

## CORRESPONDENCE



New England Fishery Management Council

50 WATER STREET | NEWBURYPORT, MASSACHUSETTS 01950 | PHONE 978 465 0492 | FAX 978 465 3116

John F. Quinn, J.D., Ph.D., *Chairman* | Thomas A. Nies, *Executive Director*

March 27, 2017

Mr. John Bullard  
Regional Administrator  
National Marine Fisheries Service  
Greater Atlantic Regional Fisheries Office  
55 Great Republic Drive  
Gloucester, MA 01930

Dear John:

In accordance with provisions of the Magnuson-Stevens Act, I have reviewed the draft regulatory text for Omnibus Essential Fish Habitat Amendment 2 in order to deem whether it is consistent with the amendment text and the Council's intent. The draft regulatory text was originally provided to the Council staff by email on January 23, 2017. We revised the draft regulations in collaboration with your staff, and the enclosure reflects the agreed upon revisions. Our revisions are limited to those regulations implementing the Omnibus Habitat Amendment. I am not commenting on portions of §648.81 (NE multispecies year-round and seasonal closed areas) that are unaffected by the amendment. I have concluded that the proposed regulatory text implementing the amendment measures is consistent with Council intent.

Please feel free to call me with any concerns.

Sincerely,

John F. Quinn, J.D., Ph.D.  
Council Chairman

Enclosure: OHA2 Draft regulations

*Notes:*

*Cross references which require final review are highlighted.*

*GARFO staff are reviewing §648.81 (b)(2)(ii) to see if the language can be cleaned up at all.  
This is the existing language.*

## Subpart A

### §648.2 Definitions

*Bottom-tending mobile gear*, means gear in contact with the ocean bottom, and towed from a vessel, which is moved through the water during fishing in order to capture fish, and includes otter trawls, beam trawls, hydraulic dredges, non-hydraulic dredges, and seines (with the exception of a purse seine).

*Bridles* connect the wings of a bottom trawl to the ground cables. The ground cables lead to the doors or otter boards. The doors are attached to the towing vessel via steel cables, referred to as wires or warps. Each net has two sets of bridles, one on each side.

*Ground cables* on a bottom trawl run between the bridles, which attach directly to the wings of the net, and the doors, or otter boards. The doors are attached to the towing vessel via steel cables, referred to as wires or warps.

## Subpart D

### §648.5X

(?) *Closed Area II Seasonal Scallop Closure*. From June 15 through October 31 of each year, no fishing vessel may fish with scallop dredge gear in the portion of Closed Area II, as specified in section 648.81XXX, north of 41° 30'N.

## Subpart F

### § 648.80 NE Multispecies regulated mesh areas and restrictions on gear and methods of fishing.

(a) \* \* \*

(3) \* \* \*

(vii) {Reserved}

### §648.81 NE multispecies year-round and seasonal closed areas.

(a) *Year-round groundfish closed areas*. (1) No fishing vessel or person on a fishing vessel may enter, fish, or be in, and no fishing gear capable of catching NE multispecies may be used or on board a vessel in, the Cashes Ledge or Western Gulf of Maine Closure Areas, unless otherwise allowed by or exempted under this part. Charts of the areas described in this section are available from the Regional Administrator upon request.

(2) Exemptions. Unless restricted by the requirements of subpart (P) or elsewhere in this part, paragraph (a)(1) of this section does not apply to a fishing vessel or person on a fishing vessel when fishing under the following conditions:



(i) Fishing with or using exempted gear as defined under this part, except for pelagic gillnet gear capable of catching NE multispecies, unless fishing with a single pelagic gillnet not longer than 300 ft (91.4 m) and not greater than 6 ft (1.83 m) deep, with a maximum mesh size of 3 inches (7.6 cm), provided that:

(A) The net is attached to the boat and fished in the upper two-thirds of the water column;

(B) The net is marked with the owner's name and vessel identification number;

(C) No regulated species or ocean pout are retained; and

(D) No other gear capable of catching NE multispecies is on board;

(ii) Fishing in the Midwater Trawl Gear Exempted Fishery as specified in §648.80(d);

(iii) Fishing in the Purse Seine Gear Exempted Fishery as specified in §648.80(e);

(iv) Fishing under charter/party or recreational regulations specified in §648.89, provided that:

(A) A letter of authorization issued by the Regional Administrator is onboard the vessel, which is valid from the date of enrollment until the end of the fishing year;

(B) No harvested or possessed fish species managed by the NEFMC or MAFMC are sold or intended for trade, barter or sale, regardless of where the fish are caught;

(C) Only rod and reel or handline gear is on board the vessel; and

(D) No NE multispecies DAS are used during the entire period for which the letter of authorization is valid.

(3) *Cashes Ledge Closure Area*. The Cashes Ledge Closure Area is defined by straight lines connecting the following points in the order stated:

**CASHES LEDGE CLOSURE AREA**

Point	N. lat.	W. long.
CL1	43°07'	69°02'
CL2	42°49.5'	68°46'
CL3	42°46.5'	68°50.5'
CL4	42°43.5'	68°58.5'
CL5	42°42.5'	69°17.5'
CL6	42°49.5'	69°26'
CL1	43°07'	69°02'

(4) *Western GOM Closure Area*. The Western GOM Closure Area is defined by straight lines connecting the following points in the order stated:

#### WESTERN GOM CLOSURE AREA

Point	N. lat.	W. long.
WGM1	42°15'	70°15'
WGM2	42°15'	69°55'
WGM3	43°15'	69°55'
WGM4	43°15'	70°15'
WGM1	42°15'	70°15'

(b) *Gulf of Maine spawning groundfish closures.* (1) Unless allowed in this part, no fishing vessel or person on a fishing vessel may enter, fish, or be in, and no fishing gear capable of catching NE multispecies may be used or on board a vessel in, the spawning closure areas described in paragraphs (b)(3) and (b)(4), during the times specified in this section. Charts depicting the areas defined here are available from the RA upon request.

(2) *Exemptions.* Paragraph (b)(1) of this section does not apply to a fishing vessel or person on a fishing vessel:

(i) That has not been issued a NE multispecies permit that is fishing exclusively in state waters;

(ii) That is fishing with or using exempted gear as defined under this part, excluding pelagic gillnet gear capable of catching NE multispecies, except for a vessel fishing with a single pelagic gillnet not longer than 300 ft (91.4 m) and not greater than 6 ft (1.83 m) deep, with a maximum mesh size of 3 inches (7.6 cm), provided:

(A) The net is attached to the vessel and fished in the upper two-thirds of the water column;

(B) The net is marked with the vessel owner's name and vessel identification number;

(C) No regulated species or ocean pout are retained; and

(D) No other gear capable of catching NE multispecies is on board;

(iii) That is fishing as a charter/party or recreational fishing vessel, provided that:

(A) With the exception of tuna, fish harvested or possessed by the vessel are not sold or intended for trade, barter, or sale, regardless where the species are caught;

(B) Any gear other than pelagic hook and line gear, as defined in this part, is properly stowed and not available for immediate use as defined in §648.2; and

(C) No regulated species or ocean pout are retained; and

(iv) That is transiting pursuant to paragraph (i) of this section.

(3) *GOM Cod Spawning Protection Area.* Except as specified in paragraph (b)(2) of this section, from April through June of each year, no fishing vessel or person on a fishing vessel may enter, fish, or be in, and no fishing gear capable of catching NE multispecies may be used or on board a vessel in, the GOM Cod Spawning Protection Area, as defined by straight lines connecting the following points in the order stated:

**GOM COD SPAWNING PROTECTION AREA**

Point	N. latitude	W. longitude
CSPA1	42°50.95'	70°32.22'
CSPA2	42°47.65'	70°35.64'
CSPA3	42°54.91'	70°41.88'
CSPA4	42°58.27'	70°38.64'
CSPA1	42°50.95'	70°32.22'

(4) *Winter Massachusetts Bay Spawning Protection Area.* Except as specified in paragraph (b)(2) of this section, from November 1 through January 31 of each year, no fishing vessel or person on a fishing vessel may enter, fish, or be in, and no fishing gear capable of catching NE multispecies may be used or be on board a vessel in, the Massachusetts Bay Spawning Protection Area, as defined by a straight line connecting the following points along the Massachusetts state waters boundary:

**WINTER MASSACHUSETTS BAY SPAWNING PROTECTION AREA**

Point	N. Latitude	W. Longitude
1	42° 23.6'	70° 39.2'
2	42° 07.7'	70° 26.8'

(1) Western/southern boundary at Massachusetts state waters

(5) *Spring Massachusetts Bay Spawning Protection Area.* (i) From April 15 through April 30 of each year, no fishing vessel or person on a fishing vessel may enter, fish, or be in, and no fishing gear capable of catching NE multispecies may be used or on board a vessel in, the thirty minute block defined by straight lines connecting the following points in the order stated:

**SPRING MASSACHUSETTS BAY SPAWNING PROTECTION AREA**

Point	N. Latitude	W. Longitude
1	42° 00'	70° 30'
2	42° 30'	70° 30'
3	Massachusetts coastline south of Duxbury and 42° 00' N	
4	Massachusetts coastline near Marblehead and 42° 30' N	

(ii) Unless otherwise restricted in this part, the Block 125 closure does not apply to a fishing vessel or person on a fishing vessel that meets the criteria in paragraphs (d)(5)(ii) through (vi) and (d)(5)(x) of this section (listed under the exemptions for the GOM Cod Protection Closures). This includes recreational vessels meeting the criteria specified in paragraphs (d)(5)(v)(A) through (D) of this section.

(c) *Georges Bank Spawning Groundfish Closures.* (1) Unless otherwise allowed in this part, no fishing vessel or person on a fishing vessel may enter, fish, or be in, and no fishing gear capable of catching NE multispecies may be used on board a vessel in the spawning closure areas described in paragraphs (b)(3) and (b)(4), and during the times specified in this section. Charts depicting the areas defined here are available from the RA upon request.

(2) Exemptions. Paragraph (c)(1) of this section does not apply to a fishing vessel or person on a fishing vessel:

(i) That is fishing with or using exempted gear as defined under this part, excluding pelagic gillnet gear capable of catching NE multispecies, except for vessels fishing with a single pelagic gillnet not longer than 300 ft (91.4 m) and not greater than 6 ft (1.83 m) deep, with a maximum mesh size of 3 inches (7.6 cm), provided:

(A) The net is attached to the vessel and fished in the upper two-thirds of the water column;

(B) The net is marked with the vessel owner's name and vessel identification number;

(C) No regulated species or ocean pout are retained; and

(D) No other gear capable of catching NE multispecies is on board;

(ii) That is fishing for scallops consistent with any restrictions imposed by the scallop fishery management plan, including rotational access program requirements specified in § 648.59.

(iii) That is fishing in the mid-water trawl exempted fishery.

(iv) That is transiting pursuant to the requirements described in § 648.2.

(3) *Closed Area I North.* Except as specified in paragraph (c)(2) of this section, from February 1 through April 15 of each year, no fishing vessel or person on a fishing vessel may enter, fish, or be in; and no fishing gear capable of catching NE multispecies may be used on board a vessel in, Closed Area I North, as defined by straight lines connecting the following points in the order stated:

**CLOSED AREA I—NORTH**

Point	N. lat.	W. long.
CI1	41°30'	69°23'
CI4	41°30'	68°30'
CIH1	41°26'	68°30'
CIH2	41°04'	69°01'
CI1	41°30'	69°23'

(4) *Closed Area II.* Except as specified in paragraph (c)(2) of this section, from February 1 through April 15 of each year, no fishing vessel or person on a fishing vessel may enter, fish, or

be in, and no fishing gear capable of catching NE multispecies may be used or on board a vessel in, Closed Area II, as defined by straight lines connecting the following points in the order stated:

**CLOSED AREA II**

Point	N. lat.	W. long.
C1I1	41°00'	67°20'
C1I2	41°00'	66°35.8'
G5	41°18.6'	66°24.8' <sup>1</sup>
C1I3	42°22'	67°20' <sup>1</sup>
C1I1	41°00'	67°20' <sup>1</sup>

(d) *GOM Cod Protection Closures.* (1) Unless otherwise allowed in this part, no fishing vessel or person on a fishing vessel may enter, fish, or be in, and no fishing gear capable of catching NE multispecies may be used or on board a vessel in, GOM Cod Protection Closures I through V as described, and during the times specified, in paragraphs (d)(4)(i) through (v) of this section.

(2) The New England Fishery Management Council shall review the GOM Cod Protection Closures Areas specified in this section when the spawning stock biomass for GOM cod reaches the minimum biomass threshold specified for the stock (50 percent of  $SSB_{MSY}$ ).

(3) *Seasons.* (i) GOM Cod Protection Closure I is in effect from May 1 through May 31.

(ii) GOM Cod Protection Closure II is in effect from June 1 through June 30.

(iii) GOM Cod Protection Closure III is in effect from November 1 through January 31.

(iv) GOM Cod Protection Closure IV is in effect from October 1 through October 31.

(v) GOM Cod Protection Closure V is in effect from March 1 through March 31.

(4) *GOM Cod Protection Closure Areas.* Charts depicting these areas are available from the Regional Administrator upon request.

(i) *GOM Cod Protection Closure I.* GOM Cod Protection Closure I is the area bounded by the following coordinates connected in the order stated by straight lines:

**GOM COD PROTECTION CLOSURE I**

[May 1-May 31]

Point	N. latitude	W. longitude
CPCI 1	43°30' N	(1)
CPCI 2	43°30' N	69°30' W
CPCI 3	43°00' N	69°30' W
CPCI 4	43°00' N	70°00' W
CPCI 5	42°30' N	70°00' W



CPCI 6	42°30' N	70°30' W
CPCI 7	42°20' N	70°30' W
CPCI 8	42°20' N	(2) (3)
CPCI 1	43°30' N	(1) (3)

<sup>1</sup>The intersection of 43°30' N latitude and the coastline of Maine.

<sup>2</sup>The intersection of 42°20' N latitude and the coastline of Massachusetts.

<sup>3</sup>From Point 8 back to Point 1 following the coastline of the United States.

(ii) *GOM Cod Protection Closure II*. GOM Cod Protection Closure II is the area bounded by the following coordinates connected in the order stated by straight lines:

#### **GOM COD PROTECTION CLOSURE II**

[June 1-June 30]

Point	N. latitude	W. longitude
CPCII 1	(1)	69°30' W
CPCII 2	43°30' N	69°30' W
CPCII 3	43°30' N	70°00' W
CPCII 4	42°30' N	70°00' W
CPCII 5	42°30' N	70°30' W
CPCII 6	42°20' N	70°30' W
CPCII 7	42°20' N	(2) (3)
CPCII 8	42°30' N	(4) (3)
CPCII 9	42°30' N	70°30' W
CPCII 10	43°00' N	70°30' W
CPCII 11	43°00' N	(5) (6)
CPCII 1	(1)	69°30' W <sup>6</sup>

<sup>1</sup>The intersection of 69°30' W longitude and the coastline of Maine.

<sup>2</sup>The intersection of 42°20' N latitude and the coastline of Massachusetts.

<sup>3</sup>From Point 7 to Point 8 following the coastline of Massachusetts.

<sup>4</sup>The intersection of 42°30' N latitude and the coastline of Massachusetts.

<sup>5</sup>The intersection of 43°00' N latitude and the coastline of New Hampshire.

<sup>6</sup>From Point 11 back to Point 1 following the coastlines of New Hampshire and Maine.

(iii) *GOM Cod Protection Closure III*. GOM Cod Protection Closure III is the area bounded by the following coordinates connected in the order stated by straight lines:

#### **GOM COD PROTECTION CLOSURE III**

[November 1-January 31]

Point	N. latitude	W. longitude
CPCIII 1	42°30' N	(1)
CPCIII 2	42°30' N	70°30' W
CPCIII 3	42°15' N	70°30' W
CPCIII 4	42°15' N	70°24' W
CPCIII 5	42°00' N	70°24' W
CPCIII 6	42°00' N	(2) (3)

CPCIII 1	42°30' N	(1) (3)
----------	----------	---------

<sup>1</sup>The intersection of 42°30' N latitude and the Massachusetts coastline.

<sup>2</sup>The intersection of 42°00' N latitude and the mainland Massachusetts coastline at Kingston, MA.

<sup>3</sup>From Point 6 back to Point 1 following the coastline of Massachusetts.

(iv) *GOM Cod Protection Closure IV*. GOM Cod Protection Closure IV is the area bounded by the following coordinates connected in the order stated by straight lines:

#### **GOM COD PROTECTION CLOSURE IV**

[October 1-October 31]

Point	N. latitude	W. longitude
CPCIV 1	42°30' N	(1)
CPCIV 2	42°30' N	70°00' W
CPCIV 3	42°00' N	70°00' W
CPCIV 4	42°00' N	(2) (3)
CPCIV 1	42°30' N	(1) (3)

<sup>1</sup>The intersection of 42°30' N latitude and the Massachusetts coastline

<sup>2</sup>The intersection of 42°00' N latitude and the mainland Massachusetts coastline at Kingston, MA

<sup>3</sup>From Point 4 back to Point 1 following the coastline of Massachusetts

(v) *GOM Cod Protection Closure V*. GOM Cod Protection Closure V is the area bounded by the following coordinates connected in the order stated by straight lines:

#### **GOM COD PROTECTION CLOSURE V**

[March 1-March 31]

Point	N. latitude	W. longitude
CPCV 1	42°30' N	70°00' W
CPCV 2	42°30' N	68°30' W
CPCV 3	42°00' N	68°30' W
CPCV 4	42°00' N	70°00' W
CPCV 1	42°30' N	70°00' W

(5) The GOM cod protection closures specified in this section do not apply to a fishing vessel or person on board a fishing vessel under any of the following conditions:

(i) No multispecies permit has been issued and the vessel is fishing exclusively in state waters;

(ii) Fishing with or using exempted gear as defined under this part, except for pelagic gillnet gear capable of catching NE multispecies, unless fishing with a single pelagic gillnet not longer than 300 ft (91.4 m) and not greater than 6 ft (1.83 m) deep, with a maximum mesh size of 3 inches (7.6 cm), provided that:

(A) The net is attached to the boat and fished in the upper two-thirds of the water column;

- (B) The net is marked with the owner's name and vessel identification number;
- (C) No regulated species are retained; and
- (D) No other gear capable of catching NE multispecies is on board;
- (iii) Fishing in the Midwater Trawl Gear Exempted Fishery as specified in §648.80(d);
- (iv) Fishing in the Purse Seine Gear Exempted Fishery as specified in §648.80(e);
- (v) Fishing under charter/party or recreational regulations specified in §648.89, provided that:
  - (A) A vessel fishing under charter/party regulations in a GOM cod protection closure described under paragraph (f)(4) of this section, has on board a letter of authorization issued by the Regional Administrator that is valid from the date of enrollment through the duration of the closure or 3 months duration, whichever is greater;
  - (B) No harvested or possessed fish species managed by the NEFMC or MAFMC are sold or intended for trade, barter or sale, regardless of where the fish are caught;
  - (C) Only rod and reel or handline gear is on board; and
  - (D) No NE multispecies DAS are used during the entire period for which the letter of authorization is valid;
  - (vi) Fishing with scallop dredge gear under a scallop DAS or when lawfully fishing in the Scallop Dredge Fishery Exemption Area as described in §648.80(a)(11), provided the vessel does not retain any regulated NE multispecies during a trip, or on any part of a trip; or
  - (vii) Fishing in the Raised Footrope Trawl Exempted Whiting Fishery, as specified in §648.80(a)(15), or in the Small Mesh Area II Exemption Area, as specified in §648.80(a)(9);
  - (viii) Fishing on a sector trip, as defined in this part, and in the GOM Cod Protection Closures IV or V, as specified in paragraphs (f)(4)(iv) and (v) of this section; or
  - (ix) Fishing under the provisions of a Northeast multispecies Handgear A permit, as specified at §648.82(b)(6), and in the GOM Cod Protection Closures IV or V, as specified in paragraphs (f)(4)(iv) and (v) of this section .
  - (x) Transiting the area, provided it complies with the requirements specified in paragraph (i) of this section.
- (e) *Restricted Gear Areas. (1) Restricted Gear Area Seasons.* No fishing vessel with mobile gear on board, or person on a fishing vessel with mobile gear on board may fish or be in the specified



Restricted Gear Areas, unless transiting, during the seasons below. No fishing vessel with lobster pot gear on board, or person on a fishing vessel with lobster pot gear on board, may fish in, and no lobster pot gear may be deployed or remain in the specified Restricted Gear Areas. Vessels with lobster pot gear on board may transit during the seasons below.

	<b>Mobile Gear</b>	<b>Lobster Pot Gear</b>
Restricted Gear Area I	October 1-June 15	June 16-September 30
Restricted Gear Area II	November 27-June 15	June 16-November 26
Restricted Gear Area III	June 16-November 26	January 1-April 30
Restricted Gear Area IV	June 16-September 30	n/a

(2) Vessels with mobile gear may transit this area, provided that all mobile gear is on board the vessel while inside the area, and is stowed and not available for immediate use as defined in §648.2.

