EXPANSION OF FEDERAL WATERS RED TIDE CLOSURE FOR A PUBLIC HEALTH EMERGENCY

Environmental Assessment
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United States Department of Commerce
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Northeast Region

1.0 INTRODUCTION

The following environmental assessment (EA) has been prepared for an action that would amend existing paralytic shellfish poisoning (PSP) closed areas to also include a prohibition on gastropod possession and harvesting.

BACKGROUND

On June 10, 2005, the U.S. Food and Drug Administration (FDA) requested that NMFS close an area of Federal waters off the coasts of New Hampshire and Massachusetts to bivalve shellfish (which did not include gastropods) fishing due to the presence in those waters of toxins that cause PSP. These toxins can form blooms commonly referred to as red tides, which can produce toxins that accumulate in filter-feeding shellfish. Shellfish contaminated with the toxin, if eaten in large enough quantity, can cause illness or death from PSP.

On June 16, 2005, NMFS published an emergency rule closing the waters recommended by the FDA. Since then, the rule has been slightly modified and extended several times to provide an uninterrupted closure since originally implemented in 2005. At the time of the original closure in 2005, the closure included all bivalves, but more specifically focused on Atlantic sea scallops, Atlantic surfclams, and ocean quahogs, largely because they were the only shellfish fisheries that were in existence at that time that were known to accumulate PSP.

As stated, this closure did not include or consider other marine species that could be susceptible to PSP, because there were no other PSP susceptible species known to be harvested or of commercial value at that time. As such, these closures do not include gastropods, which now have a developing market and fishery and information is available indicating that gastropods are susceptible to PSP.

The Temporary PSP Closure for bivalves has been in place since 2005, but only imposes a prohibition on the harvest of bivalves. In the recent past, there has been a state waters whelk fishery, but since this is not a federally managed fishery, NMFS was not aware of a Federal whelk fishery. NMFS was recently informed by a number of harvesters and dealers that there are vessels gearing up to target whelks, specifically in the northern component of the Temporary PSP Closure. This prompted NMFS to conduct an analysis of the whelk fishery. Since this is not a federally managed fishery there is little data available. However, the data that is available shows that there is in fact a Federal waters fishery for whelk, with the majority of the fishery taking place off the coast of the Commonwealth of Massachusetts (MA). This prompted NMFS to engage the FDA and the Commonwealth of Massachusetts to discuss the issue. The FDA, in collaboration with the Commonwealth of Massachusetts Division of Marine Fisheries and Department of Public Health, have been actively investigating this issue and, on October 29, 2013, the FDA and the Commonwealth of Massachusetts requested by teleconference that NMFS modify the Temporary PSP Closures to also include a prohibition on the harvest of gastropods while they continue to research the issue. On November 26, 2013, NMFS received a letter from the FDA, formalizing this request. Based on this recommendation, and the fact that we now know there is a whelk fishery in Federal waters and there is evidence that it is expanding, NMFS believes that action is needed to prohibit the harvest and possession of

gastropods from the areas currently defined as the Temporary PSP Closed Areas to protect the health of human consumers from consuming contaminated gastropods.

2.0 PURPOSE AND NEED

The purpose of this emergency action is to close specified waters to the harvest of gastropods. The waters being closed are waters that are currently closed to bivalve harvesting due to the possible presence of PSP. This action would essentially expand an existing bivalve closure to also include a prohibition on gastropod harvesting and possession.

This action is needed to protect public health because data suggest (FDA 2011, MDPI) that gastropods, like bivalves, can cause PSP, but the existing closed areas referred to as the Temporary Emergency PSP Closed Areas in this action do not include gastropods. This action will prohibit the harvest and possession of gastropods from the Temporary PSP Closed Areas, which are currently closed to the harvest of bivalves, but not gastropods. Gastropods include carnivorous snails, conchs, and whelks that feed on bivalves. The bivalves, if contaminated with the toxin that causes PSP, transfer the toxins on to the whelk when ingested. While there are not a lot of data available on how susceptible gastropods are to these toxins, the few data that the FDA and the Commonwealth of Massachusetts have available indicate that gastropods typically have higher levels of the PSP-causing toxin and retain it longer than bivalves taken from the same waters.

3.0 PROPOSED ALTERNATIVES

A. Proposed Gastropod Closure

As discussed in the previous section, this action would temporarily prohibit the harvest and possession of gastropods from the areas referred to as the Temporary PSP Closed Areas, which are currently closed to the harvest of bivalves, but not gastropods. The Temporary PSP Closed Areas are defined as:

1. Northern Component
   (1) 43º00' N. lat., 71º00' W. long.; (2) 43º00' N. lat., 69º00' W. long.; (3) 41º39' N. lat., 69º00' W. long.; (4) 41º39' N. lat., 71º00' W. long., and then ending at the first point.

2. Southern Component
   (1) 41º39’ N. lat, 71º00’ W. long.; (2) 41º39’ N. lat., 69º00’ W. long.; (3) 40º00’ N. lat., 69º00’ W. long.; (4) 40º00’ N. lat., 71º00’ W. long., and then ending at the first point, and excluding the Federal waters of Nantucket Sound west of 70 ˚ 00’ W. Longitude.

It should be noted that the gastropod prohibition includes both the northern southern areas. This is a distinction worth noting since only the northern area is closed to all bivalve harvesting, while the southern area is only closed to the harvest of whole or roe on scallops. The gastropod harvesting prohibition applies to both areas because the data that the Commonwealth of Massachusetts and the FDA have available indicate that gastropods are more susceptible to the toxin that causes PSP than other bivalves taken from the same waters (MDPI, 2008). Therefore,

to ensure the protection of public health while the FDA continues to research this matter, both the northern and southern areas would be closed to the harvest of gastropods.

A. No Action Alternative

The No Action alternative would not close the area to gastropod harvesting. Generally, under Section 306 of Magnuson-Stevens Act, states have authority to prohibit landings from federally permitted vessels from their own state, but not vessels from other states. However, there is no Federal fishery management plan (FMP) for any species of gastropod, and in a case such as this, the Magnuson-Stevens Act provides the state with the authority over a fishery when there is no FMP. Therefore, the states have the authority to restrict or prohibit gastropod landings should they choose to take action. However, at this time, it is not clear how the states plan to respond. The Commonwealth of Massachusetts has informed NMFS that they intend to prohibit or restrict and monitor/test gastropod landings from the area should NMFS not close the area, but it is not yet determined if they have the resources to do so. NMFS has not been notified whether other states in the region have the same capabilities, views, or resources as the Commonwealth of Massachusetts. It is likely that other states such as New Hampshire with less marine fisheries and a resulting less robust state management program, would not have the resources to conduct such monitoring or the ability implement a prohibition or restriction.

