inner boundary of which is a line coterminous with the seaward boundary of each of the coastal States and the outer boundary of which is a line drawn in such a manner that each point on it is 200 nautical miles from the baseline from which the territorial sea is measured.

Fishing trip - a departure from port, transit to the fishing grounds, fishing, and returning to port.

GRT - gross registered ton.

Maine Mahogany Quahogs - Identical to ocean quahogs in name, *Arctica islandica*, but generally harvested at a smaller size and marketed in half-shell raw market.

Maine bushel - Unit of measurement for the eastern Maine zone harvest. The "bushel" unit used in Maine is smaller than the "bushel" unit traditionally used in the mid-Atlantic. Maine, in their tax law, uses a bushel definition which measures 1.2445 cubic feet (2,150.4 cubic inches). The standard clam bushel was defined as 1.88 cubic feet in the FMP, and conforms to industry practice in the industrial fisheries for surfclams and ocean quahogs. Throughout Amendment 10, any reference to "bushel" harvests in the Maine inshore or EEZ ocean quahog fishery refers to the "Maine bushel" of 1.2445 cubic feet. All references to ocean quahog harvests outside of Maine refer to the regular clam bushel.

MSY - maximum sustainable yield. The largest average catch of yield that can continuously be taken from a stock under existing environmental conditions.

natural mortality - deaths from all causes except fishing, including predation, senility, epidemics, pollution, etc.

NEFSC - the Northeast Fisheries Science Center of the NMFS.

NMFS - the National Marine Fisheries Service of the National Oceanic and Atmospheric Administration (NOAA).

Off loading - to separate physically a cage from a vessel such as by the removal of the sling or wire used to remove the cage from the harvesting vessel.

OY - Optimum Yield.

Personal use - harvest of surf clams or ocean quahogs for use as bait, for human consumption, or for other purposes (not including sale or barter) in amounts not to exceed 2 bushels per person per trip.

Processor - a person who receives surf clams or ocean quahogs for a commercial purpose and removes them from a cage.

Regional Administrator (RA) - the Regional Administrator, Northeast Region, NMFS, One Blackburn Drive, Gloucester, MA 01930-2998. Telephone 508-281-9250.

SAW - Stock Assessment Workshop.

SARC - Stock Assessment Review Committee.

stock assessment - the biological assessment of the status of the resources. This document provides the official estimates of stock size, spawning stock size, fishing mortalities, recruitment, and other parameters used in this Plan. The data from these assessments shall constitute the "best scientific information currently available" as required by the Act.

Territorial Sea - marine waters from the shoreline to 3 miles seaward.

USDC - US Department of Commerce.

year class - the fish spawned or hatched in a given year.

yield per recruit (YPR) - the expected yield in weight from a single recruit.