(3) *Restricted Gear Area I.* Restricted Gear Area I is defined by straight lines connecting the following points in the order stated:

<b>Point</b>	<b>N. latitude</b>	<b>W. longitude</b>
<b>Inshore Boundary</b>		
to 120		
69	40°07.9'	68°36.0'
70	40°07.2'	68°38.4'
71	40°06.9'	68°46.5'
72	40°08.7'	68°49.6'
73	40°08.1'	68°51.0'
74	40°05.7'	68°52.4'
75	40°03.6'	68°57.2'
76	40°03.65'	69°00.0'
77	40°04.35'	69°00.5'
78	40°05.2'	69°00.5'
79	40°05.3'	69°01.1'
80	40°08.9'	69°01.75'
81	40°11.0'	69°03.8'
82	40°11.6'	69°05.4'
83	40°10.25'	69°04.4'
84	40°09.75'	69°04.15'
85	40°08.45'	69°03.6'
86	40°05.65'	69°03.55'
87	40°04.1'	69°03.9'
88	40°02.65'	69°05.6'
89	40°02.00'	69°08.35'
90	40°02.65'	69°11.15'
91	40°00.05'	69°14.6'
92	39°57.8'	69°20.35'
93	39°56.65'	69°24.4'

94	39°56.1'	69°26.35'
95	39°56.55'	69°34.1'
96	39°57.85'	69°35.5'
97	40°00.65'	69°36.5'
98	40°00.9'	69°37.3'
99	39°59.15'	69°37.3'
100	39°58.8'	69°38.45'
102	39°56.2'	69°40.2'
103	39°55.75'	69°41.4'
104	39°56.7'	69°53.6'
105	39°57.55'	69°54.05'
106	39°57.4'	69°55.9'
107	39°56.9'	69°57.45'
108	39°58.25'	70°03.0'
110	39°59.2'	70°04.9'
111	40°00.7'	70°08.7'
112	40°03.75'	70°10.15'
115	40°05.2'	70°10.9'
116	40°02.45'	70°14.1'
119	40°02.75'	70°16.1'
to 181		
<b>Offshore Boundary</b>		
to 69		
120	40°06.4'	68°35.8'
121	40°05.25'	68°39.3'
122	40°05.4'	68°44.5'
123	40°06.0'	68°46.5'
124	40°07.4'	68°49.6'
125	40°05.55'	68°49.8'
126	40°03.9'	68°51.7'
127	40°02.25'	68°55.4'
128	40°02.6'	69°00.0'
129	40°02.75'	69°00.75'
130	40°04.2'	69°01.75'
131	40°06.15'	69°01.95'
132	40°07.25'	69°02.0'
133	40°08.5'	69°02.25'
134	40°09.2'	69°02.95'
135	40°09.75'	69°03.3'
136	40°09.55'	69°03.85'
137	40°08.4'	69°03.4'
138	40°07.2'	69°03.3'
139	40°06.0'	69°03.1'
140	40°05.4'	69°03.05'
141	40°04.8'	69°03.05'

142	40°03.55'	69°03.55'
143	40°01.9'	69°03.95'
144	40°01.0'	69°04.4'
146	39°59.9'	69°06.25'
147	40°00.6'	69°10.05'
148	39°59.25'	69°11.15'
149	39°57.45'	69°16.05'
150	39°56.1'	69°20.1'
151	39°54.6'	69°25.65'
152	39°54.65'	69°26.9'
153	39°54.8'	69°30.95'
154	39°54.35'	69°33.4'
155	39°55.0'	69°34.9'
156	39°56.55'	69°36.0'
157	39°57.95'	69°36.45'
158	39°58.75'	69°36.3'
159	39°58.8'	69°36.95'
160	39°57.95'	69°38.1'
161	39°54.5'	69°38.25'
162	39°53.6'	69°46.5'
163	39°54.7'	69°50.0'
164	39°55.25'	69°51.4'
165	39°55.2'	69°53.1'
166	39°54.85'	69°53.9'
167	39°55.7'	69°54.9'
168	39°56.15'	69°55.35'
169	39°56.05'	69°56.25'
170	39°55.3'	69°57.1'
171	39°54.8'	69°58.6'
172	39°56.05'	70°00.65'
173	39°55.3'	70°02.95'
174	39°56.9'	70°11.3'
175	39°58.9'	70°11.5'
176	39°59.6'	70°11.1'
177	40°01.35'	70°11.2'
178	40°02.6'	70°12.0'
179	40°00.4'	70°12.3'
180	39°59.75'	70°13.05'
181	39°59.3'	70°14.0'
to 119		

(4) *Restricted Gear Area II*. Restricted Gear Area II is defined by straight lines connecting the following points in the order stated:

Point	Latitude	Longitude
-------	----------	-----------

Inshore Boundary		
to 1		
49	40°02.75' N.	70°16.1' W.
50	40°00.7' N.	70°18.6' W.
51	39°59.8' N.	70°21.75' W.
52	39°59.75' N.	70°25.5' W.
53	40°03.85' N.	70°28.75' W.
54	40°00.55' N.	70°32.1' W.
55	39°59.15' N.	70°34.45' W.
56	39°58.9' N.	70°38.65' W.
57	40°00.1' N.	70°45.1' W.
58	40°00.5' N.	70°57.6' W.
59	40°02.0' N.	71°01.3' W.
60	39°59.3' N.	71°18.4' W.
61	40°00.7' N.	71°19.8' W.
62	39°57.5' N.	71°20.6' W.
63	39°53.1' N.	71°36.1' W.
64	39°52.6' N.	71°40.35' W.
65	39°53.1' N.	71°42.7' W.
66	39°46.95' N.	71°49.0' W.
67	39°41.15' N.	71°57.1' W.
68	39°35.45' N.	72°02.0' W.
69	39°32.65' N.	72°06.1' W.
70	39°29.75' N.	72°09.8' W.
to 48		
Offshore Boundary		
to 49		
1	39°59.3' N.	70°14.0' W.
2	39°58.85' N.	70°15.2' W.
3	39°59.3' N.	70°18.4' W.
4	39°58.1' N.	70°19.4' W.
5	39°57.0' N.	70°19.85' W.
6	39°57.55' N.	70°21.25' W.
7	39°57.5' N.	70°22.8' W.
8	39°57.1' N.	70°25.4' W.
9	39°57.65' N.	70°27.05' W.
10	39°58.58' N.	70°27.7' W.
11	40°00.65' N.	70°28.8' W.
12	40°02.2' N.	70°29.15' W.
13	40°01.0' N.	70°30.2' W.
14	39°58.58' N.	70°31.85' W.
15	39°57.05' N.	70°34.35' W.
16	39°56.42' N.	70°36.8' W.
21	39°58.15' N.	70°48.0' W.
24	39°58.3' N.	70°51.1' W.

25	39°58.1' N.	70°52.25' W.
26	39°58.05' N.	70°53.55' W.
27	39°58.4' N.	70°59.6' W.
28	39°59.8' N.	71°01.05' W.
29	39°58.2' N.	71°05.85' W.
30	39°57.45' N.	71°12.15' W.
31	39°57.2' N.	71°15.0' W.
32	39°56.3' N.	71°18.95' W.
33	39°51.4' N.	71°36.1' W.
34	39°51.75' N.	71°41.5' W.
35	39°50.05' N.	71°42.5' W.
36	39°50.0' N.	71°45.0' W.
37	39°48.95' N.	71°46.05' W.
38	39°46.6' N.	71°46.1' W.
39	39°43.5' N.	71°49.4' W.
40	39°41.3' N.	71°55.0' W.
41	39°39.0' N.	71°55.6' W.
42	39°36.72' N.	71°58.25' W.
43	39°35.15' N.	71°58.55' W.
44	39°34.5' N.	72°00.75' W.
45	39°32.2' N.	72°02.25' W.
46	39°32.15' N.	72°04.1' W.
47	39°28.5' N.	72°06.5' W.
48	39°29.0' N.	72°09.25' W.
to 70		

(5) *Restricted Gear Area III.* Restricted Gear Area III is defined by straight lines connecting the following points in the order stated:

Point	Latitude	Longitude
<b>Inshore Boundary</b>		
to 49		
182	40°05.6' N.	70°17.7' W.
183	40°06.5' N.	70°40.05' W.
184	40°11.05' N.	70°45.8' W.
185	40°12.75' N.	70°55.05' W.
186	40°10.7' N.	71°10.25' W.
187	39°57.9' N.	71°28.7' W.
188	39°55.6' N.	71°41.2' W.
189	39°55.85' N.	71°45.0' W.
190	39°53.75' N.	71°52.25' W.
191	39°47.2' N.	72°01.6' W.
192	39°33.65' N.	72°15.0' W.
to 70		

Offshore Boundary		
to 182		
49	40°02.75' N.	70°16.1' W.
50	40°00.7' N.	70°18.6' W.
51	39°59.8' N.	70°21.75' W.
52	39°59.75' N.	70°25.5' W.
53	40°03.85' N.	70°28.75' W.
54	40°00.55' N.	70°32.1' W.
55	39°59.15' N.	70°34.45' W.
56	39°58.9' N.	70°38.65' W.
57	40°00.1' N.	70°45.1' W.
58	40°00.5' N.	70°57.6' W.
59	40°02.0' N.	71°01.3' W.
60	39°59.3' N.	71°18.4' W.
61	40°00.7' N.	71°19.8' W.
62	39°57.5' N.	71°20.6' W.
63	39°53.1' N.	71°36.1' W.
64	39°52.6' N.	71°40.35' W.
65	39°53.1' N.	71°42.7' W.
66	39°46.95' N.	71°49.0' W.
67	39°41.15' N.	71°57.1' W.
68	39°35.45' N.	72°02.0' W.
69	39°32.65' N.	72°06.1' W.
70	39°29.75' N.	72°09.8' W.
to 192		

(6) *Restricted Gear Area IV.* Restricted Gear Area IV is defined by straight lines connecting the following points in the order stated:

Point	Latitude	Longitude
Inshore Boundary		
193	40°13.60' N.	68°40.60' W.
194	40°11.60' N.	68°53.00' W.
195	40°14.00' N.	69°04.70' W.
196	40°14.30' N.	69°05.80' W.
197	40°05.50' N.	69°09.00' W.
198	39°57.30' N.	69°25.10' W.
199	40°00.40' N.	69°35.20' W.
200	40°01.70' N.	69°35.40' W.
201	40°01.70' N.	69°37.40' W.
202	40°00.50' N.	69°38.80' W.
203	40°01.30' N.	69°45.00' W.
204	40°02.10' N.	69°45.00' W.
205	40°07.60' N.	70°04.50' W.
206	40°07.80' N.	70°09.20' W.

to 119		
<b>Offshore Boundary</b>		
69	40°07.90' N.	68°36.00' W.
70	40°07.20' N.	68°38.40' W.
71	40°06.90' N.	68°46.50' W.
72	40°08.70' N.	68°49.60' W.
73	40°08.10' N.	68°51.00' W.
74	40°05.70' N.	68°52.40' W.
75	40°03.60' N.	68°57.20' W.
76	40°03.65' N.	69°00.00' W.
77	40°04.35' N.	69°00.50' W.
78	40°05.20' N.	69°00.50' W.
79	40°05.30' N.	69°01.10' W.
80	40°08.90' N.	69°01.75' W.
81	40°11.00' N.	69°03.80' W.
82	40°11.60' N.	69°05.40' W.
83	40°10.25' N.	69°04.40' W.
84	40°09.75' N.	69°04.15' W.
85	40°08.45' N.	69°03.60' W.
86	40°05.65' N.	69°03.55' W.
87	40°04.10' N.	69°03.90' W.
88	40°02.65' N.	69°05.60' W.
89	40°02.00' N.	69°08.35' W.
90	40°02.65' N.	69°11.15' W.
91	40°00.05' N.	69°14.60' W.
92	39°57.8' N.	69°20.35' W.
93	39°56.75' N.	69°24.40' W.
94	39°56.50' N.	69°26.35' W.
95	39°56.80' N.	69°34.10' W.
96	39°57.85' N.	69°35.05' W.
97	40°00.65' N.	69°36.50' W.
98	40°00.90' N.	69°37.30' W.
99	39°59.15' N.	69°37.30' W.
100	39°58.80' N.	69°38.45' W.
102	39°56.20' N.	69°40.20' W.
103	39°55.75' N.	69°41.40' W.
104	39°56.70' N.	69°53.60' W.
105	39°57.55' N.	69°54.05' W.
106	39°57.40' N.	69°55.90' W.
107	39°56.90' N.	69°57.45' W.
108	39°58.25' N.	70°03.00' W.
110	39°59.20' N.	70°04.90' W.
111	40°00.70' N.	70°08.70' W.
112	40°03.75' N.	70°10.15' W.
115	40°05.20' N.	70°10.90' W.

116	40°02.45' N.	70°14.1' W.
119	40°02.75' N.	70°16.1' W.
to 206		



**Subpart P** – Habitat-related management measures.

**648.330. Habitat Management Areas (HMAs).**

**648.331. Dedicated Habitat Research Areas.**

**648.332. Deep-Sea Coral Protection Zones.**

**648.330. Habitat Management Areas.** Unless otherwise specified, no fishing vessel or person on a fishing vessel, may fish with bottom-tending mobile gear in the areas defined in this section. Copies of charts depicting these areas are available from the Regional Administrator upon request.

(a) *Eastern Maine Habitat Management Area.* The Eastern Maine HMA is defined by straight lines connecting the following points in the order stated:

**Eastern Maine HMA**

Point	N Latitude	W Longitude
1	44° 02.5'	68° 06.1'
2	43° 51.0'	68° 33.9'
3*	43° 56.6'	68° 38.1'
4*	44° 07.6'	68° 10.6'
*Landward boundary at state waters. Only endpoints provided.		

(b) *Jeffreys Bank Habitat Management Area.* The Jeffreys Bank HMA is defined by straight lines connecting the following points in the order stated:

**Jeffreys Bank HMA**

Point	N Latitude	W Longitude
1	43° 31'	68° 37'
2	43° 20'	68° 37'
3	43° 20'	68° 55'
4	43° 31'	68° 55'

(c) *Cashes Ledge Habitat Management Area.* The Cashes Ledge HMA is defined by straight lines connecting the following points in the order stated:

**Cashes Ledge HMA**

Point	N Latitude	W Longitude
1	43° 01.0'	69° 00.0'
2	43° 01.0'	68° 52.0'
3	42° 45.0'	68° 52.0'
4	42° 45.0'	69° 00.0'

(d) *Fippennies Ledge Habitat Management Area.* The Fippennies Ledge HMA is defined by straight lines connecting the following points in the order stated:

**Fippennies Ledge HMA**

Point	N Latitude	W Longitude
1	42° 50.0'	69° 17.0'
2	42° 44.0'	69° 14.0'
3	42° 44.0'	69° 18.0'
4	42° 50.0'	69° 21.0'

(e) *Ammen Rock Habitat Management Area*. (1) The Ammen Rock HMA is defined by straight lines connecting the following points in the order stated:

**Ammen Rock HMA**

Point	N Latitude	W Longitude
1	42° 55.5'	68° 57.0'
2	42° 52.5'	68° 55.0'
3	42° 52.5'	68° 57.0'
4	42° 55.5'	68° 59.0'

(2) No fishing vessel, including private and for-hire recreational fishing vessels, may fish in the Ammen Rock HMA, except for vessels fishing exclusively with lobster traps, as defined in §697.2.

(f) *Western Gulf of Maine Habitat Management Area*. (1) The Western GOM HMA is defined by the straight lines connecting the following points in the order stated:

**Western Gulf of Maine HMA**

Point	N Latitude	W Longitude
WGM4	43° 15'	70° 15'
WGM1	42° 15'	70° 15'
WGM5	42° 15'	70° 00'
WGM6	43° 15'	70° 15'

(2) *Western Gulf of Maine Shrimp Exemption Area*. Vessels fishing with shrimp trawls under the Small Mesh Northern Shrimp Fishery Exemption specified at §648.80(a)(5) may fish within the Western Gulf of Maine HMA Shrimp Exemption Area which is defined by the straight lines connecting the following points in the order stated:

**Western Gulf of Maine Shrimp Exemption Area**

Point	N Latitude	W Longitude
1	43° 15'	70°
2	43° 13'	70°
3	43° 13'	70° 05'
4	43° 09'	70° 05'
5	43° 09'	70° 08'
6	42° 55'	70° 08'

7	42° 55'	70° 15'
8	43° 15'	70° 15'

(h) *Georges Shoal Habitat Management Area.* (1) The Georges Shoal HMA is defined by the straight lines connecting the following points in the order stated:

**Georges Shoal HMA**

Point	N Latitude	W Longitude
1	41° 46'	67° 46'
2	41° 39'	67° 40'
3	41° 30'	67° 40'
4	41° 30'	68° 10'
5	41° 41'	68° 10'

(2) *Hydraulic Clam Dredge Exemption.* Surfclam and ocean quahog permitted vessels may fish with hydraulic clam dredges in the Georges Shoal HMA only until {INSERT DATE 1 YEAR FROM EFFECTIVE DATE}.

(i) *Northern Edge Habitat Management Area.* The Northern Edge HMA is defined by the straight lines connecting the following points in the order stated:

**Northern Edge HMA**

Point	N Latitude	W Longitude
1	42° 02' 00"	67° 02' 14.205"
2	41° 50' 00"	66° 52' 01.383"
3	41° 50' 00"	67° 20' 00"
4	42° 02' 00"	67° 20' 00"

(j) *Northern Edge Reduced Impact Habitat Management Area.* (1) The Northern Edge RIHMA is defined by the straight lines connecting the following points in the order stated:

**Northern Edge Reduced Impact HMA**

Point	N Latitude	W Longitude
1	42° 10' 00"	67° 09' 18"
2	42° 02' 00"	67° 02' 14.205"
3	42° 02' 00"	67° 20' 00"
4	42° 00' 00"	67° 20' 00"
5	42° 00' 00"	67° 26' 00"
6	42° 05' 30"	67° 26' 00"

(2) *Scallop Dredge Exemption.* Atlantic sea scallop permitted vessels may fish with scallop dredges in the Northern Edge Reduced Impact HMA as authorized under the sea scallop area rotation program as described in § 648.59.

(3) Eastern US/CA Haddock Special Access Program (SAP) Exemption. Vessels fishing under the Eastern US/CA Haddock special access program, as defined in § 648.85(b)(8), may use bottom trawls in the Northern Edge Reduced Impact HMA west of 67° 20' W.

(k) Great South Channel Habitat Management Area. (1) The Great South Channel HMA is defined by the straight lines connecting the following points in the order stated:

**Great South Channel HMA**

Point	N Latitude	W Longitude
1	41° 30.3'	69° 31.0'
2	41° 0.00'	69° 18.5'
3	40° 51.7'	69° 18.5'
4	40° 51.6'	69° 48.9'
5	41° 30.2'	69° 49.3'

(2) Hydraulic Clam Dredge Exemption. (i) Except for the portion of the Great South Channel HMA defined in paragraph (iii) of this section, surfclam and ocean quahog permitted vessels may fish with hydraulic clam dredges in the Great South Channel HMA.

(ii) The Hydraulic clam dredge exemption is effective until **{INSERT DATE 1 YEAR FROM EFFECTIVE DATE}**. After which, no vessels fishing with hydraulic clam dredges may fish within the Great South Channel HMA.

(iii) The hydraulic clam dredge exemption does not apply in the area defined as the straight lines connecting the following points in the order stated:

Point	N Latitude	W Longitude
GSC 1	41° 30.3'	69° 31.0'
MBTG 2	41° 21.0'	69° 27.2'
MBTG 3	41° 21.0'	69° 43.0'
MBTG 4	41° 30.0'	69° 43.0'

(l) Cox Ledge Habitat Management Areas. (1) Cox Ledge 1 Habitat Management Area. The Cox Ledge 1 HMA is defined by the straight lines connecting the following points in the order stated:

**Cox Ledge HMA 1**

Point	N Latitude	W Longitude
1	41° 05.0'	71° 03.0'
2	41° 00.0'	71° 03.0'
3	41° 00.0'	71° 14.0'
4	41° 05.0'	71° 14.0'

(2) Cox Ledge 2 Habitat Management Area. The Cox Ledge 2 HMA is defined by the straight lines connecting the following points in the order stated:

### **Cox Ledge HMA 2**

<b>Point</b>	<b>N Latitude</b>	<b>W Longitude</b>
1	41° 12.0'	70° 55.0'
2	41° 07.5'	70° 55.0'
3	40° 07.5'	71° 01.0'
4	41° 12.0'	71° 01.0'

(3) *Gear restrictions*. (a) No vessel may fish in the Cox Ledge HMAs with a hydraulic clam dredge.

(b) Vessels may fish in the Cox Ledge HMAs with bottom trawls, provided the gear is configured such that there are no groundcables and the bridle length is less than or equal to 30 fathoms per side.

(n) *Other Habitat Protection Measures*. (1) The Inshore Gulf of Maine/Georges Bank Restricted Roller Gear Area described in § 648.80 (a)(3)(vii) is considered a habitat protection measure and the restrictions outlined in that section apply to all bottom trawl gear.

(o) *Review of Habitat Management Measures*. The New England Fishery Management Council will develop a strategic process to evaluate the boundaries, scope, characteristics, and timing of habitat and spawning protection areas to facilitate review of these areas at 10 year intervals.

### **648.331. Dedicated Habitat Research Areas.**

(a) *Dedicated Habitat Research Area Topics*. The areas defined in this section are intended to facilitate coordinated research on gear impacts, habitat recovery, natural disturbance, and productivity.