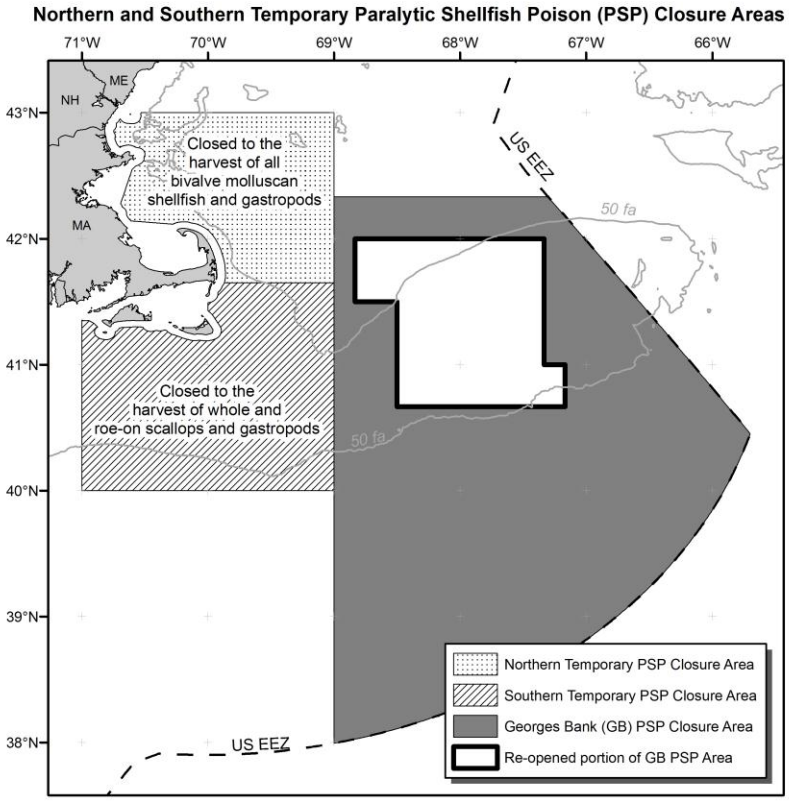
B. Other Alternatives

There are no other alternatives that allow the protection of public health.

4.0 AFFECTED ENVIRONMENT

- Location/Physical Environment/EFH

The area closed is roughly a 100 by 200 mile rectangle off the shore of both New Hampshire and Massachusetts. The area is bounded by the 3-mile territorial sea boundary of the New Hampshire and Massachusetts coastline northward to the northern limit of Jeffreys Ledge, seaward by eastern edge of Wilkinson Basin and southward to the 50-fathom depth contour. North of Cape Cod, the area represents the more inshore portions of the southwestern Gulf of Maine with dominant sediments of mud, sand and occasional bedrock. South of Cape Cod the area is predominantly sand interspersed with mud and muddy sand. Depths range from about 15-50 fathoms.



- Target Species

Although this closure includes all gastropods, it is believed that the primary target species that could be available for harvest in the areas being closed is primarily either the waved or common whelk (*Buccinum undatum)*, known to have a small fishery in Maine, or the channeled whelk (*Busycotypus canaliculatus*) locally known as the 'conch', which has been harvested in state waters along the southern coast of Massachusetts, and likely other states.

Gastropods, more commonly known as snails and slugs, are a large taxonomic class within the phylum Mollusca. The class Gastropoda includes snails and slugs of all kinds and all sizes from microscopic to large. There are many thousands of species of sea snails and sea slugs. The anatomy, behavior, feeding and reproductive adaptations of gastropods vary significantly from one clade or group to another. Therefore, it is difficult to state many generalities for all gastropods.

The species that are known to have a fishery in the Northeast region include primarily the waved and channeled whelks. The channeled whelk is a very large predatory sea snail, which are endemic to the eastern coast of the United States, from Cape Cod, Massachusetts, to northern Florida. Shells of the channeled whelk typically reach to 8 inches in length with a

smooth, generally pear-shaped, typically buff gray to light tan shell. The channeled whelk prefers sandy, shallow, intertidal or subtidal areas. They tend to be nocturnal and are known to eat clams (Dietl & Alexander, 1998). There is little to no known reproductive, life cycle, or population information on the channeled whelk.

The waved, or common whelk, is a large edible marine gastropod in the family Buccinidae. They are known to inhabit the Northeast coast as far south as New Jersey and cannot survive at temperatures above 84°F. The waved whelk is mainly found on soft bottoms in the sub littoral zone, and occasionally on the littoral fringe (Hallers-Tjabbes, 1996). This species' solid shell is very pale and appears yellowish-brown. The maximum height of the shell is 3.9 inches and the maximum width is 2.3 inches. They feed on live bivalves, and are, in turn, preyed upon by several fish (cod, dogfish, etc.) and crustaceans. They also benefit from seastar feeding, by eating the extracted bivalve remains abandoned by the seastar (Himmelman, 1993).

It is also likely that other species of snails, conchs, and whelks are harvested or are available for harvest. However, at this time, it cannot be determined exactly what other species are/can be harvested due to the small scale of current harvest and lack of available data.

Gastropods are not managed under a Federal Fishery Management Plan. As such there is little data available on their biology. It is also not well known exactly how fishing activity and operations would be conducted for whelk in Federal waters. However, it is likely it would be similar to state waters fisheries, which harvest whelk using pot type gear, dredge, similar to that of a scallop dredge, and by hand as well. There is also little to no information available on biomass, abundance, and areas inhabited in Federal waters. Further, because this information is not known, there is no readily available information regarding bycatch or non-target species in Federal waters.

- Protected Resources

Several species of marine mammals, sea turtles, and fish inhabit the PSP closure area and are protected under either the Endangered Species Act (ESA) of 1973 or Marine Mammal Protection Act (MMPA) of 1972. Species found in the closure area that are protected by either the ESA or MMPA include cetaceans (14 species), seals (3 species), sea turtles (5 species), fish (3 species); a complete list of which is found in Appendix I. ESA-listed marine mammals most commonly found in the closure area include the endangered North Atlantic right whale, humpback whale, and fin whale. ESA-listed sea turtles most commonly found in the closure area include the loggerhead sea turtle (Northwest Atlantic distinct population segment [DPS]), leatherback sea turtle, Kemp's ridley sea turtle, and green sea turtle. The most common ESA-listed fish species found in the closure area are Atlantic sturgeon (from all five DPSs) and Atlantic salmon (Gulf of Maine DPS).

There is little known about the effects of the whelk fishing gear on protected marine mammals, sea turtles, and fish in Federal waters as there is no known fishery in those waters. Based on the existing state waters whelk fishery and available seafood dealer data, the fishery appears to utilize primarily trap/pot gear similar to what is used to target fish and lobsters, dredge type gear similar to the scallop fishery, as well as hand harvest. As such, it is likely that a Federal waters

whelk fishery would have similar gear interactions with protected species as pot/trap and scallop dredge fisheries. It is not known exactly what the breakdown between the number of participants using pot/trap gear versus dredge gear or hand harvest would be and how much gear would be used.

ESA-listed large whales and sea turtles are known to be susceptible to entanglement in vertical lines associated with pot/trap gear used in state whelk fisheries (NMFS SEFSC 2001; Dwyer et al. 2002; NMFS 2007). Whelk fisheries in Massachusetts, New York, New Jersey, and Virginia were verified as the fisheries involved in 18 sea turtle entanglements from 2001 to 2010. Twelve entanglement events involved leatherbacks, five involved loggerheads, and one involved a green sea turtle (Northeast Region Sea Turtle Disentanglement Network database). Whelk pots, which unlike lobster pots are not fully enclosed and differ in use of a bridle, are also a potential source of entrapment for loggerhead sea turtles that may be enticed to enter the trap to prey upon the bait or whelks caught in the trap (Mansfield et al. 2001). Atlantic sturgeon are not known to interact with whelk pot/trap gear, although they may be susceptible to capture in dredge gear, as evidenced via a dredge capture in the scallop fishery in September 2012 (Northeast Fisheries Observer Program database).

For the pot/trap and scallop dredge fisheries that capture whelks, utilize representative gear types, and operate throughout the PSP closure area, the same list of species in Appendix I applies. Based on recent biological opinions for both fisheries (NOAA 2012), lobster pot/trap fishing and scallop dredging activities in Federal waters are not likely to jeopardize the continued existence of any species of ESA-listed marine mammals, sea turtles, or fish nor are they likely to destroy or adversely modify North Atlantic right whale critical habitat.