(b) *Stellwagen Dedicated Habitat Research Area*. (1) The Stellwagen DHRA is defined by the straight lines connecting the following points in the order stated:

#### **Stellwagen DHRA**

<b>Point</b>	<b>N Latitude</b>	<b>W Longitude</b>
1	42° 15.0'	70° 00.0'
2	42° 15.0'	70° 15.0'
3	42° 45.2'	70° 15.0'
4	42° 46.0'	70° 13.0'
5	42° 46.0'	70° 00.0'

(2) Vessels fishing with bottom-tending mobile gear, sink gillnet gear, or demersal longline gear are prohibited from fishing in the Stellwagen DHRA, unless otherwise exempted.

(c) *Georges Bank Dedicated Habitat Research Area*. (1) The Georges Bank DHRA is defined by straight lines connecting the following points in the order stated:

#### **Georges Bank DHRA**

Point	N Latitude	W Longitude
CIH3	40° 55'	68° 53'
CIH4	40° 58'	68° 30'
CI3	40° 45'	68° 30'
CI2	40° 45'	68° 45'

(2) Vessels fishing with bottom-tending mobile gear are prohibited from fishing in the Georges Bank DHRA, unless otherwise exempted.

(d) *Dedicated Habitat Research Areas Review*. (1) The Regional Administrator shall initiate a review of the DHRAs defined in this section three years after implementation.

(2) After initiation of the review and consultation with the New England Fishery Management Council, the Regional Administrator may remove a DHRA. The following criteria will be used to determine if DHRA should be maintained:

(i) Documentation of active and ongoing research in the DHRA area, in the form of data records, cruise reports or inventory samples with analytical objectives focused on the DHRA topics, described in paragraph (a) of this section; and

(ii) Documentation of pending or approved proposals or funding requests (including ship time requests), with objectives specific to the DHRA topics, described in paragraph (a) of this section.

(3) The Regional Administrator will make any such determination in accordance with the APA through notification in the *Federal Register*.

#### **648.332. Deep-Sea Coral Protection Areas.**

(a) Frank R. Lautenberg Deep-Sea Coral Protection Area.

(b) NEFMC Deep-Sea Coral Protection Areas.



New England Fishery Management Council

50 WATER STREET | NEWBURYPORT, MASSACHUSETTS 01950 | PHONE 978 465 0492 | FAX 978 465 3116  
John F. Quinn, J.D., Ph.D., *Chairman* | Thomas A. Nies, *Executive Director*

March 23, 2017

Mr. Bryan Oles  
ERT Inc.  
14401 Sweitzer Lane Suite 300  
Laurel, MD 20707

Dear Bryan:

The New England Fishery Management Council, one of eight regional councils established by federal legislation in 1976, is charged with conserving and managing fishery resources from three to 200 miles off the coasts of Maine, New Hampshire, Massachusetts, Rhode Island, and Connecticut. Last week, one of your staff, Renee King, assisted with two workshops we convened to gather feedback from stakeholders on management approaches to protect deep-sea corals from the impacts of fishing. Given the severe winter weather, it was not an easy week to travel to New England, and we appreciated her flexibility around our constantly evolving schedule and agenda.

The first step in gathering useful feedback from the public is communicating our proposals clearly, and maps frequently help us do that. Renee served as our GIS analyst for the meeting, displaying and editing data on the fly to facilitate the discussion. Having a dedicated GIS analyst at the workshops freed up Council staff to more fully engage in discussion with attendees, while knowing that mapping was being done quickly and accurately. I believe Renee's involvement resulted in a better experience for workshop participants.

Renee's work last week was a credit to ERT. We look forward to working with her in the future on essential fish habitat and other issues.

Sincerely,

Dr. John Quinn  
Council Chairman

cc: Renee King



New England Fishery Management Council

50 WATER STREET | NEWBURYPORT, MASSACHUSETTS 01950 | PHONE 978 465 0492 | FAX 978 465 3116  
John F. Quinn, J.D., Ph.D., *Chairman* | Thomas A. Nies, *Executive Director*

March 23, 2017

Mr. Christopher Meany  
NOAA Fisheries Office of Habitat Conservation  
1315 East-West Highway  
SSMC3, 14th Floor F/HC  
Silver Spring, MD 20910

Dear Christopher:

I am writing to thank you for allowing Renee King to attend the Council's recent Deep-Sea Coral Workshops in New Bedford and Portsmouth. Given the severe winter weather, it was not an easy week to travel to New England, and we appreciated her flexibility around our constantly evolving schedule and agenda.

The first step in gathering useful feedback from the public is communicating our proposals clearly, and maps frequently help us do that. Having a dedicated GIS analyst at the workshops freed up Council staff to more fully engage in discussion with attendees, while knowing that mapping was being done quickly and accurately. I believe Renee's involvement resulted in a better experience for workshop participants.

We look forward to future collaboration with NOAA Habitat Conservation to pursue our shared objectives of ecosystem protection and sustainable fisheries.

Sincerely,

Dr. John Quinn  
Council Chairman

cc: Renee King



# **MATARONAS LOBSTER CO., INC.**

**Gary S. Mataronas, President**

**22 CALIFORNIA ROAD**

**LITTLE COMPTON, R.I.**

**02837 – 1010**

**(401) 635-2143**

March 6, 2017

New England Fisheries Management Council:

I have been an Offshore Lobsterman for forty-three years and have been involved with the planning of the management and conservation plan for AREA 3 since 1990. I have owned and operated three different offshore lobster boats in that time.

I am vehemently opposed, along with other fishers, to any closures of the canyon areas inside 550 meters.

I have fished in the offshore canyons (Veatch, Block, & Atlantis) since 1973. I lobster in that area with several other lobstermen and we have held that bottom from other lobstermen, draggers, (foreign & domestic), & scallopers. Most lobstermen do the same thing in the canyons as there is just a sliver of area where jonah crab, lobster, and red crab are found. These depths range anywhere from 100 meters to 900 meters. If any lobster boats are displaced from the designated area, they will move their gear to the Gulf of Maine and create gear conflicts with lobstermen in that area and create more interactions with whales which inhabit the Gulf. If these lobster boats move to the south, instead, they will also create gear conflicts with lobstermen there and put more pressure on an already stressed Area 3 Southern New England lobster resource.

I want to make it clear there is a significant amount of gear fishing in these designated areas and it will be near impossible to move gear anywhere else, never mind the negative financial impact it will have. I, along with many other offshore canyon fishers I have spoken with, have never had any interaction with offshore coral. As was stated by many environmentalist and scientist, the coral in the designated area is pristine, so it bewilders me why we should be shut off from these areas after lobstering there for over forty-three years.

I would implore you not to restrict any fishing activity inside 550 meters and allow lobstermen and red crab fishermen to continue to fish there uninhibited.

Sincerely,

A handwritten signature in cursive script, appearing to read "Gary Mataronas".

Gary Mataronas  
F/V Edna May

Gary Mataronas Jr  
F/V Night Prowler

James Mataronas 111  
F/V Sakonnet Lobster 11

## CORAL QUESTIONS

3/10/2017

HAS THERE BEEN ANY SPECIFIC RESEARCH OR DATA COLLECTIONS IN SPECIFIC CANYONS OR IS THIS A BLANKET RESTRICTED OVERLAY ZONE?

WHERE ARE THE AREAS YOU HAVE RESEARCHED FOR THE ABUNDANCE OR LACK THEREOF, OF CORAL. HAVE YOU DONE RESEARCH ON THE SLOPE AS WELL AS THE CANYONS AND AT WHAT DEPTHS?

WHEN HAVE THESE STUDIES BEEN CONDUCTED AND HOW MANY HAVE BEEN DONE. HAVE THEY BEEN RANDOM OR A CONCERTED EFFORT TO MAP THE SEA FLOOR FOR CORAL? ARE THERE HEAVY CONCENTRATIONS IN CERTAIN AREAS AND DEPTHS AND NO CORAL EXISTING IN OTHER AREAS OR DEPTHS?

HAVE THERE BEEN ANY RESEARCH OR STUDIES DONE ON THE IMPACTS, OR LACK THEREOF, OF TRAP FISHING IN ANY PRESUMED CORAL AREAS?

I HAVE BEEN FISHING IN THE OFFSHORE CANYONS AND SHELF SLOPE AREA FOR FORTY-THREE YEARS BETWEEN 50 AND 220 FATHOMS AND I HAVE NEVER HAD ANY INTERACTIONS WITH CORAL. IT SEEMS WE HAVE MINIMAL TO NO EFFECT ON CORAL! THE SCIENTIFIC COMMUNITY TELLS US THAT THE CORAL IN THE CANYONS AND ON THE SHELF IS PRISTINE. SO I ASK YOU WHY ARE WE HERE, AND WHY IS THERE A MOVEMENT TO RESTRICT OUR TRAP FISHING IN THESE PLANNED RESTRICTED AREAS?

DOES THIS COUNCIL HAVE THE AUTHORITY TO RESTRICT LOBSTER TRAP FISHING IN THE AREA 3 OFFSHORE CANYONS AND SLOPES?

IF IN FACT YOU DO HAVE THE AUTHORITY, I WOULD SUGGEST YOU TO SET THE BOUNDARY ZONE TO 550 METERS AND GREATER!

HOW DO YOU PLAN TO SET THE BOUNDARIES: WILL IT BE ONE STRAIGHT LINE WHICH WILL ENCOMPASS MANY DIFFERENT DEPTHS OR WILL IT BE BY DEPTH CONTOUR, AND WHAT IS THE PLAN FOR ENFORCEMENT?

YOU MUST ALSO CONSIDER THE SOCIEO AND ECONOMIC HARDSHIPS THAT SUCH A RESTRICTION WILL HAVE, NOT TO MENTION THE INTENSE COST AND GEAR CONFLICTS THAT WILL ARISE IF AND WHEN WE HAVE TO MOVE OUR GEAR OUT OF THESE RESTRICTED AREAS.

GARY MATARONAS    EMAIL: lobster2@cox.net    CELL: 401-573-0942  
F/V EDNA MAY        F/V NIGHT PROWLER    F/V SAKONNET LOBSTER

"to make freshly caught native live lobsters  
available to you at the lowest cost."

## SAKONNET LOBSTER CO.

SAKONNET POINT

LITTLE COMPTON, R. I. 02837

3-12-17

I have fished the canyons involved since 1974.  
In no case have I found coral on or in my  
traps or any other equipment.

Has there been any research on this matter?  
How will boundaries be made and enforced?  
Have the social and economic hardships that a  
boundary will cause been considered?

James M. M. M.  
F/V Sakonnet Lobster II

1-401-635-4371

SLSJMTW @ aol.com

THANKS TO OUR MANY SATISFIED CUSTOMERS  
OUR BUSINESS IS GROWING LARGER EVERY DAY



New England Fishery Management Council

50 WATER STREET | NEWBURYPORT, MASSACHUSETTS 01950 | PHONE 978 465 0492 | FAX 978 465 3116  
John F. Quinn, J.D., Ph.D., *Chairman* | Thomas A. Nies, *Executive Director*

February 24, 2017

The Honorable Angus S. King, Jr.  
United States Senate  
133 Hart Senate Office Building  
Washington, DC 20510

Dear Senator King:

Mr. John Bullard, Regional Administrator for the Greater Atlantic Region of the National Marine Fisheries Service, forwarded me your February 15 letter about our development of a management action that will consider protection for deep-sea corals in the Gulf of Maine and other areas. In your letter, you asked that we hold a workshop with local fishermen in eastern Maine. I want to thank you for your interest in this issue and explain our plans for this amendment.

In order to collect more information on how deep-sea coral protections may impact fishermen, we planned workshops for fishermen in southern New England and southern Maine/New Hampshire/northern Massachusetts. The Maine Department of Marine Resources (DMR) has a very close relationship with fishermen in eastern Maine, so we contacted them to determine the best way to interact with these fishermen. Maine DMR urged us not to have a workshop in eastern Maine, but to work with them to hold a seminar at the Maine Fishermen's Forum. Because of their local expertise, we deferred to their wishes and are working closely with them on the seminar. They are also planning other outreach activities on the subject. We are also collaborating with the Atlantic States Marine Fisheries Commission staff and advisors as we evaluate the alternatives in the amendment.

Finally, we plan to hold public hearings on this amendment in the future, and will be certain to schedule one or more hearings in locations convenient to participants in the Maine Area 1 lobster fishery. The Council may use feedback provided at and prior to these hearings to modify the range of approaches under consideration. Please encourage your constituents to contact us directly if they have questions about the amendment, or wish to provide feedback about how their operations would be affected by designation of these zones.

I hope our approach will address your concerns. Please let me know if I can provide additional information.

Sincerely,

Thomas A. Nies  
Executive Director



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
GREATER ATLANTIC REGIONAL FISHERIES OFFICE  
55 Great Republic Drive  
Gloucester, MA 01930-2276

FEB 23 2017

Thomas A. Nies  
Executive Director  
New England Fishery Management Council  
50 Water Street  
Newburyport, MA 01950




Dear Tom,

On February 16, 2017, we received a letter from Senator Angus S. King (I-ME) regarding the New England Fishery Management Council's workshops on Deep-Sea Coral Management Areas. The letter requested that the Council hold an additional deep-sea coral workshop in Maine to give the industry in Maine the opportunity to provide feedback on the Omnibus Deep-Sea Coral Amendment. We understand that the Council has been in contact with the Maine Department of Marine Resources concerning the possibility of holding a workshop in Maine, but we wanted to forward this letter to provide the Council the opportunity to consider the request by Senator King.

If you have further questions, please contact Michael Pentony, Assistant Regional Administrator for Sustainable Fisheries, at (978) 281-9283.

Sincerely,

  
for John Bullard  
Regional Administrator



mb 2/28/17

ANGUS S. KING, JR.  
MAINE

133 HART SENATE OFFICE BUILDING  
(202) 224-5344  
Website: <http://www.King.Senate.gov>

United States Senate  
WASHINGTON, DC 20510

COMMITTEES:  
ARMED SERVICES  
BUDGET  
ENERGY AND  
NATURAL RESOURCES  
INTELLIGENCE  
RULES AND ADMINISTRATION

February 15, 2017

John Bullard, Regional Administrator  
Greater Atlantic Regional Fisheries Office  
55 Great Republic Drive  
Gloucester, MA 01930

RECEIVED  
FEB 21 2017

BY: \_\_\_\_\_

Dear Mr. Bullard:

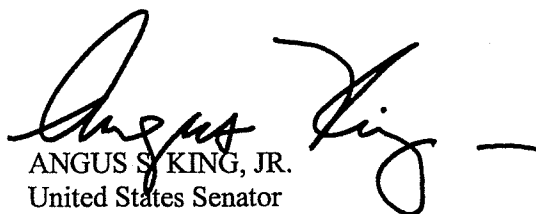
I am writing on behalf of Maine lobstermen who have contacted me about the New England Fishery Management Council's recently-announced workshops on Deep Sea Coral Management Areas.

I am aware of, and applaud the Council's current and ongoing interaction with members of the fishing industry in Maine as well as the Maine Department of Marine Resources (DMR) to conserve these unique habitats while minimizing the plan's impact on fishermen who make their livelihoods in those areas. However, with the Portsmouth, New Hampshire workshop focusing on the Jordan Basin areas, those in Down East Maine are concerned that there is no scheduled opportunity to weigh in the proposed closures on Schoodic Ridge and Mount Desert Rock. I am aware that the DMR will be supportive of lobstermen being exempt from these closures and will be conducting their own outreach with industry; but with the amendment language not yet finalized, the uncertainty has fishermen worried about the Council's upcoming decisions and the lack of opportunity to contribute. Therefore, I request that the Council hold a workshop in Maine or provide other means by which fishermen in the state can offer feedback on the draft amendment with respect to Schoodic Ridge and Mount Desert Rock.

As the draft amendment on deep sea corals is discussed and improved, I hope that the Council will continue to engage with all those who might be impacted until clearer determinations have been made about which types of gear might be permitted to continue to be fished within these new management areas.

Thank you for your attention to stakeholders in Maine, I look forward to seeing you at the Maine Fishermen's Forum next month.

Sincerely,

  
ANGUS S. KING, JR.  
United States Senator

AUGUSTA  
4 Gabriel Drive, Suite F1  
Augusta, ME 04330  
(207) 622-8292

PRESQUE ISLE  
169 Academy Street, Suite A  
Presque Isle, ME 04769  
(207) 764-5124

SCARBOROUGH  
383 US Route 1, Suite 1C  
Scarborough, ME 04074  
(207) 883-1588



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
GREATER ATLANTIC REGIONAL FISHERIES OFFICE  
55 Great Republic Drive  
Gloucester, MA 01930-2276

FEB 22 2017



Dr. John F. Quinn, Chairman  
New England Fishery Management Council  
and Habitat Committee  
50 Water Street, Mill 2  
Newburyport, MA 01950

Dear John:

Lou Chiarella serves as my delegate on your Habitat Committee, but Lou is not available for your meeting on February 24, 2017. Pete Christopher will attend in place of Lou, and Pete will serve as my delegate so that we will maintain a voting seat on the Committee. Further, since the New England Fishery Management Council's Deep Sea Coral Amendment involves habitat and sustainable fisheries issues, I am designating both Lou and Pete to be delegates for me at the meetings. Only one of them would vote if both attend your Habitat Committee meetings.

If you have any questions, please contact Michael Pentony at (978) 281-9283.

Sincerely,

John K. Bullard  
Regional Administrator

cc: Tom Nies, Executive Director, New England Fishery Management Council

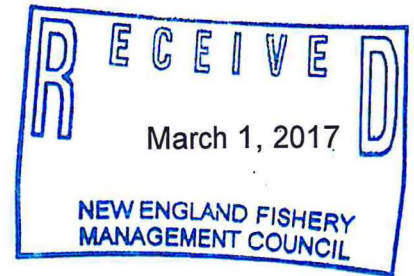






UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
GREATER ATLANTIC REGIONAL FISHERIES OFFICE  
55 Great Republic Drive  
Gloucester, MA 01930-2276

FEB 28 2017



Jennifer McCarthy  
Chief, Regulatory Division  
US Army Corps of Engineers  
New England District  
696 Virginia Road  
Concord, MA 01742

Re: Essential Fish Habitat Programmatic Consultation for General Permits, Standard Permits and Letters of Permission, for the States of Connecticut, Maine, Massachusetts, New Hampshire and Rhode Island.

Dear Ms. McCarthy:

This letter and Programmatic Consultation (PC) supersedes our earlier letter dated July 19, 2016. Section 305(b)(2) of the Magnuson-Stevens Fishery Conservation Management Act (MSA) requires Federal action agencies such as the Corps to consult with us for any action they authorize, fund or undertake that may adversely affect Essential Fish Habitat (EFH). Federal action agencies consult with us through the use of existing environmental review procedures, general concurrence, abbreviated consultation, expanded consultation or programmatic consultation (PC). However, the agency should use the most efficient approach for EFH consultation that is appropriate for a given action. Based on the EFH regulations at 50 CFR Subpart K, 600.9200, we believe the PC is an efficient method for us to consult with each other on the majority of projects that you routinely authorize under your Regulatory program through General Permits (GPs), standard permits (SPs) (also known as individual permits (IPs)), and Letters of Permission (LOPs), and to develop programmatic conservation recommendations (CRs) that will address reasonable foreseeable adverse impacts to EFH.

We evaluated the potential adverse effects to EFH resulting from commonly permitted GP projects in the New England Region. According to data provided to us from your permitting database for 2014 and 2015, approximately 235 acres and 301 acres of subtidal, intertidal, and riverine habitats in the New England region were impacted through 1,517 and 1,562 permits respectively, and we anticipate similar impacts to these habitats in 2017 and subsequent years. These acreage impacts are the result of dredging, structures and fill activities.

This EFH PC will reduce the number of projects that we will screen on an individual basis by programmatically issuing CRs for GP actions that may adversely affect EFH. In some cases, activities may have more than minimal adverse impacts on EFH, either individually or cumulatively; however, by modifying an activity according to the CRs provided herein, those impacts may be avoided or minimized and our EFH consultation requirements will be satisfied.

The U.S. Army Corps of Engineers, New England District Regulatory Division (Corps) issues two basic categories of permits: GPs for activities that have no more than minimal individual and cumulative adverse effects on the aquatic environment, and SPs/LOPs for projects that do not meet the terms and conditions of a GP. Upon a thorough review of the activity-based GPs that will be authorized, and consideration of the proposed activities that we have reviewed in the past that were proposed for issuance under SPs and LOPs, we have developed this EFH PC to allow for a more efficient consultation process for projects that are authorized under your Regulatory program.



The Corps has developed one state-wide GP document for each of these five states: Connecticut (CT), Maine (ME), Massachusetts (MA), New Hampshire (NH) and Rhode Island (RI). You are in the process of updating each state-wide GP to an activity-based format as the existing GPs are reauthorized. This will essentially continue your GP process, but under a new format.

As you know, we have been working with your office in implementing the GP program for over twenty years. This process has been mutually beneficial; it allowed you to efficiently authorize activities that had minimal impacts, and it allowed us to offer protections to our trust resources. As you continue to refine the GP process going forward, we will similarly adjust the format of our EFH consultation process so that it remains aligned. Our mutual goal is to have an EFH consultation process that continues to efficiently address these same minimal impact activities, and SPs and LOPs, in a way that is both protective and consistent across the New England Region.

### **Essential Fish Habitat Descriptions**

The New England and the Mid-Atlantic Fishery Management Councils (NEFMC and MAFMC, respectively) have designated EFH for multiple Federally-managed fish and shellfish species occurring in marine, estuarine and riverine waters within the geographical range of the New England District. EFH includes pelagic habitat as well as benthic habitats such as sand, mud, gravel, cobble, natural rocky habitat, submerged aquatic vegetation (SAV) and areas containing shellfish. Structurally complex habitats, including hard bottom/natural rocky habitats and areas containing shellfish are productive habitat areas which provide shelter and forage for many of the managed species. In addition, special aquatic sites (SAS) are areas that are afforded additional protection due to their significant contribution to the environment under the 404(b)(1) Guidelines of the Clean Water Act, which states that SAS includes fish and wildlife sanctuaries and refuges, wetlands, mudflats, vegetated shallows, and riffles and pool complexes. EFH descriptions for each life stage of managed species in New England are listed at [www.greateratlantic.fisheries.noaa.gov/hcd/list.htm](http://www.greateratlantic.fisheries.noaa.gov/hcd/list.htm). This document applies to EFH in tidal waters and streams with diadromous fish.

#### Submerged Aquatic Vegetation

Submerged aquatic vegetation such as eelgrass is known to play a critical ecosystem role. The U.S. Environmental Protection Agency (EPA) has designated SAV (referred to as vegetated shallows in the Section 404(b)(1) Guidelines), including eelgrass, as "special aquatic sites" under the 404(b)(1) Guidelines due to its important role in the marine ecosystem for nesting, spawning, nursery cover and forage areas for fish and wildlife. Furthermore, the MAFMC has designated SAV, including eelgrass as a Habitat Area of Particular Concern (HAPC) for summer flounder EFH. Seagrasses provide important ecological services including fish and shellfish habitat, and shore-bird feeding habitats, nutrient and carbon cycling, sediment stabilization, and biodiversity (Thayer et al 1984, Fonseca and Cahalan 1992, Fonseca et al., 1998, Kenworthy et al 1998, Orth et al., 2006). In many locations along the east coast, eelgrass coverage has declined by fifty percent or more since the 1970's (Thayer et al. 1975, Short et al. 1993, Short and Burdick 1996). Loss of eelgrass is attributed to reduced water quality and clarity resulting from elevated inputs of nutrients or other pollutants such as suspended solids and disturbances such as dredging (Kemp et al. 1983, Short et al. 1993, Short and Burdick 1996, Orth et al. 2006). Eelgrass may also be adversely affected through shading and burial or smothering resulting from turbidity and subsequent sedimentation (Deegan and Buchsbaum 2005, Duarte et al. 2005, Johnson et al. 2008). In Massachusetts, surveys from 1995 to 2007 have shown statewide declines in seagrass cover in 90% of the embayments where it was studied (Costello and Kentworthy, 2010). In New Hampshire, eelgrass distribution throughout the entire Great Bay Estuary has declined precipitously since 1996, with a loss of 76% in the Great Bay and extirpation of nearly all beds in the Piscataqua River during that time (Short 2013). Given the widespread decline in eelgrass beds in New England, any additional loss to this habitat will likely significantly affect the resources that depend on these meadows. Successful compensatory

mitigation for impacts to SAV can be costly and difficult to implement, making this habitat especially vulnerable to permanent loss.

#### Salt Marsh and Tidal Wetlands

Estuarine tidal wetlands are essential for healthy fisheries and coastlines. Salt marshes and tidal creeks provide food, refuge, and nursery habitat for several federally managed species. These systems support multiple forage fish species and invertebrates that serve as prey for commercially and recreationally valuable species (Steimle et al. 2000). Salt marshes also protect shorelines from erosion by buffering wave action and trapping sediments. They reduce flooding by absorbing rainwater and protect water quality by filtering runoff and metabolizing excess nutrients. Given the important nature of this habitat, impacts to tidal wetlands will likely significantly affect a variety of species and habitats.

#### Intertidal Mudflats

Mudflats serve as EFH for multiple managed fish species during spawning, juvenile and/or adult life history stages. The EPA has designated mudflats as SAS under 404(b)(1) Guidelines due to their important role in the marine ecosystem for spawning, nursery cover and forage areas for fish and wildlife. Juvenile fish and invertebrates seek shelter in mudflats by burrowing into the soft sediments. Mudflats support distinct benthic communities that provide important prey and foraging habitat for managed fish species (Cargnelli et al. 1999; Chang et al. 1999; Pereira et al. 1999; Stevenson et al. 2014). These habitats are particularly vulnerable to disturbances that may result in turbidity or scouring impacts. Compensatory mitigation for impacts to intertidal mudflat habitat can be difficult to implement, making this habitat especially vulnerable to permanent loss.

#### Hard Bottom Habitat

Structural complexity of habitats such as gravel, cobble, and boulders provide important functional value for fish as shelter and refuge from predators (Auster 1998; Auster and Langton 1999; NRC 2002; Stevenson et al. 2006). The relationship between benthic habitat complexity and demersal fish community diversity has been positively correlated (Malek et al. 2010). Multiple managed fish species have life-history stages that are dependent on, or mediated by, hard bottom habitats and attributes (Gotceitas et al. 1995, Lindholm et al. 1999, Klein-MacPhee 2002, Auster 2001, Auster 2005, Methratta and Link 2006). Hard bottom habitats provide a substrate for epibenthic growth which serves as additional refuge for juvenile fish and has been shown to significantly increase survivorship of juvenile cod (Lindholm et al. 1998 and 2001). These complex benthic substrates are vulnerable to disturbances that reduce complexity, particularly due to their extended recovery times (Bradshaw et al. 2000, Collie et al. 2005, Tamsett et al. 2010).

#### Areas Containing Shellfish

Shellfish provide an important ecological role through water column filtration, sediment stabilization as well as supplying habitat for multiple fish species (Zimmerman et al. 1989, Dames and Libes 1993, Coen et al. 1999, Nakamura and Kerciku 2000, Forster and Zettler 2004, Newell 2004, Coen and Grizzle 2007, McDermott et al. 2008). Shellfish are also an important food source for federally managed species (Steimle et al. 2000). Shellfish are susceptible to elevated levels of suspended sediments which can interfere with spawning success, feeding, and growth for shellfish such as mussels, clams, and oysters (Wilber and Clark 2001). Sessile species and life history stages are highly vulnerable to smothering and activities that may result in dislodgement of recently settled individuals.

#### Intertidal Habitat

Intertidal habitats support distinct marine communities and provide important foraging habitats and areas of refuge from predation for juvenile fish during periods of high tide (Helfman et al. 2009). Intertidal habitats include salt marsh vegetated habitats, mud and sandflats, in addition to sandy beaches and rocky shorelines. The functional value of these habitats may be adversely impacted by activities that result in

increased erosional rates, changes in slope profiles, habitat type conversions, or decreased connectivity with shallow water subtidal habitats.

#### Shallow Water Habitat

Shallow water coastal, marine, and estuarine habitats are important for multiple managed fish species for spawning, juvenile and/or adult life history stages (Cargnelli et al. 1999, Chang et al. 1999, Pereira et al. 1999, Stevenson et al. 2014). Because of their shallow depths, seasonally warm water temperatures and proximity to nutrients derived from river runoff, these habitats are highly productive (Stevenson et al. 2014). Each shallow water habitat type provides EFH for multiple managed fish species. Mud and sand habitat types support distinct benthic communities that serve as EFH for managed fish species by directly providing prey and foraging habitat, or through emergent fauna providing increased structural complexity and shelter from predation. Habitat attributes within fine grained substrates also provide important functions for managed fish species including shelter, foraging, and prey (Wicklund 1966, Ogren et al. 1968, Stanley 1971, Shepard et al. 1986, Able and Fahay 1998). Sand waves and ridges serve as valuable habitat for refuge and shelter, as well as habitat for spawning and juvenile development for a variety of species. Gravel, cobble and boulder habitats provide structural complexity for managed fish species that require shelter and seek refuge from predation (Auster 1998, Auster and Langton 1999, NRC 2002, Stevenson et al. 2006, Stevenson et al. 2014). Due to their proximity to the coast, these shallow water habitats are vulnerable to degradation and loss from human activity.

#### Anadromous Fish

Anadromous fish provide a food source for several federally managed species (Buckel and Conover 1997, Steimle et al. 2000, McDermott et al. 2015). Anadromous species, including blueback herring, alewife, and American shad have been declining in numbers over the last several decades, largely due to fishing pressure and habitat loss (ASMFC 2009). Anadromous fish can be significantly impacted by waterway blockages during their upstream or downstream migrations. Blockages to fish movement can be caused by physical structures in the waterway such as dams or fill. Fish migration can also be blocked by turbidity plumes, thermal plumes or acoustic events. Suspended sediment can mask pheromones used by migratory fishes to reach their spawning grounds, impede their migration, and can smother immobile benthic organisms and newly-settled juvenile demersal fish (Auld and Schubel 1978; Breitburg 1988; Newcombe and MacDonald 1991; Burton 1993; Nelson and Wheeler 1997). Anadromous fish serve as prey for a number of federally-managed species and are therefore considered a component of EFH pursuant to the MSA. Actions that reduce the availability of prey species, either through direct harm or capture or through adverse impacts to the prey species' habitat are considered adverse effects on EFH.

### **Essential Fish Habitat Programmatic Consultation**

#### Applicability

This EFH PC applies to all activities in tidal waters and streams with diadromous fish proposed for authorization under the five state GPs, IPs and LOPs that may adversely affect EFH and our other trust resources. The scope of analysis for this EFH PC includes all tidally-influenced waters of the U.S. and, as appropriate, non-tidal waters that support diadromous fish, within the New England region. This EFH PC provides our EFH CRs for projects that you routinely authorize under GPs and allows you to determine when an action under the GP will require EFH individual consultation with us.

#### General Concurrence

We will issue a general concurrence for self verification (SV) eligible activities that may adversely affect EFH but will likely result in no more than minimal adverse effects individually and cumulatively on EFH and other trust resources when they comply with the terms and conditions of the GPs (50 CFR 600.920(g)). Activities that are eligible for SV in the five New England states will be reviewed for general concurrence as those state GPs are reissued.

### Programmatic EFH Conservation Recommendations

Appendix A contains the EFH CRs which are intended to avoid and minimize impacts to our trust resources for activities authorized under your Regulatory Program. These CRs are based upon both our experience and expertise, as well as our analysis in the most up-to-date science and literature.

Specifically, we have been analyzing and providing CRs to you for over twenty years on substantially identical projects, and are familiar with these types of minimal impact projects. In addition, our office has evaluated a broad range of these activities in Impacts to marine fisheries habitat from nonfishing activities in the northeastern United States (Johnson et al 2008), and Shallow Water Benthic Habitats in the Gulf of Maine: A Summary of Habitat Use by Common Fish and Shellfish Species in the Gulf of Maine (Stevenson et al 2014). Based on these efforts, we have developed the CRs in Appendix A pursuant to Section 305(b)(2) of the MSA.

As you know, the action agency (Corps) determines whether or not an activity would have an adverse effect on EFH. Activities authorized under GPs (SV and Pre Construction Notification (PCN)), IPs and LOPs that would not adversely affect EFH are rare, but in these cases no EFH consultation (i.e., CRs or individual consultation) is needed. For those activities that will have an adverse effect on EFH, the Project Manager (PM) will incorporate CRs as special conditions or into the project plans, as appropriate, to avoid and minimize potential adverse effects to EFH. This may include provisions for the use of turbidity and erosion controls, time of year (TOY) restrictions, or other specific criteria to minimize adverse impacts on EFH.

### Individual Consultation

Essential Fish Habitat individual consultation is required for certain activities identified in Appendix A. For these actions, the PM must initiate EFH individual consultation, which can be either abbreviated or expanded. The thresholds for requiring individual consultation are based upon the single and complete project and all direct, secondary and indirect impacts.

The abbreviated consultation procedures are used when the adverse effect(s) of an action could be alleviated through minor modifications. An abbreviated consultation should be initiated with a phone call or email from the PM to our staff to discuss the proposed action. We will notify the PM that:

1. The action would not adversely affect EFH likely due to project changes; no CRs are needed;
2. CRs can be provided based upon existing information; or
3. An EFH Assessment is needed.
4. An expanded consultation is needed due to the action resulting in substantial adverse effects on EFH. We will request via email or letter (at Supervisor level) to the branch chief that the Corps should initiate expanded consultation.

The assessment required for an abbreviated or expanded consultation:

#### Must contain:

1. A description of the action.
2. An analysis of the potential adverse effects of the action on EFH and the managed species.\*
3. The Federal agency's conclusions regarding the effects of the action on EFH.
4. Proposed mitigation, if applicable.

#### Should contain the following if appropriate:

1. The results of an on-site inspection to evaluate the habitat and the site-specific effects of the project.
2. The views of recognized experts on the habitat or species that may be affected.
3. A review of pertinent literature and related information.
4. An analysis of alternatives to the action. Such analysis should include alternatives that could



- avoid or minimize adverse effects on EFH.
5. Other relevant information.

\*The Corps may provide an EFH worksheet (<http://www.greateratlantic.fisheries.noaa.gov/habitat/efh/efhassessment.html>) or use it as a guide to provide the necessary information and avoid delays. Per 50 CFR 600.920(e)(2), "The level of detail in an EFH assessment should be commensurate with the complexity and magnitude of the potential adverse effects of the action. For example, for relatively simple actions involving minor adverse effects on EFH, the assessment may be very brief. Actions that may pose a more serious threat to EFH warrant a correspondingly more detailed EFH Assessment".

If we receive an incomplete EFH assessment, we will request additional information within 10 business days for GPs and LOPs, and 30 business days for IPs. Upon receiving a complete EFH assessment, we will respond in writing to the PM within 30 days for an abbreviated consultation and within 60 days for an expanded consultation by providing:

1. EFH CRs; or
2. A concurrence that impacts are not more than minimal and CRs are unnecessary.

The Corps should contact us, or make a permit decision based upon the best information available, if we do not respond within the 30 or 60-day time frames.

#### Points of Contact

The points of contact for information on individual consultations and this EFH PC are:

Mike Johnson	Maine to Boston Harbor/Hull	mike.r.johnson@noaa.gov	978-281-9130
Alison Verkade	Cohasset, MA to Connecticut	alison.verkade@noaa.gov	978-281-9266

#### Reporting

The PM will indicate their action in the PCN Determination of Eligibility Checklist/MFR and indicate which CRs were accepted and provide justification for those CRs that were not accepted. For the purpose of annual tracking, determination of the effectiveness of the EFH PC, and calculating cumulative impacts, the Corps will send each authorization and the PCN Determination of Eligibility Checklist/MFR to christopher.boelke@noaa.gov within 30 days of issuance.

#### **Dispute Resolution**

As soon as issues are identified, all reasonable efforts will be made to resolve them at the staff level. There will be instances, however, where the staff will not be successful. When this occurs, the issue should be raised to Corps branch chief and NMFS Habitat Field Office Supervisor. Dispute resolution should follow the procedures in the Section 404(q) MOA and its Local Coordination Procedures.

#### **Monitoring and Revision**

We will review this EFH PC with the Corps periodically to determine whether this EFH PC should be revised to account for any new information or technology or to better streamline the coordination process.

#### **Supplemental Consultation**

Pursuant to 50 CFR 600.920(1), you should reinitiate EFH consultation with us if the proposed action is substantially revised in a way that may adversely affect EFH, or if new information becomes available that affects the basis for our CRs. In the case of this EFH PC, you should reinitiate consultation with us if a proposed action is substantially revised in a way such that the activity is no longer covered by this EFH

PC or if the GPs are changed in any manner that would affect the basis of these CRs. In addition, if we receive new or additional information that may affect our CRs, we will consider whether to request additional consultation with you and/or provide additional CRs.

### **Endangered Species Act and Marine Mammal Protection Act Consultations**

This PC applies only to EFH consultations and does not obviate your responsibilities to consult with us under either the Endangered Species Act (ESA) or Marine Mammal Protection Act (MMPA). Section 7(a)(2) of the ESA states that each federal agency shall insure that any action they authorize, fund or carry out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. Any discretionary federal action that may affect a listed species should undergo Section 7 consultation. The MMPA prohibits, with certain exceptions, the take of marine mammals in U.S. waters and by U.S. citizens on the high seas. If the proposed action will result in the take of marine mammals, the appropriate authorization as issued under the MMPA should be obtained. Questions regarding these requirements should be directed to Mark Murray-Brown at (978) 281-9306.

### **Conclusion**

In summary, this EFH PC on the New England District Regulatory program provides upfront EFH recommendations for projects that you routinely authorize. It provides an efficient method for us to consult with each other on these minor development projects. The consultation includes recommendations for the activities listed in Appendix A as well as information on what type of projects may require individual review. Activities that are not covered in this PC will require individual consultation. We look forward to working with you to implement this PC. Should you have any questions, please contact Christopher Boelke at (978) 281-9131 or [christopher.boelke@noaa.gov](mailto:christopher.boelke@noaa.gov).



Louis A. Chiarella  
Assistant Regional Administrator  
for Habitat Conservation

cc:  
Kim Damon-Randall, PRD  
Thomas Nies, NEFMC  
Christopher Moore, MAFMC  
Lisa Havel, ASMFC

## References

- Able KW and Fahay MP. 1998. First year in the life of estuarine fishes in the middle Atlantic Bight. Rutgers University Press, New Brunswick, NJ.
- Auld AH and Schubel JR. 1978. Effects of suspended sediments on fish eggs and larvae: a laboratory assessment. *Estuarine, Coastal and Marine Science* 6: 153-164.
- Auster PJ. 1998. A conceptual model of the impacts of fishing gear on the integrity of fish habitats. *Conservation Biology* 12: 1198-1203.
- Auster PJ. 2005. Are deep-water corals important habitats for fishes? In: *Cold-water corals and ecosystems*. Springer Berlin Heidelberg. pp 747-760.
- Auster PJ, Joy K, and Valentine PC. 2001. Fish species and community distributions as proxies for seafloor habitat distributions: the Stellwagen Bank National Marine Sanctuary example (Northwest Atlantic, Gulf of Maine). *Environmental Biology of Fishes* 60(4): 331-346.
- Auster PJ. and Langton R. 1999. The effects of fishing on fish habitat. *American Fisheries Society Symposium* 22: 150-187.
- Bradshaw C, Veale LO, Hill AS, and Brand AR. 2000. The effects of scallop dredging on gravelly seabed communities. In: Kaiser MJ and de Groot SJ, editors. *Effects of fishing on non-target species and habitats*. Blackwell Scientific Publications, Oxford, UK. pp 83-104.
- Breitburg DL. 1988. Effects of turbidity on prey consumption by striped bass larvae. *Transactions of the American Fisheries Society* 117: 72-77.
- Buckel JA and Conover DO. 1997. Movements, feeding periods, and daily ration of piscivorous young of-the-year bluefish, *Pomatomus saltatrix*, in the Hudson River estuary. *Fisheries Bulletin* 95(4): 665-679.
- Burton WH. 1993. Effects of bucket dredging on water quality in the Delaware River and the potential for effects on fisheries resources. Prepared for: Delaware Basin Fish and Wildlife Management Cooperative, by Versar Inc., Columbia MD.
- Cargnelli LM, Griesbach SJ, Packer DB, Berrien PL, Johnson DL, and Morse WW. 1999. Essential Fish Habitat Source Document: Pollock, *Pollachius virens*, Life History and Habitat Characteristics. NOAA Technical Memorandum NMFS-NE-131.
- Chang S, Berrien PL, Johnson DL and Morse WW. 1999. Essential Fish Habitat Source Document: Windowpane, *Scophthalmus aquosus*, Life History and Habitat Characteristics. NOAA Technical Memorandum NMFS-NE-137.
- Coen LD and Grizzle RE. 2007. The importance of habitat created by molluscan shellfish to managed species along the Atlantic coast of the United States. *Atlantic States Marine Fisheries Commission. Habitat Management Series #8*.
- Coen LD, Luckenbach MW, and Breitburg DL. 1999. The role of oyster reefs as essential fish habitat: a review of current knowledge and some new perspectives. *American Fisheries Society Symposium* 22: 438-454.