A component of the existing whelk fishery is bycatch in the pot/trap fish and lobster fisheries. Therefore, Federally permitted vessels using fish and/or lobster pots fishing in areas where whelk is present, may catch whelk as bycatch while targeting lobster and fish. In addition, there are also pots/traps that are used designed specifically to target whelks as described above. Even though the traps themselves may vary slightly, all other parts of the gear that would potentially interact with protected species would be same as lobster and fish pot gear. The American lobster fishery uses trap/pot gear to harvest lobsters that consists of the trap, buoy/surface line, groundline, buoys and/or highflyers. Buoy line(s) connect to the trap and rise vertically to the surface. Lobster traps may be set singly with each trap having its own surface line and buoy, or can be fished in trawls consisting of two or more traps per trawl. Multiple traps are linked together by groundline, with at least one, but most often two, surface lines and buoys. The surface lines are typically at an end of a series of traps to mark the location of the gear. Offshore gear includes additional line at or near the surface that connects a radar reflector highflyer to one of the buoys to aid in relocation and “visibility” of the gear. Excess buoy line is restricted from floating at the surface and all buoys, flotation devices and/or weights must be attached to the buoy with a weak link. Fishermen are encouraged, but not required, to maintain knot-free buoy lines. Fish pots, such as black sea bass pots are similar in design to lobster pots. They are usually fished singly or in trawls of up to 25 pots, in shallower waters than the offshore lobster pots or red crab pots (NREFHSC 2002). Strategies for black sea bass pots vary by region.

There are also whelk specific pots which are generally either cylindrical or rectangular. They typically have bridles with a buoy and line attached. Unlike lobster traps, whelk pots do not have side heads, rather the top of the trap is more open, with the head on the top. Some models are also lined with crab pot wire to prevent the catch from escaping if the pot is turned over, when it is raised, or when it is invaded by sea turtles or other marine life (Mansfield et al. 2001). In Massachusetts, fishermen commonly fish conch pots singly and not in trawls. Information on depth fished is not available. In Massachusetts, fishing for whelk with pots is prohibited from December 15 through April 14. All pots shall be removed from the water during this closed season.

Although state regulations may allow slightly different gear types, any whelk that were to be caught in Federal waters using dredge gear would have to use an Atlantic sea scallop dredge, which has been known to have interactions with sea turtles. There are a number of measures in place to protect habitat and protected resources from the impacts of dredge gear. Fishermen use 4-inch rings on their dredges that increase the dredges' efficiency in catching larger scallops and allow small scallops and other small marine life to return to the sea floor by passing through the dredge rings. The 4-inch rings also reduce the amount of time dredges contact the bottom. Benthic finfish, sea turtles, and undersized scallops can be incidentally caught in the scallop fishery. Seasonal fishing prohibitions in areas where sea turtles congregate, reduces catch of these untargeted species. Scallop dredges must have a 10" mesh "twine-top" designed to allow fish to escape.

Marine Mammals and Protected Species

The following species found in the proposed PSP Closure area are listed as threatened or endangered under the Endangered Species Act of 1973 (ESA)or are protected under the Marine Mammal Protection Act of 1972 (MMPA). Two North Atlantic right whale critical habitat designations are also found in the proposed PSP Closure area.

Cetaceans

North Atlantic right whale (*Eubalaena glacialis*)	Endangered
Humpback whale (*Megaptera novaeangliae*)	Endangered
Fin whale (*Balaenoptera physalus*)	Endangered
Sei whale (*Balaenoptera borealis*)	Endangered
Blue whale (*Balaenoptera musculus*)	Endangered
Sperm whale (*Physeter macrocephalus*)	Endangered
Minke whale (*Balaenoptera acutorostrata*)	Protected
Harbor porpoise (*Phocoena phocoena*)	Protected
Risso's dolphin (*Grampus griseus*)	Protected
Pilot whale (*Globicephala* spp.)	Protected
White-sided dolphin (*Lagenorhynchus acutus*)	Protected
Common dolphin (*Delphinus delphis*)	Protected
Spotted and striped dolphins (*Stenella* spp.)	Protected
Bottlenose dolphin (*Tursiops truncatus*)	Protected

Seals

Harbor seal (*Phoca vitulina*)	Protected
Gray seal (*Halichoerus grypus*)	Protected

Harp seal (*Phoca groenlandica*)	Protected
Sea Turtles	
Loggerhead sea turtle (*Caretta caretta*) – Northwest Atlantic DPS	Threatened
Leatherback sea turtle (*Dermochelys coriacea*)	Endangered
Kemp's ridley sea turtle (*Lepidochelys kempii*)	Endangered
Green sea turtle (*Chelonia mydas*)	Endangered
Hawksbill sea turtle (*Eretmochelys imbricata*)	Endangered
Fish	
Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*)	
Gulf of Maine DPS	Threatened
New York Bight DPS	Endangered
Chesapeake Bay DPS	Endangered
Carolina DPS	Endangered
South Atlantic DPS	Endangered
Atlantic salmon (*Salmo salar*) – Gulf of Maine DPS	Endangered
Shortnose sturgeon (*Acipenser brevirostrum*)	Endangered
Critical Habitat Designations	
North Atlantic right whale	Cape Cod Bay Great South Channel

- Human Communities

Since there is little data available on Federal waters gastropod fishery, it is not known exactly what human communities would be affected. It is also not clear exactly what species of gastropods are being landed and where specifically they are being harvested from. As discussed above, this analysis is based on dealer reported data, using the assumption that landings from these dealers are actually taken from areas that are within reasonable proximity to the dealers location. As such given their proximity to the closed areas, it is possible that ports in ME, MA, NH, and RI could be affected. Hence, the states of ME, NH, MA, and RI were included in the analysis. However, NH shows no past landings taken from Federal waters, but is still discussed since NMFS has received information that some of the vessels that may be preparing to fish in the closed area are located in NH.

Overall pounds of gastropods taken from Federal waters in 2010 and 2011 were approximately 3 million each year, worth $2.7 million and $3.4 million respectively. In 2012 and 2013, approximately 4 million pounds were taken each year, worth approximately $7 million in 2012 and $5.4 million in 2013. We are not able to determine from the available data as to the reason of the inflated value in 2012, however, it appears that there is an overall trend of increasing pounds being landed, with a possible correlation to an increase in price. In addition, the lack of data available in this fishery is also likely contributing to the variances in the prices per pound seen. It is expected that numerous species of gastropods are being landed and included in this analysis. However, they are primarily all being reported generically under the category 'whelk', and as such there is likely some differences in price between species that is not being captured here. In addition, gastropods are likely being landed and reported in different forms (whole and shucked). This difference is also not clear in the data and as such is not being captured and

differentiated in this analysis. It is likely that there are some differences in species landed according to the area harvested as well.

Pounds and Value of Federal Waters Gastropod Landings (2010-2013)*		
Year	Pounds	Value
2010	2,950,812	2,762,850
2011	2,977,281	4,364,800
2012	4,155,582	7,088,750
2013	3,952,927	5,380,349

*Includes gastropods that were landed in the states of ME, MA, and RI.

Table 1 – Pounds and Value of Federal Waters Gastropod Landings

From 2010-2013 there have been an average of 451 vessels with gastropod landings taken from Federal waters. The number of participating vessels ranges from 327 vessels in 2010 to 501 vessels in 2013. Overall, there appears to be an upward trend in the number of participants, with the vast majority of active vessels in MA, with 292 active vessels in 2013.

Quantity of Vessels with Gastropod Landings from Federal Waters (2010-2013)				
Year	MA	ME	RI	Total
2010	247	2	78	327
2011	278	2	183	463
2012	273	10	230	513
2013	292	24	185	501

Table 2 – Quantity of Vessels with Gastropod Landings from Federal Waters

In regards to dealers, there has been an average of 162 dealers who purchase gastropods taken from Federal waters from 2010-2013. In 2010 there were 117 dealers and 187 in 2013. As with the other data in this analysis, this aligns with the upward trend in the number of participants in the gastropod fishery.

Quantity of Dealers with Gastropod Landings from Federal Waters (2010-2013)				
Year	MA	ME	RI	Total
2010	84	2	31	117
2011	104	2	58	164
2012	120	5	53	178
2013	130	9	48	187

Table 3 – Quantity of Dealers with Gastropod Landings from Federal Waters

Massachusetts has recently seen in increase in overall landings whelk, with approximately 2.5-3 million pounds landed in recent years, worth approximately $5.5–6 million (MA DMF, 2012). In recent years, Massachusetts has had approximately 104 active whelk permits per year with a recent upward trend. The state has indicated that a very high percentage of their landings are taken from the waters of Buzzards Bay and Nantucket Sound, which are not part of the closure in

this action, but are in the direct vicinity. Gastropods taken from Federal waters and landed in MA, account for approximately 3 million pounds, worth approximately $4 million in 2013. The vast majority of MA landings were landed in Cape Cod ports, which are in very close proximity to the southern PSP closed area. In regards to dealers, from 2010-2013 MA has had an average of 110 dealers purchase whelks harvested from Federal waters. This includes a low of 84 dealers in 2010 and a high of 130 in 2013. The vast majority of dealers are located in Cape Cod. Massachusetts has had an average of 273 vessels land whelks harvested from Federal waters from 2010-2013. This includes a low of 247 vessels in 2010 and a high of 292 vessels in 2013. Again, both the number of dealers and participating vessels reflects that number of participants in gastropod fisheries is increasing. Given that the majority of dealers and landings are from Cape Cod, it is expected that Cape Cod communities will be the most affected by this action.

Pounds and Value of Federal Waters Gastropod Landings (2010-2013, by state)							
Year	MA		ME		RI		
	Pounds	Value	Pounds	Value	Pounds	Value	
2010	2,420,397	1,984,686	348	2,248	530,067	775,916	
2011	2,268,844	3,285,531	652	489	707,785	1,078,780	
2012	3,384,657	5,527,728	2,103	1,550	768,822	1,559,472	
2013	3,334,900	4,191,315	12,271	6,792	605,756	1,182,242	

Table 4 – Pounds and Value of Federal Waters Gastropod Landings

Since we have been informed that NH based vessels and dealers may be preparing to harvest in this area it is necessary to include them in the analysis even though they have no prior landings of whelk. We have information that a Portsmouth based dealer already has developed the market and infrastructure for whelk harvesting and processing and this is where the primary dealer is located that are intending to fish in the area. Thus, Portsmouth, NH, would likely be the primary port affected, if at all.

Portsmouth is the site of the primary fishing fleet of New Hampshire, which is supported by a state pier and adjoining fish co-op. There are about 26 finfish vessels and 50 lobster boats that fish out of Portsmouth. The fishing vessels in the fleet vary in size from 22 to 60 feet in length, with most vessels being around 45 feet in length. In Portsmouth, approximately three hundred households indirectly depend on commercial fisheries. These are the truckers, marine and fishing gear suppliers, seafood brokers, seafood restaurants, welders, and various other secondary stakeholders in the total capital flow system. In addition, approximately two hundred households are thought to be directly dependent on commercial fishing. Species brought into the Portsmouth co-op include groundfish, whiting, shrimp, squid, herring, mackerel, lobster, bluefin tuna, striped bass, dogfish, skate, bluefish, monkfish, scallops, conch, and sea urchin, among some others (Hall-Arber, 2001).

Large-mesh groundfish and monkfish were the most valuable landings in Portsmouth between the years 1997-2006. Additionally, lobster, “other” species, and sea scallops accounted for a large portion of the value of species landed in Portsmouth. The value of landings of most of these species groupings had declined in 2006 from the 1997-2006 average; lobster landings had

increased considerably, however, and were the most valuable landings for Portsmouth in 2006. The number of home ported vessels has varied between the years 1997-2006, but overall showed an increasing trend. In 1997 there were 54 vessels which increased to a high of 67 vessels in 2004. The number of vessels where the owner's city is Portsmouth is somewhat consistent, varying over the years but with no consistent trend (NEFSC 2010).

The state of ME is included in this analysis because it is in relative proximity to the northern PSP closure area. However, it is unlikely that Federal waters landings of whelk in the state of ME were in fact taken from the closed area in this action. The primary fishery in Maine is for the waved whelk, while the primary fishery in the area of the known closures is primarily the channeled whelk. Also, all dealers that reported gastropods taken from Federal waters where from dealers located in mid-coast and down east ME. As such, it is unlikely that steaming from this distance to access the PSP closed areas would be cost effective, particularly for a new a developing fishery. The waved whelk fishery has significantly less landings with 12,271 pounds landed in 2013 worth $6,792, which is not reflective of the pounds and associated values seen in the more southern ports in MA and RI. In 2013 there were 9 dealers and 24 vessels involved in the gastropod fishery in ME. As such, Maine is included in this analysis given its relative proximity to the area, but it is likely the relatively small, down east ME fishery is a different fishery targeting a different species with different markets and associated values, and will likely not be affected by this action.

The state of RI is included in this analysis because it is probable that some lobster and possibly fish pot fisherman fish in the PSP closed area. As such, there could be some bycatch of whelks in those fisheries taken from the PSP closed areas. Also, given that the whelk fishery is still developing it is unlikely vessels from RI are steaming the required distance offshore to access the PSP areas to specifically target whelks. As a result, it is expected that if RI is affected it will likely only affect whelk bycatch in other fisheries, which would be a small subset of RI landings. The gastropod fishery in RI landed approximately .6 million pounds in 2013 worth $1.1 million. In regards to dealers, from 2010-2013 RI has had an average of 48 dealers purchase whelks harvested from Federal waters. This includes a low of 31 dealers in 2010 and a high of 58 in 2013. They have had an average of 169 vessels land whelks harvested from Federal waters from 2010-2013. This includes a low of 78 vessels in 2010 and a high of 230 vessels in 2013. The vast majority of participants and landings are from Point Judith. As such, if RI is affected, it is expected that Point Judith would be the primary community affected.

In addition to the fishing industry and stakeholders discussed above, this action can also have a profound affect on consumers. This action prevents the harvest of gastropods that could be infected with the toxins that cause PSP. These toxins are produced by an alga, which can form blooms commonly referred to as red tides, or harmful algal blooms, and can accumulate in filter-feeding shellfish. Shellfish contaminated with the toxin, if eaten in large enough quantity, can cause illness or death in humans. The shellfish, if contaminated with the toxin that causes PSP, transfer the toxins on to the whelk when ingested. Therefore, this action protects the public health by not allowing any potentially infected gastropods to enter into commerce for human consumption.