- Collie JS, Hermesen JM, Valentine PC, and Almeida FP. 2005. Effects of fishing on gravel habitats: Assessment and recovery of benthic megafauna on Georges Bank. American Fisheries Society Symposium 41: 325-343.
- Costello, C.T. and W.J. Kenworthy. 2011. Twelve-year mapping and change analysis of eelgrass (*Zostera marina*) areal abundance in Massachusetts (USA) identifies statewide decline. Estuaries and Coasts 34:232-242.
- Dame R and Libes S. 1993. Oyster reefs and nutrient retention in tidal creeks. Journal of Experimental Marine Biology and Ecology 171: 251-258.
- Dewey WF. 2000. The various relationships between shellfish and water quality. Journal of Shellfish Research 19: 656.
- Deegan LA and Buchsbaum RN. 2005. The effect of habitat loss and degradation on fisheries. In: Buchsbaum R, Pederson J, and Robinson WE, editors. The decline of fisheries resources in New England: evaluating the impact of overfishing, contamination and habitat degradation. Cambridge (MA): MIT Sea Grant College Program; Publication No. MITSG 05-5. pp 67-96.
- Duarte CM, Fourqurean JW, Krause-Jensen D, and Olesen B. 2005. Dynamics of seagrass stability and change. In Larkum A, Orth RJ, and Duarte C, editors. Seagrass Biology. Netherlands. pp 271-294.
- Fonseca MS and Cahalan JA. 1992. A preliminary evaluation of wave attenuation by four species of seagrass. Estuarine, Coastal and Marine Science 35: 565-576.
- Fonseca MS, Kenworthy WJ, and Thayer GW. 1998. Guidelines for the Conservation and Restoration of Seagrasses in the United States and Adjacent Waters. NOAA Coastal Ocean Program. Decision Analysis Series No. 12.
- Forster S and Zettler ML. 2004. The capacity of the filter-feeding bivalve *Mya arenaria* L. to effect water transport in sandy beds. Marine Biology 144: 1183-1189.
- Gotceitas V, Fraser S, and Brown JA. 1995. Habitat use by juvenile Atlantic cod (*Gadus morhua*) in the presence of an actively foraging and non-foraging predator. Marine Biology 123(3): 421-430.
- Helfman G, Collette BB, Facey DE, and Bowen BW. 2009. The diversity of fishes: biology, evolution, and ecology. John Wiley & Sons.
- Johnson MR, Boelke C, Chiarella LA, Colosi PD, Greene K, Lellis-Dibble K, Ludeman H, Ludwig M, McDermott S, Ortiz J, Rusanowsky D, Scott M, and Smith J. 2008. Impacts to marine fisheries habitat from nonfishing activities in the northeastern United States. NOAA Technical Memorandum NMFS-NE-209. Woods Hole, MA.
- Kemp WM, Boynton WR, Stevenson JC, Twilley RR, and Means JC. 1983. The decline of submerged vascular plants in upper Chesapeake Bay: Summary of results concerning possible causes. Marine Technology Society Journal 17: 78-89.
- Kenworthy WJ, Thayer GW, and Fonseca MS. 1988. The utilization of seagrass meadows by fishery organisms. In: Hook DD, McKee WH, Smith HK, Gregory J, Burrell VG, DeVoe MR, Sojka RE, Gilbert

S, Banks R, Stolzy LH, Brooks C, Matthews TD, and Shea TH, editors. The Ecology of Wetlands: Volume 1. pp. 548-560.

Lindholm J, Auster PJ, and Kaufman L. 1999. Habitat-mediated survivorship of juvenile (0-year) Atlantic cod (*Gadus morhua*). Marine Ecology Progress Series 180: 247-255.

Lindholm, J., P.J. Auster, M. Ruth and L. Kaufman. 2001. Modeling the effects of fishing and implications for the design of marine protected areas: juvenile fish responses to variations in seafloor habitat. Conservation Biology 15: 424-437.

Malek A, Laffrance M, Collie J, and King J. 2010. Fisheries Ecology in Rhode Island and Block Island Sounds for the Rhode Island Ocean Special Area Management Plan. University of Rhode Island, November 30, 2010.

McDermott S, Bransome NC, Sutton SE, Smith BE, Link JS, and Miller TJ. 2015. Quantifying alosine prey in diets of marine piscivores in the Gulf of Maine. Journal of Fish Biology 86: 1811-1829.

McDermott S, Burdick O, Grizzle R, and Greene J. 2008. Restoring Ecological Functions and Increasing Community Awareness of an Urban Tidal Pond Using Blue Mussels. Ecological Restoration 26(3): 254-262.

Methratta ET and Link JS. 2006. Evaluation of quantitative indicators for marine fish communities. Ecological Indicators 6(3): 575-588.

Nakamura Y and Kerciku F. 2000. Effects of filter-feeding bivalves on the distribution of water quality and nutrient cycling in a eutrophic coastal lagoon. Journal of Marine Systems 26(2): 209-221.

Natural Research Council. 2002. Effects of trawling and dredging on seafloor habitat. National Academy Press, Washington, District of Columbia.

Nelson DA and Wheeler JL. 1997. The influence of dredging-induced turbidity and associated contaminants upon hatching success and larval survival of winter flounder, *Pleuronectes americanus*, a laboratory study. Final report, Grant CWF #321-R, to Connecticut Department Environmental Protection, by National Marine Fisheries Service, Milford CT.

Newcombe CP and MacDonald DD. 1991. Effects of suspended sediments on aquatic ecosystems. North American Journal of Fisheries Management 11: 72-82.

Newell RIE. 2004. Ecosystem Influences of Natural and Cultivated Populations of Suspension feeding Bivalve Molluscs: a Review. Journal of Shellfish Research. 23 :51-61.

Ogren L, Chess J, and Lindenberg J. 1968. More notes on the behavior of young squirrel hake, *Urophycis chuss*. Underwater Naturalist 5(3): 38-39.

Orth RJ, Carruthers TJB, Dennison WC, Duarte CM, Fourqurean JW, Heck KL, Hughes AR, Kendrick GA, Kenworthy WJ, Olyarnik S, Short FT, Waycott M, and Williams SL. 2006. A global crisis for seagrass ecosystems. BioScience 56(12): 987-996.

Pereira JJ, Goldberg R, Ziskowski JJ, Berrien PL, Morse WW, and Johnson DL. 1999, Essential Fish habitat source document: winter flounder, *Pseudopleuronectes americanus*, life history and characteristics. NOAA Technical Memorandum NMFS-NE-138. Northeast Fisheries Science Center, Woods Hole, MA.

- Shepard AN, Theroux RB, Cooper RA, and Uzmann JR. 1986. Ecology of Ceriantharia (Coelenterata, Anthozoa) of the northwest Atlantic from Cape Hatteras to Nova Scotia. *Fishery Bulletin* 84: 625-646.
- Short FT and Burdick DM. 1996. Quantifying eelgrass habitat loss in relation to housing development and nitrogen loading in Waquoit Bay, Massachusetts. *Estuaries* 19: 730-739.
- Short FT, Burdick DM, Wolfe J, and Jones GE. 1993. Eelgrass in estuarine research reserve along the East Coast, U.S.A., Part I: Declines from pollution and disease and Part II: Management of eelgrass meadows. NOAA-Coastal Oceans Program Publication.
- Short FT. 2013. Eelgrass distribution in the Great Bay Estuary for 2012. A Final Report to the Piscataqua Region Estuaries Partnership. 8pp.
- Stanley DJ. 1971. Fish-produced markings on the outer continental margin east of the Middle Atlantic states. *Journal of Sedimentary Petrology* 41: 159-170.
- Steimle FW, Pikanowski RA, McMillan DG, Zetlin CA, and Wilk SJ. 2000. Demersal fish and American lobster diets in the Lower Hudson-Raritan Estuary. NOAA Technical Memorandum NMFS-NE-161. Woods Hole, MA.
- Stevenson D, Chiarella L, Stephan D, Reid R, Wilhelm K, McCarthy J, and Pentony M. 2006. Characterization of the fishing practices and marine benthic ecosystems of the northeast US shelf, and an evaluation of the potential effects of fishing on essential habitat. NOAA Tech Memo NMFS NE 181.
- Stevenson DK, Tuxbury S, Johnson MR, and Boelke C. 2014. Shallow Water Benthic Habitats in the Gulf of Maine: A Summary of Habitat Use by Common Fish and Shellfish Species in the Gulf of Maine. Greater Atlantic Region Policy Series 14-01. NOAA Fisheries Greater Atlantic Regional Fisheries Office.
- Tamsett A, Heinonen KB, Auster PJ, and Linholm J. 2010. Dynamics of hard substratum communities inside and outside of a fisheries habitat closed area in Stellwagen Bank National Marine Sanctuary (Gulf of Maine, NW Atlantic). Marine Sanctuaries Conservation Series ONMS-10-05. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of National Marine Sanctuaries, Silver Spring, MD.
- Thayer GW, Kenworthy WJ, and Fonseca MS. 1984. The ecology of eelgrass meadows of the Atlantic Coast: a community profile. U.S. Fish and Wildlife Service, FWS/OBS-84/02.
- Thayer GW, Wolfe DA, and Williams RB. 1975. The impact of man on seagrass systems. *American Scientist* 63: 288-296.
- Wicklund R. 1966. Observations on the nursery grounds of young squirrel hake, *Urophycis chuss*. *Underwater Naturalist* 4(1): 33-34.
- Wilber DH and Clarke DG. 2001. Biological Effects of Suspended Sediments: A Review of Suspended Sediment Impacts on Fish and Shellfish with Relation to Dredging Activities in Estuaries. *North American Journal of Fisheries Management* 21: 855-875.
- Zimmerman RT, Minello J, Baumer T, and Castiglione M. 1989. Oyster reef as habitat for estuarine macrofauna. NOAA Tech. Memo. NMFS-SEFC-249.

## APPENDIX A: EFH Conservation Recommendations

### 1. Repair, Replacement and Maintenance

*Activities that require individual consultation:*

1. Impacts >100 SF of tidal SAV or [natural rocky habitats](#).
2. Impacts >1000 SF of tidal SAS or intertidal areas.
3. All expansions >1/2 acre.
4. Replacement or maintenance of: a) sloped stabilization structures >200 LF and waterward of the existing toe, or b) vertical structures >18 inches waterward of the existing face and >200 LF.
5. Dam and flood control or levee repairs that will alter water levels or flood elevations.
6. Controls in streams that exceed the widths in #6 below or don't provide downstream passage.
7. Discharges of more than de minimus quantities of accumulated bottom sediments from or through a dam.
8. All work to tide gates without a Corps-approved operation and maintenance plan or alterations to tide gates that will affect the hydraulic regime.

*Conservation recommendations for all other activities not identified above:*

1. Require an SAV survey for activities within mapped or adjacent to known tidal SAV if a survey has not been conducted in 3 years in accordance with [SAV Survey Guidance](#). Tidal SAV at the project site should be identified in the field prior to the start of work and equipment should not anchor or impact SAV.
2. No impacts to tidal SAS.
3. Work should not produce sedimentation in tidal SAS or natural rocky habitats. This may be achieved using setbacks of 100 feet from tidal SAV or 25 feet from tidal SAS or natural rocky habitats.
4. The TOY restriction in App. B should be required for work that produces greater than minimal turbidity or sedimentation in [diadromous streams](#) or tidal waters.
5. Appropriate soil erosion, sediment and turbidity controls should be used and maintained in effective operating condition during construction. Activities capable of producing greater than minimal turbidity or sedimentation should be done during periods of low-flow or no-flow, when the stream or tide is waterward of the work, or when controls are used to obtain dry work conditions. Work that produces greater than minimal turbidity or sedimentation should not be done during the TOY restriction(s) in [App. B](#).
6. Controls in streams should be installed and removed during the same TOY work window when practicable. Controls (e.g., cofferdams) should not encroach: i) >25% from OHW in [diadromous streams](#) during the TOY restriction in App. B; or ii) >25% from MHW in tidal waters during the TOY restrictions for shellfish and w.flounder in App B; or iii) >50% from MHW in tidal waters during the TOY windows for shellfish and w.flounder in App B. This is to protect upstream fish passage. Maintain downstream fish passage throughout the project. Controls should be removed upon completion of work, but not until all exposed soil and other fills, as well as any work waterward of OHW or the HTL, are permanently stabilized. Sediment and debris collected by these devices should be removed and placed at an upland location in a manner that will prevent its later erosion into a waterway or wetland.
7. For replacement or maintenance of sloped stabilization structures, stabilization materials such as riprap should not extend waterward of the existing toe of slope. Replaced vertical structures should be located within the existing footprint where possible, but limited to the area within 18 inches of existing structures.
8. Compensatory mitigation should be provided for impacts to tidal SAS, intertidal areas, or natural rocky habitats.

## **2. Moorings**

*Activities that require individual consultation:*

1. New or relocated moorings within SAS or intertidal areas.
2. New, expansions or boundary reconfigurations of mooring fields within SAS or intertidal areas; or in excess of 1/2 acre.

*Conservation recommendations for all other activities not identified above:*

1. New or relocated moorings, mooring field expansions or boundary reconfigurations should not be placed in SAS. Those in SAS should utilize low-impact mooring technology. Low impact mooring technology eliminates contact with the bottom substrate at all tides, such as helical anchors and elastic or other floating mooring tackle (i.e. no dragging chains).
2. Compensatory mitigation should be provided for all adverse impacts to SAS.

## **3. Pile-Supported Structures, Floats and Lifts**

*Activities that require individual consultation:*

1. Structures (piers, ramps, floats, etc.) in tidal SAV or  $\geq 150$  LF over salt marsh waterward of MHW.
2. New public, community, government, or commercial boating facilities; or expansions of existing facilities within intertidal or tidal SAV.

*Conservation recommendations for all other activities not identified above:*

1. The lowermost part of the floats should be  $\geq 18$  inches above the substrate at all times\*.
2. Structures shall have  $\geq 1:1$  height/width ratio\*\* over salt marsh.
3. Docks, piers, ramps, or floats are not located within 25 feet of tidal SAV.
4. Compensatory mitigation should be provided for impacts to tidal SAS.

\* This is to avoid grounding and propeller scour and to provide adequate circulation and flushing. This may be accomplished by siting in deep enough water, or by elevating the float with float stops or alternative methods to keep the float 18 inches off the bottom. Skids should only be used in areas where piles are not feasible and only on sandy or hard bottom substrates

\*\* This is to minimize shading impacts. The height should be measured from the marsh substrate to the bottom of the longitudinal support beam.

## **4. Aids to Navigation and Temporary Recreational Structures**

*Activities that require individual consultation:*

1. Impacts to  $\geq 100$  SF of tidal SAV.

*Conservation recommendations for all other activities not identified above:*

1. No structures should be located within tidal SAV.
2. Compensatory mitigation should be provided for impacts to tidal SAV.

## 5. Dredging, Disposal of Dredged Material, Beach Nourishment

*Activities that require individual consultation:*

1. Impacts to >100 SF of tidal SAV or natural rocky habitats.
2. Impacts to >1000 SF of tidal SAS, intertidal areas, or areas containing shellfish\*.
3. New dredge\*\* activities.
4. Nearshore disposal or beach nourishment material is inconsistent with the grain-size or type (e.g., sand over cobble) of the existing substrate.
5. Nearshore disposal or beach nourishment activities within: 1) 100 feet of tidal SAV; or 2) 25 feet of other tidal SAS, natural rocky habitats or areas containing shellfish.
6. New dredging to facilitate residential projects including docks or moorings, and new dredging conducted for the sole purpose of beach nourishment.

*Conservation recommendations for all other activities not identified above:*

1. Require an SAV survey for activities within mapped or adjacent to known tidal SAV if a survey has not been conducted in 3 years in accordance with SAV Survey Guidance. Tidal SAV at the project site should be identified in the field prior to the start of work and equipment should not anchor or impact SAV.
2. No dredging or disposal should be performed within the TOY restrictions stated in App. B.
3. No nearshore disposal or beach nourishment activities within: a) 100 feet of tidal SAV; or b) 25 feet of other tidal SAS, natural rocky habitats or areas containing shellfish.
4. No dredging should produce sedimentation in tidal SAS, natural rocky habitats or areas containing shellfish. This may be achieved using setbacks of 100 feet from tidal SAV or 25 feet from tidal SAS or natural rocky habitats.\*\*\*
5. Rocks should be relocated to an area of equivalent depth and substrate type.
6. Dredged materials should be deposited and retained in an upland area to prevent sediments from reentering aquatic habitats; unless they are disposed of at either a U.S. EPA/Corps designated disposal site or a CAD cell.
7. Compensatory mitigation should be provided for impacts to tidal SAS, intertidal areas, natural rocky habitats, and areas containing shellfish. Compensatory mitigation should generally not be provided for: a) new or maintenance dredging in areas without these resources; or b) maintenance dredging in areas with these resources if compensatory mitigation was provided in the past.

\*A shellfish survey is required to make this determination unless it is verified that minimal shellfish are present, e.g., per the maps in App. D or conversations with local officials.

\*\*The GPs may define new dredging as “dredging of an area to a depth that has never been authorized by the Corps or dredged”. For the purposes of this PC, new dredging doesn’t include dredging a previously dredged area to a deeper depth, which is defined in some GPs as improvement dredging. The Corps should consider reviewing a maintenance dredging activity as new dredging if the area has been not used in accordance with its authorized project purpose.

\*\*\*Hydraulic or mechanical dredging may not cause turbidity or sedimentation unless hydraulically dredging fines (i.e., silt and clay) involves: a) direct disposal into the ocean (rare); b) barge overflow; or c) an improperly constructed upland contained dredged material disposal area (e.g., beach or parking lot) such that sedimentation results in adjacent SAS. These are more extreme examples, but impacts could still occur when performing other activities. MAS typically analyzes proposed dredging and disposal activities for turbidity and sedimentation.



## 6. Discharges of Dredged or Fill Material Incidental to the Construction of Bridges

*Activities that require individual consultation:*

1. Impacts  $\geq 100$  SF of tidal SAV or [natural rocky habitats](#).
2. Impacts  $\geq 1000$  SF of tidal SAS or intertidal areas.
3. Impacts  $\geq 1/2$  acre of tidal resources.
4. Controls in streams that exceed the widths in #5 below or do not provide downstream passage.

*Conservation recommendations for all other activities not identified above:*

1. Require an SAV survey for activities within mapped or adjacent to mapped or known tidal SAV beds if a survey has not been conducted in 3 years in accordance with [SAV Survey Guidance](#). Tidal SAV at the project should be identified in the field prior to the start of work and equipment should not impact SAV.
2. No excavation, dredging or fill activities should occur within: 1) intertidal areas, 2) 100 feet of tidal SAV, or 3) 25 feet of other tidal SAS or natural rocky habitats.
3. The TOY restriction in [App. B](#) should be required for work that produces greater than minimal turbidity or sedimentation in [diadromous streams](#) or tidal waters.
4. Appropriate soil erosion, sediment and turbidity controls should be used and maintained in effective operating condition during construction. Activities capable of producing greater than minimal turbidity or sedimentation should be done during periods of low-flow or no-flow, when the stream or tide is waterward of the work, or when controls are used to obtain dry work conditions. Work that produces greater than minimal turbidity or sedimentation should not be done during the TOY restriction(s) in App. B.
5. Controls in streams should be installed and removed during the same TOY work window when practicable. Controls (e.g., cofferdams) should not encroach: i)  $>25\%$  from OHW in diadromous streams during the TOY restriction in App. B; or ii)  $>25\%$  from MHW in tidal waters during the TOY restrictions for shellfish and w.flounder in App B); or iii)  $>50\%$  from MHW in tidal waters during the TOY windows for shellfish and w.flounder in App B. This is to protect upstream fish passage. Maintain downstream fish passage throughout the project. Controls should be removed upon completion of work, but not until all exposed soil and other fills, as well as any work waterward of OHW or the HTL, are permanently stabilized. Sediment and debris collected by these devices should be removed and placed at an upland location in a manner that will prevent its later erosion into a waterway or wetland.
6. Compensatory mitigation should be provided for impacts to tidal SAS, intertidal areas, and natural rocky habitats.

## 7. Bank and Shoreline Stabilization

*Activities that require individual consultation:*

1. Impacts  $\geq 100$  SF of tidal SAV or [natural rocky habitats](#).
2. Impacts to greater than 1000 SF of tidal SAS, intertidal areas, or areas containing shellfish\* will require an individual EFH consultation.
3. All structures, fill, and/or armoring placed below MHW in excess of 200 LF.
4. Controls in streams that exceed the widths in #5 below or do not provide downstream passage.

*Conservation recommendations for all other activities not identified above:*

1. Require an SAV survey for activities within mapped or known tidal SAV if a survey has not been conducted in 3 years in accordance with [SAV Survey Guidance](#). Tidal SAV at the project site should be identified in the field prior to the start of work and equipment should not anchor or impact SAV.
2. No activity should produce sedimentation in tidal SAS, natural rocky habitats or areas containing shellfish. This may be achieved using setbacks of 100 feet from tidal SAV or 25 feet from tidal SAS or natural rocky habitats.
3. The TOY restriction in [App. B](#) should be required for work that produces greater than minimal turbidity or sedimentation in [diadromous streams](#) or tidal waters.
4. Appropriate soil erosion, sediment and turbidity controls should be used and maintained in effective operating condition during construction. Work capable of producing turbidity or sedimentation should be done during periods of low-flow or no-flow, when the stream or tide is waterward of the work, or when controls are used to obtain dry work conditions. Work that produces greater than minimal turbidity or sedimentation should not be done during the TOY restriction(s) in App. B.
5. Controls in streams should be installed and removed during the same TOY work window when practicable. Controls (e.g., cofferdams) should not encroach: i)  $>25\%$  from OHW in diadromous streams during the TOY restriction in App. B; or ii)  $>25\%$  from MHW in tidal waters during the TOY restrictions for shellfish and w. flounder in App B; or iii)  $>50\%$  from MHW in tidal waters during the TOY windows for shellfish and w.flounder in App B. This is to protect upstream fish passage. Maintain downstream fish passage throughout the project. Controls should be removed upon completion of work, but not until all exposed soil and other fills, as well as any work waterward of OHW or the HTL, are permanently stabilized. Sediment and debris collected by these devices should be removed and placed at an upland location in a manner that will prevent its later erosion into a waterway or wetland.
6. Fill should be located outside of tidal SAS, natural rocky habitats, or areas containing shellfish, and should not impact adjacent SAS, natural rocky habitats, or areas containing shellfish.
7. Compensatory mitigation should be provided for impacts to SAS, intertidal areas, natural rocky habitats, and areas containing shellfish.

\*A shellfish survey is required to make this determination unless it is verified that minimal shellfish are present, e.g., per the maps in [App. D](#) or conversations with local officials.



## **8. Residential, Commercial and Institutional Developments, Recreational Facilities**

### *Activities that require individual consultation:*

1. Activities that involve stream channelization, relocation, or loss of streambed.
2. Impacts  $\geq 100$  SF of tidal SAV or natural rocky habitats.
3. Impacts  $\geq 1000$  SF of SAS or intertidal areas.
4. Impacts  $\geq 1/2$  acre of tidal resources.
5. Controls in streams that exceed the widths in #3 below or do not provide downstream passage.