5.0 ENVIRONMENTAL CONSEQUENCES- ANALYSIS OF (DIRECT AND INDIRECT) IMPACTS

A. Proposed Closure

- Location/Physical Environment/EFH

Data available on the Federal waters whelk fishery suggests that the fishery is carried out using primarily pot/trap type gear, scallop dredge gear, and hand harvest. It is believed that the Federal waters fishery is primarily a bycatch fishery in these other directed fisheries. Since this closure only prevents gastropod harvesting, it is likely that effort in these other directed fisheries will continue in the closed areas. Therefore, the continued use of pot/trap and scallop dredge type gear is expected. As a result, this action would not likely result in any changes to the effects from these gear types on the physical environment and EFH as compared to the no action alternative. However, if there is a fishery that specifically targets whelks in Federal waters, this action would prevent such a fishery from fishing in this area as well as expanding into the area.

This action could potentially cause some effort to shift outside of the closed area for vessels seeking to retain gastropods. As such, there could be some physical environment and EFH impacts to areas outside of the closures being considered in this action. However, since there is not a lot of data available on gastropod stocks, it is difficult to determine where effort displacement would occur. Given that it is thought that the whelk fishery is largely a bycatch fishery, it is likely that any shift in effort would only be minor and not significant, with any effort shifts likely to waters just outside of the closure. However, it is difficult to determine more accurate effort displacement locations due to the lack of information available on this fishery.

- Target Species

This action would likely have minor, positive impacts on gastropods when compared to the no action alternative. Since this action would prohibit the harvest of gastropods, all species of gastropods would not be permitted for harvest in the closure area, thereby protecting them from the possibility of being depleted due to overfishing. In addition, as discussed above this action could potentially cause some effort shifts to waters outside of the closed area for vessels seeking to retain gastropods. As such, there could be some impact to target species in areas outside of the proposed closure. However, since there is not a lot of data available on gastropod stocks, it is difficult to determine where exactly the effort would be displaced to and what stocks of gastropods would be affected. Given that it is thought that the whelk fishery is largely bycatch in other fisheries, it is likely that any shift in effort would be only minor and not significant, with any effort shifts likely just to waters just outside of the closure.

- Protected Resources

Since this action would prohibit whelk harvesting, when compared to the no action alternative, it is not expected that there would be any additional interactions with marine mammals and protected resources. In fact, impacts could be slightly positive if the closure reduces the further development or expansion of a directed whelk fishery. However, as discussed above, this action

could result in some effort shifting, particularly if there is a directed whelk fishery. It is difficult to determine where effort would shift but given the limited scope and size of reported whelk landings, it is expected to be minor. Since it believed that the majority of gastropods are harvested as bycatch to the directed lobster and fish trap/pot and scallop fisheries, the impacts to protected resources should be similar to what has been observed in those fisheries (i.e., lobster trap, scallop dredge, and fish traps can result in marine mammal entanglements from vertical lines and turtle interactions with scallop dredge gear). However, since this action only prohibits the possession of gastropods, the lobster and scallop fisheries would continue to operate in the proposed closed area and no additional impacts to protected species, when compared to the no action alternative, are expected.

- Human Communities

Closure of the area would provide assurance that contaminated gastropods would not reach fish markets, thereby ensuring the safety for human consumers. Therefore, it would have a positive effect on seafood consumers that eat gastropods. This action would also have long term positive impact on the fishing industry as it would reduce the likelihood of contaminated product from reaching consumers. Thus, this action would help by not reducing consumer interest in purchasing and consuming gastropods and possibly bivalves. Therefore, this action could have a minor positive effect on the general public as well as the overall molluscan fishing industry.

This action is expected to have minor negative consequences on fisherman, dealers, and related fishery entities. In 2013 there were approximately 501 vessels that landed 4 million pounds of gastropods in ME, MA, and RI harvested from Federal waters, worth $5.38 million. Also, in 2013, 187 dealers from these states purchased gastropods harvested from Federal waters, for a total of 691 Federally permitted entities that could possibly be affected. However, these figures reflect the maximum possible amount that could be affected and it is expected that the actual number of affected entities would be significantly lower, for a number of reasons described in more detail below. As previously discussed, since this analysis includes only dealer reported landings, it is not known exactly where these landings are being harvested. It is highly likely that a number of these landings were harvested outside of the area being closed in this action, particularly for the ports that located farther from the closed area.

NH has no past history of whelk landings from Federal waters. As such it is difficult to quantify the effect on NH based entities. Given its close proximity to the closed area and the fact that we have been informed there are NH based dealers and vessels preparing to engage in the whelk fishery, this action would prevent any whelk fishery from developing in the closed area. The primary port affected, Portsmouth, is near the northern most border of the closed area in this action, therefore if vessels are in fact preparing to fish for whelk it is feasible to steam similar distances to other fishing grounds that aren't closed due to PSP. Therefore, although this action prohibits gastropod fishing from within the closed area, there are other waters that are within similar distances where whelk fishing can occur. Because of this and the fact that there is no current Federal waters whelk fishery in NH, the effects of this action on NH based entities is expected to be negligible.

As discussed above, the state of ME is included in this analysis because it is in relative proximity to the northern PSP closure area. However, it is unlikely that Federal waters landings of whelk in the state of ME were taken from the PSP closed areas. The primary fishery in Maine is for the waved whelk, while the fishery in the area of the known closures is primarily for the channeled whelk. Dealer reported gastropod landings in ME taken from Federal waters were from dealers located in mid-coast and down east ME. As such, it is unlikely that steaming from this distance to access the PSP closed areas would be cost effective and further supports that it is likely that ME whelk landings are not from the PSP areas. Therefore, since the ME fishery occurs a significant distance from the PSP closed areas and since it appears to be a different gastropod fishery than what is occurring in the PSP closed areas, it is expected that ME based fishers would not be affected by this action.

The gastropod fishery in RI landed approximately 0.6 million pounds in 2013 worth $1.1 million. This includes 48 dealers and 230 vessels in 2013. Although there are a number of entities involved in gastropod harvesting in RI, it is expected that only a very minor subset of them, if any, would be affected. The majority of Federal waters readily accessible from RI do not include the PSP closed areas in this action. Hence, it is likely that a significant amount of RI landings are coming from waters in closer proximity to RI, which are not part of the PSP closed area. In addition, as discussed in section 4 of this analysis, it is likely that any remaining gastropod landings taken from the PSP closed areas that can be attributed to RI are likely from lobster vessels who bycatch gastropods when lobster fishing. Since lobster fisherman would not be directing effort on whelks, it is expected that only a minor subset of RI landings to be attributed to the area in this action. In addition, since these vessels are relying on lobster as their primary fishery, any affects would not be as severe as it would be for a vessel focused only on whelk harvesting. Therefore, due to the reasons above, it is expected that any effects on RI based entities would be insignificant.

Since the majority of past landings are from MA and MA is within the closest proximity to the closure in question, it is expected that MA communities will be the most affected by this action. Gastropods taken from Federal waters and landed in MA, account for approximately 3.3 million pounds, worth approximately $4.2 million in 2013. The vast majority of MA landings were landed in Cape Cod ports, which are in very close proximity to the southern PSP closed area. In 2013, Massachusetts had 130 dealers and 292 vessels involved in the gastropod fishery. Therefore, this action could potentially result in the loss of approximately $4.2 million dollars to the fishing industry in MA. Specifically, given that the majority of dealers and landings are from Cape Cod, it is expected that that the brunt of this loss would be to Cape Cod based entities. However, since this fishery is not managed, there are no other areas closed specifically to gastropod harvesting. Therefore, there is the possibility that a portion of this loss could be mitigated by shifting effort to other fishing grounds.

In conclusion, although this analysis considers all gastropod activity from areas within reasonable distance to the PSP closed areas due to lack of data, it is unlikely that all gastropod activity and fishers would be affected. Overall in 2013, approximately 4 million pounds worth approximately $5.4 million were harvested. This was from 501 vessels, selling to 187 dealers. As discussed above, it is likely that MA based entities would be most affected. As such it is expected that this action would prevent the harvest of approximately 1 million pounds of

gastropods worth $4 million dollars, and impacting 130 dealers and 292 vessels. Although, these numbers could be somewhat reduced by shifting effort to new fishing grounds. It should also be noted that the FDA and the state of MA are currently investigating this issue and it is possible that in the future it could be determined that these waters are safe to reopen to gastropod and bivalve harvesting. Therefore, since this is a temporary emergency action it is not intended to be permanent, it is not expected that the impacts will be permanent.

B. No Action Alternative

- Location/Physical Environment/EFH

The impacts of No Action would allow gastropod fishing to occur in the closed area. Based on available data, this fishery is primarily a bycatch fishery of the lobster and fish trap/pot and scallop fisheries, carried out using pot/trap and dredge type gear with some hand harvest as well. As such, ongoing operation of the lobster and scallop fisheries has likely already had a negative impact to the physical environment and EFH. Any incremental impacts that result from a directed whelk fishery prosecuted using pots/trap gear is expected to have only slightly negative impacts to the physical environment and EFH.

- Target Species

The No Action alternative could have some negative impacts to target species. This would allow gastropod harvest in the action area, thus this fishery would likely continue to develop in these waters. As a result, the No Action would likely result in additional fish gear and whelk harvest. It is believed that the market for this fishery is primarily an international market. As such it is difficult to determine how rapid this fishery would expand if there area were to remain open. Past landings have been somewhat consistent, which indicates that it could be a market driven fishery, which would prevent a significant expansion of this fishery. Therefore, the No Action alternative would likely result in the continued harvest of approximately 3-4 million pounds of the target species per year. Since there is little data available on this fishery it is not known if this is a sustainable quantity.

- Protected Resources

Not implementing this closure could have some slight negative impacts on protected resources and marine mammals. This would allow the continued harvest of gastropods from the action area. Although the fishery is believed to be primarily a bycatch fishery, there is the potential that there is some directed effort utilizing whelk specific pots/traps. Thus the No Action alternative would allow or continue the introduction of additional fishing effort and gear that could cause an increase in gear interactions with protected species. While it is difficult to determine what the predicted future use of gear would be used in the action area, it would likely be pot/trap or scallop dredge gear. Additional fixed gear being placed in the water could result in negative impacts on marine mammals that have been known to interact with lobster gear. In addition, depending upon what permits a fisher holds, not implementing this action could potentially allow additional fixed gear to be placed in the water that has otherwise not been considered. Since this is a new fishery, there is no permit and regulations for it. Therefore, not implementing this

action could potentially allow a new type of trap to be placed in the water that would be in addition to the existing lobster gear. Additional dredge effort could have negative impacts on sea turtles and Atlantic sturgeon that they are known to interact with. However, since the whelk fishery is believed to be a bycatch fishery, it is likely that there will be little additional gear and effort as a result of the No Action alternative.

- Human Communities

Not implementing this closure would allow continued gastropod harvest in the proposed area, resulting in such gastropods entering the market place. This could have substantial negative impacts to human communities as individuals could possibly consume toxic gastropods leading to illness or potentially death.

Taking no action could also have overall damage to the whelk fishery as well has a number of other fisheries that have PSP implications. If there is a PSP event as a result of this area not being closed, the general public could lose faith in fisheries and thus discontinue or reduce how much seafood products they purchase. In addition, the whelk fishery is a new and developing fishery, and a PSP event could significantly damage the emerging markets.

B. Cumulative Effects

Minor cumulative effects to physical or biological resources are anticipated from this action. When combined with other past and present fishery management actions aimed at reducing fishing effort and protecting habitat, it is likely that the cumulative effects on the physical environment/EFH in the proposed closure areas could be slightly positive, since this action prevents the use of additional fishing gear to target gastropods. However, gastropods are often taken as bycatch in other fisheries (e.g., lobster and scallop), so any positive EFH impacts would likely be negligible because this action would not prohibit those other fisheries from occurring.

Regarding cumulative impacts to protected species, similar to the physical environment, past and present management actions have combined to reduce fishing effort and promote the use of fishing gear that is less hazardous to marine mammals and turtles (e.g., break-away lines). Further, NMFS is currently considering changes to the vertical lines used in trap/pot gear that are intended to reduce entanglements. These changes in combination with the proposed elimination of a directed gastropod fishery in the closed areas may have a slightly positive impact. However, because gastropods are often taken as bycatch in other fisheries which will continue to operate in the proposed closed areas and because effort could be redirected to other open areas, any positive impacts from the closed areas would likely be negligible and insignificant.

Cumulative impacts to target species are expected to be slightly positive to neutral. Further, outside of a small gastropod fishery developing in NH, we are not aware of any future actions that would result in greater effort on the resource and there is no evidence that gastropods are overfished or that overfishing is occurring. Although a closure of the proposed areas would protect gastropods in that area from further harvest, it is possible that vessels could redirect their effort to other, open areas. Therefore, any positive biological impacts from the closure may not be realized but no cumulative significant impacts, negative or positive, are expected.

There may also be some minor, positive cumulative impacts to seafood consumers and fish markets. This action would prevent any toxic gastropods from entering the market. Therefore, it would promote safe seafood products and protect seafood consumers.

Regarding the fishing industry, many of New England's most historic commercial fisheries, such as groundfish and lobster, are heavily regulated. This has led the fishing industry to seek other sources of income, such as harvesting gastropods. The proposed closure could result in negative, insignificant cumulative impacts to the fishing industry, particularly those areas closest to the closure areas such as Cape Cod, MA. However, whelks are available for harvest in other waters outside of the proposed closed areas. In fact, since it is not a managed fishery, there are very few areas where whelk fishing would be prohibited. As such, any cumulative negative impacts are not expected to be significant because the whelk fishery could continue to be developed in other state and Federal waters.

Further, the FDA and the state of MA are currently investigating PSP and gastropods and it is possible that in the future it could be determined that these waters are safe to reopen to gastropod and bivalve harvesting. Therefore, since this is a temporary emergency action it is not intended to be permanent, it is not expected that the cumulative effects will be significant.

6.0 LIST OF AGENCIES AND PERSONS CONSULTED

In preparing this EA, NMFS consulted with the FDA, the state of Maine's Department of Marine Resources and the Commonwealth of Massachusetts's Division of Marine Fisheries and Department of Public Health. In addition, some information was supplied by members of the seafood industry. To ensure compliance with NMFS formatting requirements, the advice of NMFS NERO personnel was sought.

7.0 LIST OF APPLICABLE LAWS

Finding of No Significant Impacts

NOAA Order 216-6 (May 20, 1999) contains criteria for determining the significance of the impacts of a proposed action. In addition, the Council on Environmental Quality (CEQ) regulations at 40 C.F.R. 1508.27 state that the significance of an action should be analyzed both in terms of "context" and "intensity." Each criterion listed below is relevant in making a finding of no significant impact and has been considered individually, as well as in combination with the others. The significance of this action is analyzed based on the NAO 216-6 criteria and CEQ's context and intensity criteria. These include:

1. Can the proposed action reasonably be expected to jeopardize the sustainability of any target species that may be affected by the action?

The proposed action is not reasonably expected to jeopardize the sustainability of any gastropod species as described in section 5 of this EA. Although there is no Fishery Management Plan for gastropods that would manage and ensure the sustainability of the targets species, there is no evidence of overfishing and the proposed action would close the area to gastropod fishing, thus the target species addressed in this action would be protected from harvesting within the closure area.