### *Conservation recommendations for all other activities not identified above:*

1. The TOY restriction in App. B should be required for work that produces greater than minimal turbidity or sedimentation in diadromous streams or tidal waters.
2. Appropriate soil erosion, sediment and turbidity controls should be used and maintained in effective operating condition during construction. Work capable of producing greater than minimal turbidity or sedimentation should be done during periods of low-flow or no-flow, when the stream or tide is waterward of the work, or when controls are used to obtain dry work conditions. Work that produces greater than minimal turbidity or sedimentation should not be done during the TOY restriction(s) in App. B.
3. Controls in streams should be installed and removed during the same TOY work window when practicable. Controls (e.g., cofferdams) should not encroach: i)  $>25\%$  from OHW in diadromous streams during the TOY restriction in App. B; or ii)  $>25\%$  from MHW in tidal waters during the TOY restrictions for shellfish and w.flounder in App B); or iii)  $>50\%$  from MHW in tidal waters during the TOY windows for shellfish and w.flounder in App B. This is to protect upstream fish passage. Maintain downstream fish passage throughout the project. Controls should be removed upon completion of work, but not until all exposed soil and other fills, as well as any work waterward of OHW or the HTL, are permanently stabilized. Sediment and debris collected by these devices should be removed and placed at an upland location in a manner that will prevent its later erosion into a waterway or wetland.
4. Compensatory mitigation should be provided for impacts to tidal SAS, intertidal areas, or natural rocky habitats.

## 9. Utility Line Activities

*Activities that require individual consultation:*

1. Impacts  $\geq 100$  SF of tidal SAV or natural rocky habitats.
2. Impacts  $\geq 1000$  SF of tidal SAS, intertidal areas, or areas containing shellfish\*.
3. Utility lines  $\geq 100$  linear feet (LF) installed by trench excavation, or  $\geq 200$  LF installed by jet-plow, fluidization or other direct burial methods.
4. Controls in streams that exceed the widths in #4 below or do not provide downstream passage.

*Conservation recommendations for all other activities not identified above:*

1. Require an SAV survey for activities within mapped or known tidal SAV if a survey has not been conducted in 3 years in accordance with SAV Survey Guidance. Tidal SAV at the project site should be identified in the field prior to the start of work and equipment should not anchor or impact SAV.
2. The TOY restriction in App. B should be required for work that produces greater than minimal turbidity or sedimentation in diadromous streams or tidal waters.
3. Appropriate soil erosion, sediment and turbidity controls should be used and maintained in effective operating condition during construction. Work capable of producing greater than minimal turbidity or sedimentation should be done during periods of low-flow or no-flow, when the stream or tide is water-ward of the work, or when controls are used to obtain dry work conditions. Work that produces greater than minimal turbidity or sedimentation should not be done during the TOY restriction(s) in App. B.
4. Controls in streams should be installed and removed during the same TOY work window when practicable. Controls (e.g., cofferdams) should not encroach: i)  $>25\%$  from OHW in diadromous streams during the TOY restriction in App. B; or ii)  $>25\%$  from MHW in tidal waters during the TOY restrictions for shellfish and w.flounder in App B; or iii)  $>50\%$  from MHW in tidal waters during the TOY windows for shellfish and w.flounder in App B. This is to protect upstream fish passage. Maintain downstream fish passage throughout the project. Controls should be removed upon completion of work, but not until all exposed soil and other fills, as well as any work waterward of OHW or the HTL, are permanently stabilized. Sediment and debris collected by these devices should be removed and placed at an upland location in a manner that will prevent its later erosion into a waterway or wetland.
5. Trenches should be backfilled immediately after installation with excavated, native sediment.
6. Utility lines installed using trenching or direct burial methods should reestablish pre-construction elevations. If additional backfill material is needed to restore elevations to pre-construction conditions, the material should be of consistent type and grain-size as the existing substrate sediment.
7. Utility lines in non-tidal waters in or adjacent to SAS\*\* and in tidal waters should utilize Horizontal Directional Drilling (HDD) where possible. The HDD work must be conditioned to include a frac-out contingency plan.
8. Pipelines and submerged cables should be buried when possible, instead of resting on the surface, to allow an area to return to preexisting conditions.
9. Align pipelines to avoid sensitive habitats including SAS\*\* and hard bottom habitat, to the maximum extent possible.
10. Compensatory mitigation should be provided for impacts to SAS\*\*, intertidal areas, natural rocky habitats, and areas containing shellfish.

\* A shellfish survey is required to make this determination unless it is verified that minimal shellfish are present, e.g., per the resources in App. D or conversations with local officials.

\*\* For non-tidal waters, SAS is comprised of SAV and rifle and pool complexes.

## 10. Linear Transportation Projects Including Stream Crossings/Stream and Water Crossings

*Activities that require individual consultation:*

1. Impacts  $\geq 100$  SF of tidal SAV or natural rocky habitats.
2. Impacts  $\geq 1000$  SF of tidal SAS or intertidal areas.
3. Impacts  $\geq 1/2$  acre of tidal resources.
4. Activities that involve stream channelization, relocation, or loss of streambed.
5. Controls in streams that exceed the widths in #5 below or do not provide downstream passage.
6. Crossings (new, replacement, extensions, etc.) that do not meet the Corps stream crossing requirements or involve slip-lining of existing culverts.

*Conservation recommendations for all other activities not identified above:*

1. No excavation, dredging or fill activities should occur within: 1) intertidal areas, 2) 100 feet of tidal SAV, or 3) 25 feet tidal SAS or natural rocky habitats.
2. The TOY restriction in App. B should be required for work that produces greater than minimal turbidity or sedimentation in diadromous streams or tidal waters.
3. Require an SAV survey for activities within mapped or known tidal SAV if a survey has not been conducted in 3 years in accordance with SAV Survey Guidance. Tidal SAV at the project site should be identified in the field prior to the start of work and equipment should not anchor or impact SAV.
4. Appropriate soil erosion, sediment and turbidity controls should be used and maintained in effective operating condition during construction. Work capable of producing greater than minimal turbidity or sedimentation should be done during periods of low-flow or no-flow, when the stream or tide is waterward of the work, or when controls are used to obtain dry work conditions. Work that produces turbidity or sedimentation should not be done during the TOY restriction(s) in App. B.
5. Controls in streams should be installed and removed during the same TOY work window when practicable. Controls (e.g., cofferdams) should not encroach: i)  $>25\%$  from OHW in diadromous streams during the TOY restriction in App. B; or ii)  $>25\%$  from MHW in tidal waters during the TOY restrictions for shellfish and w.flounder in App B; or iii)  $>50\%$  from MHW in tidal waters during the TOY windows for shellfish and w.flounder in App B. This is to protect upstream fish passage. Maintain downstream fish passage throughout the project. Controls should be removed upon completion of work, but not until all exposed soil and other fills, as well as any work waterward of OHW or the HTL, are permanently stabilized. Sediment and debris collected by these devices should be removed and placed at an upland location in a manner that will prevent its later erosion into a waterway or wetland.
6. Excavated or dredged materials should be deposited and retained in an upland area to prevent sediments from reentering aquatic habitats, unless they are disposed of at either a US EPA/Corps designated disposal site or a CAD cell.
7. Compensatory mitigation should be provided for impacts to SAS (i.e., tidal SAS; or non-tidal SAV or rifle and pool), intertidal areas or natural rocky habitats.

## 11. Mining Activities

*Activities that require individual consultation:*

1. Mining activities located within riffle and pool complexes.
2. Controls in streams that exceed the widths in #4 below or do not provide downstream passage.

*Conservation recommendations for all other activities not identified above:*

1. No mining activities should occur within SAS, including riffle and pool complexes.
2. The TOY restriction in App. B should be required for work that produces greater than minimal turbidity or sedimentation in diadromous streams or tidal waters.
3. Appropriate soil erosion, sediment and turbidity controls should be used and maintained in effective operating condition during construction. Work capable of producing greater than minimal turbidity or sedimentation should be done during periods of low-flow or no-flow, when the stream or tide is waterward of the work, or when controls are used to obtain dry work conditions. Work that produces greater than minimal turbidity or sedimentation should not be done during the TOY restriction(s) in App. B.
4. Controls in streams should be installed and removed during the same TOY work window when practicable. Controls (e.g., cofferdams) should not encroach: i) >25% from OHW in diadromous streams during the TOY restriction in App. B; or ii) >25% from MHW in tidal waters during the TOY restrictions for shellfish and w.flounder in App B; or iii) >50% from MHW in tidal waters during the TOY windows for shellfish and w.flounder in App B. This is to protect upstream fish passage. Maintain downstream fish passage throughout the project. Controls should be removed upon completion of work, but not until all exposed soil and other fills, as well as any work waterward of OHW or the HTL, are permanently stabilized. Sediment and debris collected by these devices should be removed and placed at an upland location in a manner that will prevent its later erosion into a waterway or wetland.
5. Mined materials should be deposited and retained in an upland area to prevent sediments from reentering aquatic habitats.
6. Compensatory mitigation should be provided for impacts to SAS (i.e., tidal SAS; or non-tidal SAV or rifle and pool).

## 12. Boat Ramps and Marine Railways

*Activities that require individual consultation:*

1. Impacts  $\geq 100$  SF of tidal SAV or natural rocky habitats.
2. Impacts  $\geq 1000$  SF of tidal SAS, intertidal areas, or areas containing shellfish\*.
3. Impacts  $\geq 1/2$  acre of tidal resources.
4. Controls in streams that exceed the widths in #5 below or do not provide downstream passage.

*Conservation recommendations for all other activities not identified above:*

1. No activity should produce sedimentation in tidal SAS, natural rocky habitats or areas containing shellfish. This may be achieved using setbacks of 100 feet from tidal SAV or 25 feet from tidal SAS or natural rocky habitats.
2. The TOY restriction in App. B should be required for work that produces greater than minimal turbidity or sedimentation in diadromous streams or tidal waters.
3. Require an SAV survey for activities within mapped or known tidal SAV if a survey has not been conducted in 3 years in accordance with SAV Survey Guidance. Tidal SAV at the project site should be identified in the field prior to the start of work and equipment should not anchor or impact SAV.
4. Appropriate soil erosion, sediment and turbidity controls should be used and maintained in effective operating condition during construction. Work capable of producing greater than minimal turbidity or sedimentation should be done during periods of low-flow or no-flow, when the stream or tide is

waterward of the work, or when controls are used to obtain dry work conditions. Work that produces greater than minimal turbidity or sedimentation should not be done during the TOY restriction(s) in App. B.

5. Controls in streams should be installed and removed during the same TOY work window when practicable. Controls (e.g., cofferdams) should not encroach: i) >25% from OHW in diadromous streams during the TOY restriction in App. B; or ii) >25% from MHW in tidal waters during the TOY restrictions for shellfish and w.flounder in App B); or iii) >50% from MHW in tidal waters during the TOY windows for shellfish and w.flounder in App B. This is to protect upstream fish passage. Maintain downstream fish passage throughout the project. Controls should be removed upon completion of work, but not until all exposed soil and other fills, as well as any work waterward of OHW or the HTL, are permanently stabilized. Sediment and debris collected by these devices should be removed and placed at an upland location in a manner that will prevent its later erosion into a waterway or wetland.
6. Compensatory mitigation should be provided for impacts to tidal SAS (i.e., tidal SAS; or non-tidal SAV or rifle and pool), intertidal areas, natural rocky habitats, and areas containing shellfish.

\* A shellfish survey is required to make this determination unless it is verified that minimal shellfish are present, e.g., per the maps in App. D or conversations with local officials.

### **13. Land and Water-Based Renewable Energy Generation Facilities**

*Activities that require individual consultation:*

1. All projects related to renewable energy generation facilities.

### **14. Temporary Construction, Access, and Dewatering**

*Activities that require individual consultation:*

1. Impacts to  $\geq 100$  SF of tidal SAV or natural rocky habitats.
2. Impacts to  $\geq 1000$  SF of tidal SAS or intertidal areas.
3. Impacts to  $\geq 1/2$  acre of tidal resources.
4. Controls in streams that exceed the widths in #9 below or do not provide downstream passage.
5. All temporary structures, construction access, and dewatering activities proposed to be in place for  $\geq 2$  years.

*Conservation recommendations for all other activities not identified above:*

1. All temporary structures, construction, access and dewatering activities should be located outside of tidal SAS or natural rocky habitats.
2. The TOY restriction in App. B should be required for work that produces greater than minimal turbidity or sedimentation in diadromous streams or tidal waters.
3. Temporary structures, construction, access, and dewatering activities should not be in place for >2 years.
4. No activity should produce sedimentation in tidal SAS or natural rocky habitats. This may be achieved using setbacks of 100 feet from tidal SAV or 25 feet from tidal SAS or natural rocky habitats.
5. No temporary construction, access, and dewatering should occur within 100 feet of SAV.
6. No activities should occur within 25 feet of tidal wetlands or mudflats.
7. Compensatory mitigation should be provided for activities that are in place >2 years.
8. Appropriate soil erosion, sediment and turbidity controls should be used and maintained in effective operating condition during construction. Work capable of producing greater than minimal turbidity or sedimentation should be done during periods of low-flow or no-flow, when the stream or tide is waterward of the work, or when controls are used to obtain dry work conditions. Work that produces

greater than minimal turbidity or sedimentation should not be done during the TOY restriction(s) in App. B.

9. Controls in streams should be installed and removed during the same TOY work window when practicable. Controls (e.g., cofferdams) should not encroach: i) >25% from OHW in diadromous streams during the TOY restriction in App. B; or ii) >25% from MHW in tidal waters during the TOY restrictions for shellfish and w.flounder in App B; or iii) >50% from MHW in tidal waters during the TOY windows for shellfish and w.flounder in App B. This is to protect upstream fish passage. Maintain downstream fish passage throughout the project. Controls should be removed upon completion of work, but not until all exposed soil and other fills, as well as any work waterward of OHW or the HTL, are permanently stabilized. Sediment and debris collected by these devices should be removed and placed at an upland location in a manner that will prevent its later erosion into a waterway or wetland.

## **15. Reshaping Existing Drainage Ditches, New Ditches, and Mosquito Management**

*Activities that require individual consultation:*

For reshaping existing drainage ditches or new ditches:

1. Impacts  $\geq 100$  SF of tidal SAV or natural rocky habitats.
2. Impacts  $\geq 1000$  SF of tidal SAS or intertidal areas.
3. Impacts to  $\geq 1/2$  acre of tidal resources.

## **16. Response Operation for Oil and Hazardous Substances**

*Activities that require individual EFH consultation:*

1. Training activities with impacts  $\geq 100$  SF of tidal SAV or natural rocky habitats.
2. Training activities with impacts  $\geq 1000$  SF of tidal SAS, intertidal areas, or areas containing shellfish\*.
3. Training structures with impacts to  $\geq 1/2$  acre of tidal resources.

*Conservation recommendations for all other activities not identified above:*

1. Training activities should be located outside of tidal SAS or natural rocky habitats and areas containing shellfish.
2. Compensatory mitigation should be provided for impacts to tidal SAS, natural rocky habitats, and areas containing shellfish.

\*A shellfish survey is required to make this determination unless it is verified that minimal shellfish are present, e.g., per the maps in App. D or conversations with local officials.

## **17. Clean up of Hazardous and Toxic Waste**

*Activities that require individual consultation:*

1. All cleanup activities within tidal waters.

## 18. Scientific Measurement Devices

*Activities that require individual consultation:*

1. Impacts  $\geq 100$  SF of tidal SAV or natural rocky habitats.
2. Impacts  $\geq 1000$  SF of tidal SAS or intertidal areas.
3. Impacts  $\geq 1/2$  acre of tidal resources.

*Conservation recommendations for all other activities not identified above*

1. No permanent impacts to tidal SAS, intertidal areas or natural rocky habitats.
2. Compensatory mitigation should be provided for impacts to tidal SAS, intertidal areas, or natural rocky habitats.

## 19. Survey Activities

*Activities that require individual consultation:*

1. Impacts  $\geq 100$  SF of tidal SAV or natural rocky habitats.
2. Impacts  $\geq 1000$  SF of tidal SAS or intertidal areas.
3. Impacts  $\geq 1/2$  acre of tidal resources.
4. Exploratory trenching activities, or other similar silt-producing survey activities.
5. Survey activities involving seismic testing.

*Conservation recommendations for all other activities not identified above:*

1. No permanent impacts to tidal SAS or natural rocky habitats.
2. Compensatory mitigation should be provided for impacts to tidal SAS, intertidal areas, or natural rocky habitats.

## 20. Agricultural Activities

*Activities that require individual consultation:*

1. Activities that involve stream channelization, relocation, or loss of streambed.
2. Controls in streams that exceed the widths in #3 below or do not provide downstream passage.

*Conservation recommendations for all other activities not identified above:*

1. The TOY restriction in App. B should be required for work that produces greater than minimal turbidity or sedimentation in diadromous streams or tidal waters.
2. Appropriate soil erosion, sediment and turbidity controls should be used and maintained in effective operating condition during construction. Work capable of producing greater than minimal turbidity or sedimentation should be done during periods of low-flow or no-flow, when the stream or tide is waterward of the work, or when controls are used to obtain dry work conditions. Work that produces greater than minimal turbidity or sedimentation should not be done during the TOY restriction(s) in App. B.
3. Controls in streams should be installed and removed during the same TOY work window when practicable. Controls (e.g., cofferdams) should not encroach: i)  $>25\%$  from OHW in diadromous streams during the TOY restriction in App. B; or ii)  $>25\%$  from MHW in tidal waters during the TOY restrictions for shellfish and w.flounder in App B; or iii)  $>50\%$  from MHW in tidal waters during the TOY windows for shellfish and w.flounder in App B. This is to protect upstream fish passage. Maintain downstream fish passage throughout the project. Controls should be removed upon completion of work, but not until all exposed soil and other fills, as well as any work waterward of OHW or the HTL, are permanently stabilized. Sediment and debris collected by these devices should be removed and placed at an upland location in a manner that will prevent its later erosion into a waterway or wetland.



## 21. Fish and Wildlife Harvesting and Attraction Devices and Activities

*Activities that require individual consultation:*

1. Impacts  $\geq 100$  SF of tidal SAV or natural rocky habitats.
2. Impacts  $\geq 1000$  SF of tidal SAS or intertidal areas.
3. Impacts  $\geq 1/2$  acre of tidal resources.
4. Enclosures and impoundments for aquaculture activities within tidal waters.

*Conservation recommendations for all other activities not identified above:*

1. No permanent impacts to tidal SAS or natural rocky habitats.
2. Structures, cages, gear, or shell hash should not be located within 25 feet of, or suspended above, SAV. Shell hash should not be deposited in SAS to avoid conversion of habitats.
3. Seasonal structures should be removed during the off-season and stored in upland areas to minimize effects of habitat loss and shading that may occur from floats and cages.
4. Compensatory mitigation should be provided for impacts to tidal SAS, intertidal areas, or natural rocky habitats.

## 22. Aquaculture

*Activities that require individual EFH consultation:*

1. Impacts  $\geq 100$  SF of tidal SAV or natural rocky habitats.
2. Impacts  $\geq 1000$  SF of tidal SAS, intertidal areas, or areas containing shellfish\*.
3. Impacts  $\geq 1/2$  acre of tidal resources.
4. Enclosures and impoundments for aquaculture activities within tidal waters.
5. Finfish aquaculture

*Conservation recommendations for all other activities not identified above:*

1. No permanent impacts to tidal SAS, natural rocky habitats, or areas containing shellfish.
2. Structures, cages, gear, or shell hash should not be located within 25 feet of, or suspended above, tidal SAV. Shell hash should not be deposited in tidal SAS to avoid conversion of habitats.
3. Seasonal structures should be removed during the off-season and stored in upland areas to minimize effects of habitat loss and shading that may occur from floats and cages.
4. Compensatory mitigation should be provided for impacts to tidal SAS, intertidal areas, natural rocky habitats, and areas containing shellfish.

\* A shellfish survey is required to make this determination unless it is verified that minimal shellfish are present, e.g., per the maps in App. D or conversations with local officials.



### 23. Habitat Restoration, Establishment and Enhancement Activities

*Activities that require individual consultation:*

1. Impacts  $\geq 100$  SF of tidal SAV or natural rocky habitats.
2. Impacts  $\geq 1000$  SF of tidal SAS, intertidal areas, or areas containing shellfish\*.
3. Impacts  $\geq 1/2$  acre of tidal resources.
4. All projects incorporating thin layer deposition for salt marsh wetland restoration.
5. Controls in streams that exceed the widths in #7 below or do not provide downstream passage.

*Conservation recommendations for all other activities not identified above:*

1. Seed shellfish, spatted-shell, or cultch should not be deposited in tidal SAS to avoid conversion of habitats.
2. The TOY restriction in App. B should be required for work that produces greater than minimal turbidity or sedimentation in diadromous streams or tidal waters.
3. No ancillary work should occur in tidal SAS or areas containing shellfish other than proactive habitat restoration or enhancement of SAS.
4. Habitat restoration projects should not result in a permanent conversion or loss of cobble or natural rocky habitat, SAS, or areas containing shellfish.
5. Only native species of vegetation should be planted and invasive species should be controlled within the restoration site.
6. Appropriate soil erosion, sediment and turbidity controls should be used and maintained in effective operating condition during construction. Work capable of producing greater than minimal turbidity or sedimentation should be done during periods of low-flow or no-flow, when the stream or tide is waterward of the work, or when controls are used to obtain dry work conditions. Work that produces greater than minimal turbidity or sedimentation should not be done during the TOY restriction(s) in App. B.
7. Controls in streams should be installed and removed during the same TOY work window when practicable. Controls (e.g., cofferdams) should not encroach: i)  $>25\%$  from OHW in diadromous streams during the TOY restriction in App. B; or ii)  $>25\%$  from MHW in tidal waters during the TOY restrictions for shellfish and w.flounder in App B); or iii)  $>50\%$  from MHW in tidal waters during the TOY windows for shellfish and w.flounder in App B. This is to protect upstream fish passage. Maintain downstream fish passage throughout the project. Controls should be removed upon completion of work, but not until all exposed soil and other fills, as well as any work waterward of OHW or the HTL, are permanently stabilized. Sediment and debris collected by these devices should be removed and placed at an upland location in a manner that will prevent its later erosion into a waterway or wetland.

\* A shellfish survey is required to make this determination unless it is verified that minimal shellfish are present, e.g., per the maps in App. D or conversations with local officials.

## APPENDIX B

### RECOMMENDED TIME OF YEAR RESTRICTIONS

Time of year (TOY) restrictions are provided for each New England state so that work (i.e., dredging or other in-water, turbidity and noise producing activities) may be avoided during sensitive life stages of managed species. These standard restrictions take into account the breeding, nursery and migration stages of managed species which are especially vulnerable to in-water silt-producing activities, dredging projects, noise impacts, or project activities which may encroach >25% into a waterway interfering with migration. In-water work for those projects or activities with EFH CRs to utilize the appropriate TOY restriction should not be completed during the TOY restriction provided below.

#### TOY RESTRICTIONS

State	TOY Restrictions
Connecticut	Winter Flounder <sup>1</sup> : <ul style="list-style-type: none"> <li>February 1 to May 31</li> <li>April 1 through June 30 north of Old Saybrook in the CT River</li> <li>≤42°F for 3 consecutive days in Mumford Cove and connecting parts of Venetian Harbor.</li> </ul> Diadromous Fish: April 1 to June 30 Shellfish <sup>2</sup> : May 1 to September 30
Rhode Island	Winter Flounder <sup>1</sup> : February 1 to June 30 Diadromous Fish: March 15 to June 30 Shellfish <sup>2</sup> : May 1 to October 14
Massachusetts	Winter Flounder <sup>1,3</sup> : January 15 to June 30 Diadromous Fish: March 1 to June 30 Shellfish <sup>2,3</sup> : June 1 to October 31
New Hampshire	March 16 to November 14 of any year
Maine	Winter Flounder <sup>1</sup> : March 15 to June 30 Diadromous Fish: April 1 to June 30 Shellfish <sup>2</sup> : June 1 to October 31

1 See these areas at <http://www.greateratlantic.fisheries.noaa.gov/hcd/list.htm>.

2 See Appendix D

3 The Massachusetts Division of Marine Fisheries (MA DMF) has developed site-specific TOY restrictions for coastal alteration projects by waterbody. The TOY document provided on the MA DMF website at [http://www.mass.gov/dfwele/dmf/publications/tr\\_47.pdf](http://www.mass.gov/dfwele/dmf/publications/tr_47.pdf) may be referenced for in-water alteration projects in applicable locations.

## APPENDIX C

### DEFINITIONS

**Adverse effect:** This means any impact that reduces quality and/or quantity of EFH. Adverse effects may include direct or indirect physical, chemical, or biological alterations of the waters or substrate and loss of, or injury to, benthic organisms, prey species and their habitat, and other ecosystem components, if such modifications reduce the quality and/or quantity of EFH. Adverse effects to EFH may result from actions occurring within EFH or outside of EFH and may include site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions.

**Appropriate soil erosion, sediment and turbidity controls:** These include cofferdams, bypass pumping around barriers immediately up and downstream of the work footprint (i.e., dam and pump), installation of sediment control barriers (i.e., silt fence, vegetated filter strips, geotextile silt fences, filter tubes, erosion control mixes, hay bales or other devices) downhill of all exposed areas, stream fords, retention of existing vegetated buffers, application of temporary mulching during construction, phased construction, and permanent seeding and stabilization, etc.

**Greater than minimal turbidity and sedimentation:** For the purposes of this document, “greater than minimal turbidity and sedimentation” is generally not considered to occur from the installation of sheet piles, removal of sheet piles when done in accordance with the Soil Erosion and Sediment Controls general condition of the GPs, the installation or removal of piles, dredging or excavating in predominantly sand and courser material, and dredged material disposal in the upland (e.g., beach or parking lot) into properly constructed upland contained dredged material disposal area.

**Natural rocky habitats:** These are composed of pebble/gravel, cobble, boulder, or rock ledge/outcrop substrate. Manufactured stone (e.g. cut or engineered rip-rap) is not considered a natural rocky habitat. Mixed substrate types (e.g. sand and pebble/gravel) should be considered natural rocky habitats where 30% or greater of the substrate type is composed of pebble/gravel. For mixed substrate type habitats with 10-30% of pebble/gravel sediments, which do not contain cobble, boulder or rock ledge/outcrop, coordination with NMFS should be conducted to determine if the habitat should be classified as a natural rocky habitat. All habitats containing cobble, boulder, or rock ledge/outcrop should be considered natural rocky habitats.

**Special aquatic sites:** These include inland and saltmarsh wetlands, mud flats, vegetated shallows, sanctuaries and refuges, coral reefs, and riffle and pool complexes. These are defined at 40 CFR 230.3 and listed in 40 CFR 230 Subpart E.

## APPENDIX D INFORMATION AND RESOURCES

### Connecticut

NOTE: Shellfish information is required by the state and included on plans.

CT Bureau of Aquaculture: Shellfish maps and town information

<http://www.ct.gov/doag/cwp/view.asp?a=3768&q=451508&doagNav=>

CT GIS Resources: Data layers: Shellfish; Shellfish Classification Areas; CT managed shellfish beds

[http://www.ct.gov/deep/cwp/view.asp?a=2698&q=323342&deepNav\\_GID=1707](http://www.ct.gov/deep/cwp/view.asp?a=2698&q=323342&deepNav_GID=1707)

Maps all natural shellfish beds in CT that were designated in 2014. It has layers for all habitat types (including natural rocky habitats and all SAS) with an added component based on exposure

<http://clear3.uconn.edu/aquaculture>

Eelgrass Maps

[https://www.fws.gov/northeast/ecologicalservices/pdf/wetlands/2012\\_CT\\_Eelgrass\\_Final\\_Report\\_11\\_26\\_2013.pdf](https://www.fws.gov/northeast/ecologicalservices/pdf/wetlands/2012_CT_Eelgrass_Final_Report_11_26_2013.pdf)

[http://www.ct.gov/deep/cwp/view.asp?a=2698&q=323342&deepNav\\_GID=1707](http://www.ct.gov/deep/cwp/view.asp?a=2698&q=323342&deepNav_GID=1707)

<http://longislandsoundstudy.net/> (Long Island Sound study)

CT GIS Resources – Habitat and coastal resources data layers

[http://www.ct.gov/deep/cwp/view.asp?a=2698&q=323342&deepNav\\_GID=1707](http://www.ct.gov/deep/cwp/view.asp?a=2698&q=323342&deepNav_GID=1707)

<http://cteco.maps.arcgis.com/home/index.html>

CT DEEP Office of Long Island Sound Programs and Fisheries

<http://www.ct.gov/deep/>

UConn MAGIC GIS data – coastal aerial photographs and

<http://magic.lib.uconn.edu/>

CT River Watershed Council

<http://www.ctriver.org/>

### Maine

Maine Office of GIS Data Catalog:

<http://www.maine.gov/megis/catalog>.

Data layers include: molluscan shellfish area; mussel seed conservation areas; eelgrass maps; Atlantic salmon habitat.

State of Maine Shellfish Sanitation and Management:

<http://www.maine.gov/dmr/shellfish-sanitation-management/index.html>

Town shellfish information including shellfish conservation area maps

[www.maine.gov/dmr/shellfish-sanitation-management/programs/municipal/ordinances/towninfo.html](http://www.maine.gov/dmr/shellfish-sanitation-management/programs/municipal/ordinances/towninfo.html)

Eelgrass maps:

<http://www.maine.gov/dmr/science-research/species/eelgrass/index.html>

Casco Bay Estuary Partnership:

<http://www.cascobayestuary.org/> >> Resources >>

Maine GIS Stream Habitat Viewer:

<http://mapserver.maine.gov/streamviewer/index.html>

### Massachusetts

MassGIS Data – Data layer: Shellfish Suitability Areas

[http://maps.massgis.state.ma.us/map\\_ol/oliver.php](http://maps.massgis.state.ma.us/map_ol/oliver.php) shows locations of various species; metadata state

“The polygons delineate areas that are believed to be suitable for shellfish based on the expertise of the [Massachusetts Division of Marine Fisheries](#) (MarineFisheries) and local Shellfish Constables, input from commercial fishermen, and information contained in maps and studies of shellfish in Massachusetts. The areas covered include sites where shellfish have been observed since the mid-



1970's, but may not currently support any shellfish. Therefore, these maps represent potential habitat areas. Site specific surveys may be necessary to ascertain current distribution and abundance but will not be used to alter the designation of potential habitat without Marine Fisheries input. Additionally, because of the changing habitat and water quality conditions, lands containing shellfish likely exist in areas not identified on these maps. As such, these layers should not be used as a primary source to make site specific assessments for impact or mitigation. (May 2011)"

MA Shellfish Sanitation and Management program

<http://www.mass.gov/eea/agencies/dfg/dmf/programs-and-projects/shellfish-sanitation-and-management.html>

Eelgrass maps

[http://maps.massgis.state.ma.us/map\\_ol/oliver.php](http://maps.massgis.state.ma.us/map_ol/oliver.php)

[http://maps.massgis.state.ma.us/images/dep/eelgrass/eelgrass\\_map.htm](http://maps.massgis.state.ma.us/images/dep/eelgrass/eelgrass_map.htm) same data on both of these sites, just presented differently.

MassGIS Data – Habitat and coastal resources data layers

[http://maps.massgis.state.ma.us/map\\_ol/oliver.php](http://maps.massgis.state.ma.us/map_ol/oliver.php)

[http://maps.massgis.state.ma.us/map\\_ol/moris.php](http://maps.massgis.state.ma.us/map_ol/moris.php)

MA DMF Recommended TOY Restrictions Document

<http://www.mass.gov/eea/docs/dfg/dmf/publications/tr-47.pdf>

Massachusetts Bays National Estuary Program

<http://www.mass.gov/eea/agencies/mass-bays-program/>

Buzzards Bay National Estuary Program

<http://buzzardsbay.org/> This is an advisory and planning unit of MA CZM. Their website has informational pages on marine life in their area that link to the state pages in other sections on this sheet. This website does have current shellfish bed closure maps.

Massachusetts Division of Marine Fisheries

(<http://www.mass.gov/eea/agencies/dfg/dmf/>) poor link, use next one

<http://www.mass.gov/eea/agencies/dfg/dmf/programs-and-projects/designated-shellfish-growing-areas.html> maps of shellfish growing area classification (approved, conditionally approved, restricted, conditionally approved, prohibited)

Massachusetts Office of Coastal Zone Management

<http://www.mass.gov/eea/agencies/czm/no-shellfish/fish-mapping-found-at-this-site>

## New Hampshire

NH's Statewide GIS Clearinghouse, NH GRANIT:

<http://www.granit.unh.edu>

Data layers include: aquaculture resources, eelgrass maps; shellfish water classification

NH Coastal Viewer:

<http://www.granit.unh.edu/nhcoastalviewer>

Shellfish aquaculture; eelgrass beds (current only); shellfish resources (current and historic)

State of NH Shellfish Program:

<http://des.nh.gov/organization/divisions/water/wmb/shellfish/>

## Rhode Island

RI Shellfish and Aquaculture

<http://www.dem.ri.gov/programs/fish-wildlife/marine-fisheries/shellfish-aquaculture.php>

<http://www.dem.ri.gov/programs/water/shellfish/>

RI Shellfish Management Plan

<http://www.rismp.org/>

Eelgrass maps

[http://www.savebay.org/file/2012\\_Mapping\\_Submerged\\_Aquatic\\_Vegetation\\_final\\_report\\_4\\_2013.pdf](http://www.savebay.org/file/2012_Mapping_Submerged_Aquatic_Vegetation_final_report_4_2013.pdf)

RI GIS Data – Habitat and coastal resources data layers

<http://ridemgis.maps.arcgis.com/apps/webappviewer/index.html?id=87e104c8adb449eb9f905e5f18020de5>

Narraganset Bay Estuary Program

<http://www.dem.ri.gov/programs/benviron/water/wetlands/wetldocs.htm>

Rhode Island Division of Marine Fisheries

<http://www.dem.ri.gov/>

Rhode Island Coastal Resources Management Council

<http://www.crmc.ri.gov/>

**APPENDIX E**  
**STREAM WITH DIADROMOUS FISH**

Connecticut

PENDING

Maine

PENDING

Massachusetts

Streams listed in "[MA DMF Technical Report TR-47: Recommended Time of Year Restrictions \(TOYs\) for Coastal Alteration Projects to Protect Marine Fisheries Resources in Massachusetts](#)"

New Hampshire

**CONNECTICUT RIVER AND TRIBUTARIES**

Ames Brook	Dyer Brook	Ox Brook
Ammonoosuc River	Eastman Brook	Partridge Brook
Arlin Brook	Governors Brook	Petes Brook
Ash Swamp Brook	Grant Brook	Potter Brook
Ashuelot River	Great Brook	Roaring Brook
Beaver Brook	Gulf, The	Roaring Brook
Beaver Brook	Gully Brook	Roaring Brook
Beaver Brook	Hackett Brook	Scarritt Brook
Bendell	Hewes Brook	Simms Stream
Brook	Hubbard Brook	Slade Brook
Benware Brook	Hunt Mountain Brook	Smarts Mill Brook
Bill Little Brook	Israel River	Smith Brook
Bloods Brook	Johns River	Sprague Brook
Burton Brook	Kimball Brook	Sugar River
Carpenters Brook	Liscomb Brook	Sweatt Brook
Carter Brook	Little Sugar River	Upper Ammonoosuc River
Clark Brook	Lyman Brook	Walker Brook
Cobb Brook	Mascoma River	
Cold River	Mill Brook	
Coleman Brook	Mink Brook	
Cone Brook	Mohawk River	
Conmary Brook	Moore Brook	
Cow Brook	Oliverian Brook	

**MERRIMACK RIVER AND TRIBUTARIES**

Allen Brook	Brickyard Brook	Cohas Brook
Baker Brook	Browns Brook	Cold Brook
Bennett Brook	Bryant Brook	Contoocook River
Bow Bog Brook	Burnham Brook	Cross Brook
Bow Brook	Cate Brook	Dalton Brook
Bowman Brook	Chandler Brook	Giles Pond -
Bradleys Island	Chase Brook	Salmon Brook

Glines Brook  
Hayward Brook  
Horseshoe Island  
Horseshoe Pond -  
Naticook Brook  
Knox Brook  
Little Cohas Brook  
Messer Brook  
Millstone Brook  
Nashua River  
Needle Shop Brook

Nesenkeag Brook  
Pemigewasset River  
Penacook Lake  
Piscataquog River  
Pointer Club Brook  
Punch Brook  
Ray Brook  
Riddle Brook  
Sawmill Brook  
Second Brook  
Shaw Brook

Soucook River  
Souhegan River  
South Branch River  
Stirrup Iron Brook  
Suncook River  
Tannery Brook  
Turkey River  
Watts Brook  
Weeks Brook  
Winnepesaukee River  
Woods Brook

#### ANDROSCOGGIN RIVER AND TRIBUTARIES

Austin Mill Brook  
Bean Brook  
Bear Brook  
Bog Brook  
Cascade Alpine Brook  
Chickwolnepy Stream  
Clear Stream  
Clement Brook  
Conner Brook  
Dead River  
East Brook  
Gates Brook

Goose Pond  
Horne Brook  
Island Brook  
Josh Brook  
Kidder Brook  
Leadmine Brook  
Leavitt Stream  
Mollidgewock Brook  
Moose Brook  
Moose Pond  
Moose River  
Munn Pond

Pea Brook  
Peabody Brook  
Perkins Brook  
Rattle River  
Sessions Brook  
Smoky  
Camp Brook  
Stearns Brook  
Stony Brook  
Tinker Brook  
Umbagog Lake

#### SACO RIVER AND TRIBUTARIES

Albany Brook  
Artist Brook  
Avalanche Brook  
Barlett Brook  
Bearcamp River  
Beech River  
Bemis Brook  
Conway Lake  
Davis Brook

E.Branch Saco River  
Echo Lake  
Ellis River  
Flume Cascade  
Kearsarge Brook  
Kendron Brook  
Lucy Brook  
Mason Brook  
Meadow Brook

Mountain Brook  
Nancy Brook  
Ossipee River  
Razor Brook  
Rocky Branch  
Sawyer River  
Sleeper Brook  
Swift River  
Willey Brook

#### COCHECO RIVER LAMPREY RIVER

Rhode Island  
PENDING





**US Army Corps  
of Engineers**  
New England District  
696 Virginia Road  
Concord, MA 01742-2751

## PUBLIC NOTICE

**Comment Period Begins: February 28, 2017**  
**Comment Period Ends: March 29, 2017**  
**File Number: NAE-2005-658**  
**In Reply Refer To: Christine Jacek**  
**Phone: (978) 318-8026**  
**E-mail: Christine.M.Jacek@usace.army.mil**

The District Engineer has received a permit application to conduct work in waters of the United States from Neptune LNG, LLC of 20 City Square, Charlestown, Massachusetts. This work is proposed in the Atlantic Ocean three miles off the coast of Marblehead, Massachusetts. The site coordinates are North Buoy: Latitude 42.487, Longitude 70.610, and South Buoy: Latitude 42.456, Longitude 70.601.

The work proposed by the applicant involves the decommissioning of the Neptune Deepwater Liquid Natural Gas (LNG) Port. The proposed decommissioning work plan will include the complete removal of the hot tap assembly that attaches the Neptune LNG line to the Algonquin LNG Hubline, three transition manifolds, two submerged turret loading buoys, and sixteen mooring lines consisting of wire rope and chain. The applicant's preferred work plan proposes to abandon in place 13.1 miles of 24 inch pipeline which is buried 1.5 feet (ft.) below the mudline, and sixteen suction piles that will be capped with trawl guards. This proposed action will result in the addition of 11,500 square feet (sq. ft.) of new structures sitting 6.4 ft. above the mudline in waters of the United States.

The applicant has provided three other alternatives for the removal or abandonment of the suction piles:

### Alternative 1

Alternative 1 involves full removal of all sixteen suction piles utilizing a reverse installation method which would result in 6,086 sq. ft. (0.13 acres) of temporary impacts to waters of the U.S. The applicant does not prefer alternative 1 as they state pile removal may fail resulting in a larger portion of pile(s) partially exposed above the mudline and full pile removal poses a larger danger to divers working on the decommissioning. Full details regarding Alternative 1 can be found on page 16 of the decommissioning plan.

### Alternative 2

Alternative 2 involves cutting the suction piles 15 ft. below the mudline. A 56 ft. radius would be excavated around the pile, the pile cut, the 15 ft. cut section removed from the area, and the excavated sediment placed back over the cut pile. Alternative 2 would result in 4.97 acres of temporary impacts to Waters of the U.S. The applicant does not prefer alternative 2 as they state it results in larger impacts to waters of the U.S. compared to the preferred alternative of abandoning piles in place and covering the piles with trawl guards. Additional information regarding Alternative 2 can be found on page 17 of the decommissioning plan.

### Alternative 3

Alternative 3 involves cutting the suction piles 3 ft. below the mudline. A 17 ft. radius would be excavated around the pile, the pile cut, the 3 ft. cut section of pile removed, and the excavated sediment placed back over the cut



**CENAE-R**  
**FILE NO. NAE-2005-658**

pile. Alternative 3 would result in 0.74 acres of temporary impacts to Waters of the U.S. The applicant does not prefer alternative 3 as they state it results in larger impacts to waters of the U.S. compared to the preferred alternative of abandoning piles in place and covering the piles with trawl guards. Additional information regarding Alternative 3 can be found on page 18 of the decommissioning plan.

The proposed work and alternatives is shown on the attached decommissioning plan entitled "Neptune Deepwater Port Decommissioning Plan," on thirty six (36) sheets, and dated "November 2016."

**AUTHORITY**

Permits are required pursuant to:

- ☒ Section 10 of the Rivers and Harbors Act of 1899  
☐ Section 404 of the Clean Water Act  
☐ Section 103 of the Marine Protection, Research and Sanctuaries Act.

The decision whether to issue a permit will be based on an evaluation of the probable impact of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which may reasonably accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are: conservation, economics, aesthetics, general environmental concerns, wetlands, cultural value, fish and wildlife values, flood hazards, flood plain value, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

**ESSENTIAL FISH HABITAT**

The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), requires all federal agencies to consult with the National Marine Fisheries Service on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH).