2. Can the proposed action reasonably be expected to jeopardize the sustainability of any non-target species?

The proposed action is not reasonably expected to jeopardize the sustainability of any non-target species. As discussed in section 5, it is believed that the whelk fishery is carried out primarily as a bycatch fishery to the commercial lobster and fish trap/pot and scallop fisheries. While there is some anecdotal evidence that a very limited, directed gastropod fishery may exist, because it is not federally managed, there is no information indicating that bycatch to the directed whelk fishery occurs. Further, given the very limited scope of a directed fishery, any bycatch would be minimal.

3. Can the proposed action reasonably be expected to allow substantial damage to the ocean and coastal habitats and/or EFH as defined under the Magnuson-Stevens Act and identified in FMPs?

This action is not expected to cause substantial damage to the ocean and coastal habitats. In regards to the area being closed, there should be little to no additional damage to habitats since no additional effort would be allowed in the area. However, this action could shift some effort into other waters. However, the scale of the whelk fishery is relatively small so it is expected that the shifting of effort would not be great enough to cause any substantial damage. In addition, it is believed that the majority of whelk landings taken from Federal waters are from bycatch in other fisheries. Available data display that whelk is landed using primarily scallop dredge and pot/trap type gear used to target both lobster and fish. As a result, since this closure only prohibits the possession of whelk, scallop dredge and lobster and fish pot/trap gear could still be fished in the closed area. Since this effort already occurs in the area being closed this action would not permit any additional substantial damage to the ocean, coastal habitats and/or EFH.

4. Can the proposed action reasonably be expected to have a substantial adverse impact on public health or safety?

It is not reasonably expected that the proposed action will have a substantial adverse impact on public health or safety. This action is being taken based upon request from the FDA to protect the public health. Based on available data, gastropods are susceptible to the toxins that cause PSP and as such the existing PSP closure in this action should also include gastropods. As such, this action would protect any potentially toxic gastropods from entering the market, thus protecting public health and safety.

5. Can the proposed action be reasonably expected to adversely affect endangered or threatened species, marine mammals, or critical habitat of these species?

The proposed action is not expected to have an adverse impact on endangered or threatened species, marine mammals, or critical habitat for these species. Since the majority of the whelk fishery occurs as a bycatch fishery in the lobster and fish trap/pot and scallop dredge fisheries any adverse effects to endangered or threatened species, marine mammals, or their critical habitats would be similar to what is seen in these fisheries. Since this action only prohibits the possession of gastropods from the closed area, these scallop, lobster, and fish fisheries would be allowed to continue. As such, the potential remains for adverse impacts to endangered and threatened species, marine mammals, and their habitats. However, interactions between these gear types and these species are already considered in the current Endangered Species Action Biological Opinions for these fisheries. Since this action imposes no direct changes to these fisheries, it is not expected that there would be any significant adverse impacts to endangered species, marine mammals, and their habitats as a result of this action.

6. Can the proposed action reasonably be expected to have a substantial impact on biodiversity and/or ecosystem function within the affected area (e.g., benthic productivity, predator-prey relationships, etc.)?

This action is not expected to have a substantial impact on biodiversity and ecosystem function within the affected area. The affected area has been impacted by fisheries for many decades, yet continues to be a productive environment for involved species.

7. Are significant social or economic impacts interrelated with natural or physical environmental effects?

No, this action does not propose significant social or economic impacts interrelated with significant natural or physical environmental effects. The proposed action closes waters to the harvest of gastropods. Since this was not anticipated to have significant social or economic impacts interrelated with significant natural or physical environmental effects, none are expected to result from the proposed action.

8. Are the effects on the quality of human communities likely to be highly controversial?

No, the effects on the quality of the human environment are not likely to be highly controversial. This action closes specified waters to the harvest of gastropods. The waters being closed are waters that are currently closed to bivalve harvesting due to the possible presence of PSP. This action would essentially expand an existing bivalve closure to also include a prohibition on gastropod harvesting.

The bivalves, if contaminated with the toxin that causes PSP, transfer the toxins on to the whelk when ingested. While there are not a lot of data available on how susceptible gastropods are to these toxins, the best available scientific data from the FDA and the Commonwealth of Massachusetts indicate that gastropods typically have higher levels of the PSP-causing toxin and retain it longer than bivalves taken from the same waters. Therefore, this action would protect public health and is not anticipated to have a high degree of scientific controversy.

9. Can the proposed action reasonably be expected to result in substantial impacts to unique areas, such as historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers or ecologically critical areas?

The proposed action would prohibit gastropod harvesting from a specific area. Other types of commercial fishing already occur in this area and although it is possible that historic or cultural resources such as shipwrecks could be present, vessels try to avoid fishing too close to wrecks due to the possible loss or entanglement of fishing gear. Because this action restricts fishing activity, it is not likely that the proposed action would result in substantial impacts to unique areas.

10. Are the effects on human communities likely to be highly uncertain or involve unique or unknown risks?

This action is not expected to significantly alter fishing methods or activities in the gastropod fishery. The fishery is relatively small scale, with a large bycatch component. Further, this action would reduce risks to the public through the promotion of safe seafood products and the protection of seafood consumers. The measures contained in this action are not expected to have highly uncertain, unique, or unknown risks on the human environment.

11. Is the proposed action related to other actions with individually insignificant, but cumulatively significant impacts?

No, the proposed action is not related to other actions with individually insignificant but cumulatively significant impacts. This action is a temporary emergency action to close waters to gastropod harvesting due to the toxins that cause PSP. This action is the first action in the Northeast region that would affect gastropod harvest. Therefore, there are no other actions that would be related to this action.

12. Is the proposed action likely to adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural or historical resources?

Although there are shipwrecks present in areas where fishing occurs, including some registered on the National Register of Historic Places, vessels try to avoid fishing too close to wrecks due to the possible loss or entanglement of fishing gear. Therefore, it is not likely that the proposed action would adversely affect the historic resources.

13. Can the proposed action reasonably be expected to result in the introduction or spread of a nonindigenous species?

This action would not result in the introduction or spread of any nonindigenous species. This action is restrictive in nature, prohibiting fishing activity. Therefore, it is highly unlikely that the proposed action would be expected to result in the introduction or spread of non-indigenous species.

14. Is the proposed action likely to establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration?

No, the proposed action is not likely to establish precedent for future actions with significant effects. Opening and closing areas for fishing activity occur regularly in fisheries management. This action is not significantly different than past fishery spatial openings or closings and would, not, therefore, set a precedent for future actions that would have significant effects or represent a decision in principle about a future consideration.

15. Can the proposed action reasonably be expected to threaten a violation of Federal, State, or local law or requirements imposed for the protection of the environment?

The proposed action would not threaten a violation of Federal, state, or local law or requirements to protect the environment. The action complies with all applicable laws.

16. Can the proposed action reasonably be expected to result in cumulative adverse effects that could have a substantial effect on the target species or non-target species?

As specified in the responses to the first two criteria of this section, the proposed action is not expected to result in cumulative adverse effects that would have a substantial effect on target species as discussed in section 5 of this document. In regards to non-target species, gastropods are not managed under a Federal Fishery Management Plan. As such it is not well known exactly how fishing activity and operations would be conducted for whelk in Federal waters. Since this information is not known, there is no readily available information regarding bycatch or non-target species in Federal waters. While there is some anecdotal evidence that a very limited, directed gastropod fishery may exist, because it is not federally managed, there is no information indicating that bycatch to the directed whelk fishery occurs. Further, given the very limited scope of a directed fishery, any cumulative adverse effects of this action on non-target species are expected to be minimal and not significant.

DETERMINATION: In view of the information presented in this document and the analysis contained in the supporting EA prepared for this action, it is hereby determined that the proposed action to prohibit gastropod harvesting from the areas currently defined and referred to as the Temporary PSP Closed Areas would not significantly impact the quality of the human environment as described above and in the supporting EA. In addition, all beneficial and adverse impacts of the proposed action have been addressed to reach the conclusion of no significant impacts. Accordingly, preparation of an EIS for this action is not necessary.

for JOHN BULLARD 12/12/17

Regional Administrator, Northeast Region **Date**

Magnuson-Stevens Fishery Conservation Management Act

Pursuant to section 305(c)(3) of the Magnuson-Stevens Act, the proposed action is consistent with emergency regulation or interim measures and meets the criteria of an emergency, other provisions of the Magnuson-Stevens Act, and other applicable law, subject to further consideration after public comment.

In regards to EFH, the area affected by the temporary action has been identified as EFH for Atlantic sea scallop; Atlantic herring; monkfish; spiny dogfish; summer flounder, scup, and black sea bass; Atlantic mackerel, squid, and butterfish; Atlantic surfclam and ocean quahog; Atlantic bluefish; Atlantic tunas, swordfish, and sharks; NE multispecies; and skates. This rule closes an area to shellfish fishing in response to a public health emergency. No EFH consultation is required.

Endangered Species Act

I have determined that fishing activities pursuant to this rule will not affect endangered and threatened species or critical habitat in any manner not considered in prior consultations on this fishery. This action will not result in any increase in fishing activity.

Marine Mammal Protection Act

I have determined that fishing activities conducted under this temporary emergency rule will have no adverse impact on marine mammals. This action will not result in any increase in fishing activity.

Coastal Zone Management Act

I have determined that this action is consistent to the maximum extent practicable with the enforceable policies of the approved coastal management program of Maine, New Hampshire, Massachusetts, Connecticut, Rhode Island, New York, New Jersey, Maryland, Delaware, Pennsylvania, Virginia, and North Carolina. This determination was submitted as a general consistency determination, for this and all future similar PSP closures, to the responsible state agencies on October 22, 2008. All responding states thus far have concurred with this determination.

Administrative Procedure Act

The Assistant Administrator for Fisheries, NOAA, finds good cause under 5 U.S.C. 553(b)(B) and 553(d)(3), respectively, to waive prior notice and the opportunity for public comment and delayed effectiveness period on this action. This rule responds to a public health emergency in Federal waters resulting from the presence of the toxin that, in very large concentrations, causes PSP. Human consumption of affected shellfish and gastropods can result in serious illness or even death. Any delay in making this rule effective as soon as possible is contrary to the public interest.

Section 515 (Information Quality Act)

Pursuant to section 515 of Public Law 106-554, this information product has undergone a pre-dissemination review by the Sustainable Fisheries Division, completed on December 10, 2013. The signed Pre-dissemination Review and Documentation Form is on file in that Office and a copy of the form is included with this package.

Paperwork Reduction Act

This temporary rule does not contain a collection-of-information requirement subject to the PRA.

Impacts of the Plan Relative to Federalism/Executive Order (E.O.) 13132

This action does not contain policies with federalism implications under E.O. 13132.

E.O. 12866

Pursuant to the procedures established to implement section 6 of E.O. 12866, I have initially determined that this temporary emergency rule is not significant.

Regulatory Flexibility Act

This emergency rule is exempt from the procedures of the RFA because the rule is issued without opportunity for prior notice and opportunity for public comment.

8.0 REFERENCES

Dietl & Alexander, Shell Repair Frequencies in Whelks and Moon Snails from Delaware and Southern New Yersey, Malacologia v. 39 (1998), p.152

Dwyer, K.L., C.E. Ryder, and R. Prescott. 2002. Anthropogenic mortality of leatherback sea turtles in Massachusetts waters. Poster presentation for the 2002 Northeast Stranding Network Symposium.

Epperly, S., L. Avens, L. Garrison, T. Henwood, W. Hoggard, J. Mitchell, J. Nance, J. Poffenberger, C. Sasso, E. Scott-Denton, and C. Yeung. 2002. Analysis of Sea Turtle Bycatch in the Commercial Shrimp Fisheries of Southeast U.S. Waters and the Gulf of Mexico. NOAA Technical Memorandum NMFS-SEFSC-490, 88pp.

Fish and Fishery Products Hazards and Controls Guidance, FDA. November 2011. www.fda.gov/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/Seafood/ucm2018426.htm

Profile of the Channeled Whelk Pot Fishery. A report to the Director and Massachusetts Marine Fisheries Commission. Glenn, R. and S. Wilcox. 2012. Massachusetts Division of Marine Fisheries, New Bedford, MA

Himmelman, J.H. and Hamel, J.-R. (1993) Diet, behaviour and reproduction of the whelk Buccinum undatum in the northern Gulf of St. Lawrence, eastern Canada. 116:3. pp. 423-430. Marine Biology.

Maine's Division of Marine Fisheries whelk webpage. www.maine.gov/dmr/rm/whelks.html

Madeleine Hall-Arber, Christopher Dyer, John Poggie, New England's Fishing Communities, 2001, 426 pp. MITSG 01-15

Mansfield, K.L., J.A. Musick, and R.A. Pemberton. 2001. Characterization of the Chesapeake Bay pound net and whelk pot fisheries and their potential interactions with marine sea turtle species. Final Report to the National Marine Fisheries Service under Contract No. 43EANFO30131. 75 pp.

Multidisciplinary Digital Publishing Institute--Marine Drugs. Non-Traditional Vectors for Paralytic Shellfish Poisoning. Jonathan R. Deeds, Jan H. Landsberg, Stacey M. Etheridge, Grant C. Pitcher, and Sara Watt Longan. September 2008. www.mdpi.com/1660-3397/6/2/308

NMFS (National Marine Fisheries Service). 2007. Final Environmental Impact Statement for amending the Atlantic Large Whale Take Reduction Plan: broad-based gear modifications. Volume I of II.

NMFS SEFSC (Southeast Fisheries Science Center). 2001. Stock assessments of loggerhead and leatherback sea turtles and an assessment of the impact of the pelagic longline fishery on the loggerhead and leatherback sea turtles of the Western North Atlantic. NOAA Technical Memorandum NMFS-SEFSC-455:1-343.

NOAA's Northeast Fisheries Science Center. Patricia M. Clay, Lisa L. Colburn, Julia Olson, Patricia Pinto da Silva, Sarah L. Smith, Azure Westwood, and Julie Ekstrom. Community Profiles for the Northeast US Fisheries, October 2010.

NOAA's NMFS. December 2008. Extension of the shellfish closure of Federal waters for a public health emergency red tide event: Programmatic Environmental Assessment and Regulatory Impact Review.

NOAA's NMFS, August 2012. ESA Section 7 Consultation on the American Lobster FMP. Biological Opinion, August 2012.

The Unknown Life History Characteristics of the Channeled Whelk. Wilcox, S., and Oliveira, K. http://biologyseminars.blogs.umassd.edu/unknown-life-history-of-the-channeled-whelk/

Ten Hallers-Tjabbes, C.C., Everaarts, J.M., Mensink, B.P., & Boon, J.P. (1996) The Decline of the North Sea Whelk (Buccinum undatum L.) Between 1970 and 1990: A Natural or Human-Induced Event? 17:1-3. pp. 333-43. Marine Ecology.