This project may have an adverse effect on 0.13 (full pile removal) to 4.97 (piles cut 15 ft. below mudline) acres of Essential Fish Habitat (EFH), depending on the final decommissioning plan chosen, for the species and life stages listed on the attached sheet. This habitat consists of fine sandy substrate in a subtidal area with depths ranging from 122 ft. (at hot tap) to 260 ft. (at buoy locations) of water. Loss of this habitat may adversely affect the species listed on the attached table. The District Engineer has made a preliminary determination that site-specific impacts may be substantial. Accordingly, the Corps of Engineers will submit an expanded EFH

assessment to National Marine Fisheries Service, who in turn will provide conservation recommendations to the Corps. The Corps will coordinate with the applicant regarding implementation of these recommendations. The EFH consultation will be concluded prior to the final decision.

### **NATIONAL HISTORIC PRESERVATION ACT**

Based on his initial review, the District Engineer has determined that little likelihood exists for the proposed work to impinge upon properties with cultural or Native American significance, or listed in, or eligible for listing in, the National Register of Historic Places. Therefore, no further consideration of the requirements of Section 106 of the National Historic Preservation Act of 1966, as amended, is necessary. This determination is based upon one or more of the following:

- a. The permit area has been extensively modified by previous work.
- b. The permit area has been recently created.
- c. The proposed activity is of limited nature and scope.
- d. Review of the latest published version of the National Register shows that no presence of registered properties listed as being eligible for inclusion therein are in the permit area or general vicinity.
- e. Coordination with the State Historic Preservation Officer and/or Tribal Historic Preservation Officer(s)

### **ENDANGERED SPECIES CONSULTATION**

The New England District, Army Corps of Engineers has reviewed the list of species protected under the Endangered Species Act of 1973, as amended, which might occur at the project site. It is our preliminary determination that the proposed activity for which authorization is being sought is designed, situated or will be operated/used in such a manner that it is likely to adversely affect Federally listed endangered or threatened species or their designated critical habitat. The National Oceanic and Atmospheric Administration has issued an Incidental Harassment Authorization to Neptune LNG, LLC to take small numbers of marine mammals by Level B harassment incidental to the maintenance, repair, and decommissioning of the Neptune LNG deep water port.

### **COASTAL ZONE MANAGEMENT**

The States of Connecticut, Maine, Massachusetts, New Hampshire and Rhode Island have approved Coastal Zone Management Programs. Where applicable, the applicant states that any proposed activity will comply with and will be conducted in a manner that is consistent with the approved Coastal Zone Management Program. By this Public Notice, we are requesting the State concurrence or objection to the applicant's consistency statement.

The following authorizations have been applied for, or have been, or will be obtained:

- (X) Permit, License or Assent from State.
- (X) Permit from Local Wetland Agency or Conservation Commission.
- (X) Water Quality Certification in accordance with Section 401 of the Clean Water Act.

In order to properly evaluate the proposal, we are seeking public comment. Anyone wishing to comment is encouraged to do so. Comments should be submitted in writing by the above date. If you have any questions,

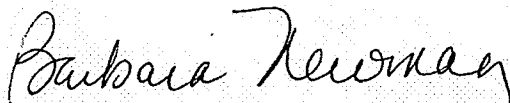
**CENAE-R**  
**FILE NO. NAE-2005-658**

please contact Christine Jacek at (978) 318-8026, (800) 343-4789 or (800) 362-4367, if calling from within Massachusetts.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for a public hearing shall specifically state the reasons for holding a public hearing. The Corps holds public hearings for the purpose of obtaining public comments when that is the best means for understanding a wide variety of concerns from a diverse segment of the public.

The initial determinations made herein will be reviewed in light of facts submitted in response to this notice. All comments will be considered a matter of public record. Copies of letters of objection will be forwarded to the applicant who will normally be requested to contact objectors directly in an effort to reach an understanding.

**THIS NOTICE IS NOT AN AUTHORIZATION TO DO ANY WORK.**



Barbara Newman  
Chief, Permits and Enforcement Branch  
Regulatory Division

If you would prefer not to continue receiving Public Notices by email, please contact Ms. Tina Chaisson at (978) 318-8058 or e-mail her at [bettina.m.chaisson@usace.army.mil](mailto:bettina.m.chaisson@usace.army.mil). You may also check here ( ) and return this portion of the Public Notice to: Bettina Chaisson, Regulatory Division, U.S. Army Corps of Engineers, 696 Virginia Road, Concord, MA 01742-2751.

NAME: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_  
PHONE: \_\_\_\_\_

Essential Fish Habitat for NAE-2005-658 Neptune LNG LLC Decommissioning						
Species	Scientific Name	Life Stage				
		Eggs	Larvae	Juvenile	Adult	All Life Stages
American Plaice	<i>Hippoglossoides platessoides</i>	X	X	X	X	X
Atlantic Butterfish	<i>Peprilus triacanthus</i>				X	X
Atlantic Cod	<i>Gadus morhua</i>	X	X	X	X	X
Atlantic Halibut	<i>Hippoglossus hippoglossus</i>					X
Atlantic Herring	<i>Clupea harengus</i>		X	X	X	X
Atlantic Mackerel	<i>Scomber scombrus</i>	X	X	X	X	X
Atlantic Wolffish	<i>Anarhichas lupus</i>					X
Basking Shark	<i>Cetorhinus maximus</i>			X	X	X
Bluefin Tuna	<i>Thunnus thynnus</i>			X	X	
Blue Shark	<i>Prionace glauca</i>			X	X	X
Haddock	<i>Melanogrammus aeglefinus</i>	X	X	X		X
Longfin Inshore Squid	<i>Doryteuthis pealeii</i>			X	X	X
Monkfish	<i>Lophius americanus</i>	X	X	X	X	X
Northern Shortfin Squid	<i>Illex illecebrosus</i>				X	X
Ocean Pout	<i>Zoarces americanus</i>	X	X	X	X	X
Redfish	<i>Sciaenops ocellatus</i>					X
Red Hake	<i>Urophycis chuss</i>	X	X	X	X	X
Sea Scallop	<i>Placopecten magellanicus</i>					X
Silver Hake	<i>Merluccius bilinearis</i>	X	X	X	X	X
Smooth Skate	<i>Malacoraja senta</i>			X		X
Spiny Dogfish	<i>Squalus acanthias</i>				X	X
Thorny Skate	<i>Amblyraja radiata</i>			X	X	X
White Hake	<i>Urophycis tenuis</i>	X	X	X	X	X
White Shark	<i>Carcharodon carharias</i>					X
Windowpane Flounder	<i>Scophthalmus aquosus</i>	X	X			X
Winter Flounder	<i>Pseudopleuronectes americanus</i>	X	X	X	X	X
Witch Flounder	<i>Glyptocephalus cynoglossus</i>	X	X	X	X	X
Yellowtail Flounder	<i>Pleuronectes ferruginea</i>	X	X	X	X	X

# **Neptune Deepwater Port Decommissioning Plan**

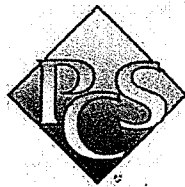
**November 2016**

Prepared for

**Neptune LNG LLC**

20 City Square  
Charlestown, MA 02129

Prepared by:



## Table of Contents

Acronyms and Abbreviations.....	5
1. Introduction .....	7
2. System Architecture.....	8
3. Regulatory Stakeholder Outreach.....	9
3.1 Stakeholders .....	9
3.2 Discussion Draft Reviews .....	12
3.3 Final Plan Development .....	12
4. Safety and Environment.....	12
4.1 Safety .....	12
4.1.1 Surface Work.....	13
4.1.2 Subsea Work .....	13
4.1.3 Lifting .....	14
4.1.4 Transport of recovered materials .....	14
4.2 Environmental Protection .....	14
4.2.1 Marine Mammals & Fisheries .....	14
4.2.2 Air Quality .....	15
4.2.3 Water Quality.....	15
4.2.4 Benthic Zone .....	15
4.2.5 Post Decommissioning Use of the Port Area .....	16
5. Suction Pile Removal Alternatives Analysis .....	16
5.1 Removal .....	16
5.2 Cut Suction Pile 15 feet below Mudline.....	17
5.3 Cut Suction Pile 3 feet below Mudline.....	18
5.4 Trawl Guard.....	19
5.5 Final Conclusion .....	20
6. Contingency Plan .....	21
6.1 Weather Downtime .....	21
6.2 Construction Methodology.....	21
6.3 Spill Prevention, Control and Countermeasures.....	22
6.4 Regional Considerations .....	22
7. Construction Equipment and Schedule .....	23



Neptune LNG Decommissioning Plan  
November 2016

7.1	Dive Support Vessel (DSV)	23
7.2	Support Barge and Tug	23
7.3	Survey Vessel	23
7.4	Crew Boat	23
7.5	Preliminary Schedule	23
8.	Scope of Work	24
8.1	Hot Tap Tie-in	24
8.2	Pipeline Decommissioning	26
8.3	Risers and Umbilicals	27
8.4	STL Buoys	28
8.5	Suction Piles	29
8.6	Mooring Lines - Anchor Chain and Wire Rope	30
8.7	PLEMS / Transition Manifold	32
8.7.1	South PLEM and Tie-In Spools	32
8.7.2	North PLEM and Tie-In Spool	33
8.7.3	Transition Manifold and Tie-In Spools	34
8.8	Seafloor Position Transponders	35
8.9	As Left Survey	36
9.	Final Documentation	36

## Figures

Figure 1-1 - Location Map	8
Figure 2-1 - System Architecture	9
Figure 5-1 - 15 feet Trench Cross Section	17
Figure 5-2 - 3 feet Trench Cross Section	19
Figure 5-3 - Over-trawlable Protection	20
Figure 8-1 - Hot Tap Assembly	25
Figure 8-2 - Riser and Umbilical Removal	28
Figure 8-3 - STL Buoy	29
Figure 8-4 - Mooring Line Detail	32
Figure 8-5 - South PLEM and Tie-in Spools	33
Figure 8-6 - North PLEM and Tie-in Spool	34
Figure 8-7 - Transition Manifold	35

Neptune LNG Decommissioning Plan  
November 2016

Attachment A - Prevention, Monitoring & Mitigation Plan (PMMP)

Attachment B - Incidental Harassment Authorization (IHA)

Attachment C - Communications Plan – (To be provided, when available)

Attachment D - Spill Prevention, Control, & Countermeasures (SPCC) Plan – (To be provided, when available)

Attachment E - Trawl Guard Spec Sheet – (To be provided, when available)

Attachment F - Subsea 7 Similar Projects List

Attachment G - Seven Falcon and Seven Pacific Specifications

## **Acronyms and Abbreviations**

ACOE	Army Corps of Engineers
BSEE	Bureau of Safety and Environmental Enforcement
Buoy	Submerged Turret Loading Buoy
Company	Neptune LNG LLC
Contractor	Company Awarded Contract for Decommissioning
DEP	Department of Environmental Protection
DP	Dynamic Positioning
DSV	Dive Support Vessel
DWP	(Neptune) Deep Water Port
EPA	(U.S.) Environmental Protection Agency
GAL	Gallon (US)
GAS	Odorized Natural Gas
GPS	Global Positioning System
Hot Tap	Mechanical Tap Fitting on the 30" HubLine
HSE	Health Safety and Environment
HubLine	Algonquin's 30" main pipeline
IHA	Incidental Harassment Authorization
IMCA	International Marine Contractors Association
JSA	Job Safety Analysis
LNG	Liquefied Natural Gas
LNGSRV	Liquefied Natural Gas Shuttle Regasification Vessel
Mat	Articulated Concrete Mat
MDEP	Massachusetts Department of Environmental Protection
MARAD	Maritime Administration
MEPA	Massachusetts Environmental Protection Act

Neptune LNG Decommissioning Plan  
November 2016

MLLW	Mean Low Low Water
MMDMRP	Marine Mammal Detection, Monitoring, and Response Plan
PSO	Protected Species Observer
Mooring Line	Chain, Cable, and fittings securing the buoy to the anchor pile
Neptune	The Neptune Deep Water Port
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
OCS	Outer Continental Shelf
Pile	Suction Anchor Pile
Pipeline	All Pipeline segments comprised of Gas Transmission Line and Flowline
Plan	Decommissioning Plan for the Neptune Deepwater Port
PLEM	Pipeline End Manifold
PMMP	Prevention, Monitoring, and Mitigation Plan
Protective Cover	Steel structure over the top of the Transition Manifold
ROV	Remotely Operated Vehicle
SOW	Scope of Work
SPCC	Spill Prevention, Control and Countermeasures (Plan)
SRV	Shuttle and Regasification Vessel
STL	Submerged Turret Loading Buoy
Subsea 7	Prime Marine Contractor
Te	Metric Tonne
USCG	United States Coast Guard

## 1. Introduction

This document describes the Decommissioning Plan (Plan) for Neptune LNG, LLC's (Neptune LNG) Deepwater Port (DWP) located in Massachusetts Bay. An overview of the DWP components is provided below in Section 2 – System Architecture. The Plan describes abandoning the pipeline and suction anchor piles in place and removal of the remaining components as described by this document.

Decommissioning of the DWP was approved as part of the original licensing process as stated in the Port License, Section 20 and is addressed in Section 8 of the current operational Prevention, Monitoring, and Mitigation Plan (PMMP) attached to this Plan as Attachment A. Decommissioning activities will be performed in accordance with all regulatory permits, approvals and guidelines. This document presents the components of the DWP, the general sequence of decommissioning, as well as environmental monitoring and mitigation activities that will be performed as part of the Plan.

The DWP, located 22 miles northeast of Boston, Massachusetts, consists of two mooring and unloading buoys, two pipeline end manifolds (PLEMS), a pipeline and a transition manifold that receives natural gas from "shuttle and regasification vessels" (SRVs). The natural gas is transferred from the SRV through the unloading buoy then through a flexible riser that connects to the PLEMS then a 24-inch subsea flowline and ultimately into a 24-inch gas transmission line. The 24-inch gas transmission line connects the DWP pipeline system to the existing 30-inch Algonquin HubLine natural gas pipeline through a transition manifold, a 16 inch spool and a hot tap tie-in assembly. The DWP is located in US federal waters in blocks NK 19-04 6525 and NK 19-04 6575 of the Outer Continental Shelf in approximate water depths ranging from 125 feet to 250 feet (MLLW). A portion of the pipeline and the connection to the Algonquin HubLine are located within the territory of the Commonwealth of Massachusetts.

[Remainder of page intentionally left blank]

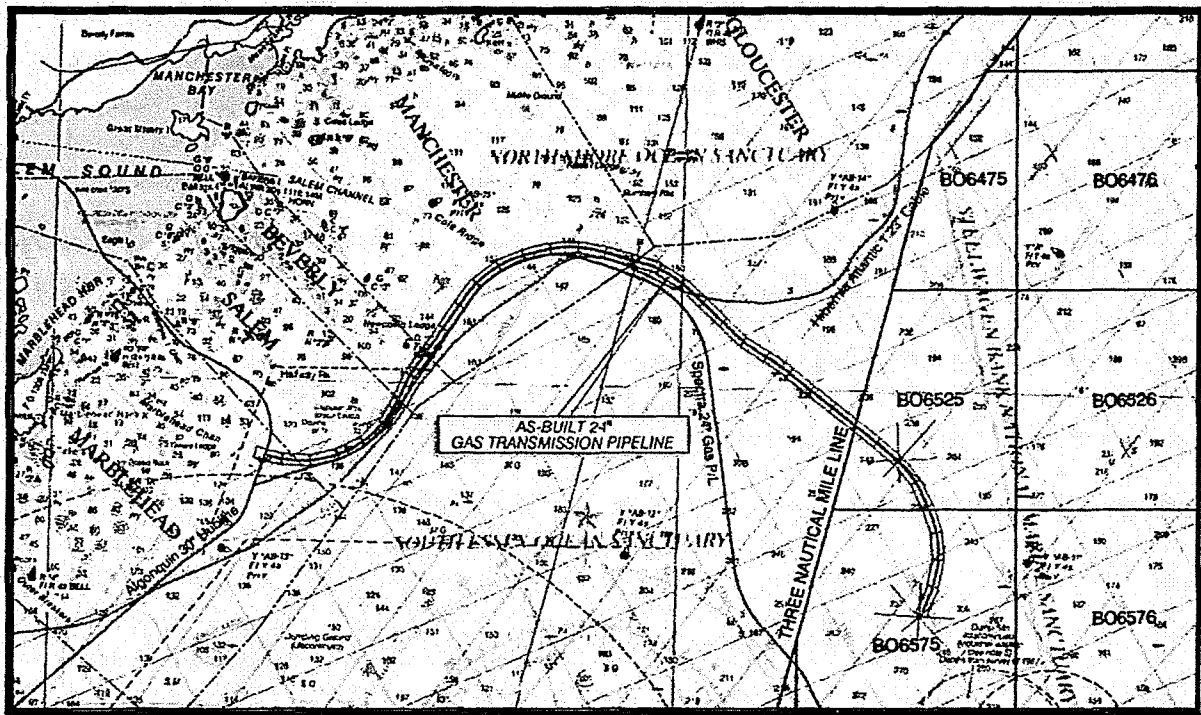


Figure 1-1 - Location Map

## 2. System Architecture

The DWP consists of the following components:

- Two Submerged Turret Loading (STL) Buoys, located 2.3 miles from each other, with each STL Buoy comprised of the following components:
  - Eight mooring lines consisting of wire rope and chain connecting each unloading buoy to anchor points on the seabed;
  - Eight anchor points consisting of suction piles;
  - One 14" diameter flexible pipe riser; and
  - One electro-hydraulic control umbilical from the unloading buoy to the PLEM.
- 13.1 miles of 24" O.D. pipeline, 0.500" wall thickness with 2.5 inches of concrete weight coating
- North Riser Manifold -PLEM with connecting spools
- South Riser Manifold -PLEM with connecting spools
- Hot Tap Tie-in Transition Manifold with protection cover and connecting spools
- Hot tap fitting with 20" tap valve, check valve, and associated supports

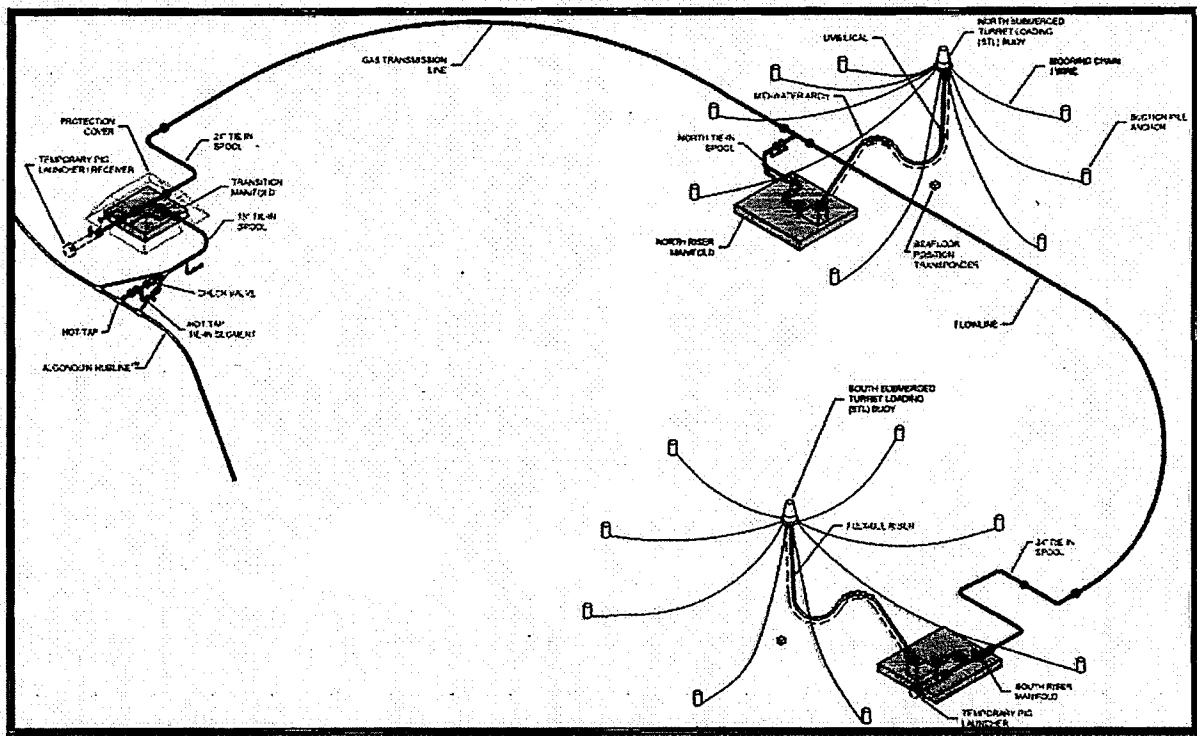


Figure 2-1 - System Architecture

### 3. Regulatory Stakeholder Outreach

Beginning in May 2016, Neptune LNG representatives initiated contact with federal, state and local officials about its intention to decommission the DWP. A "Discussion Draft" of the decommissioning plan and the anticipated schedule for the work was provided to the Agencies listed in Section 3.1 over the summer. Neptune solicited comments from each and incorporated necessary changes to the Plan to address pertinent comments.

#### 3.1 Stakeholders

The stakeholders identified in the Table 3-1 include the officials, agencies, municipalities and groups that participated in the original permitting process of the DWP and were contacted to review the Discussion Draft.



**Table 3-1 - Stakeholder List**

Agency	Role	Contact	Summary
Maritime Administration (MARAD)	DWP License Agency (Lead)	Yvette Fields Yvette.fields@dot.gov	
US Coast Guard (USCG)	Co-lead agency – Application processing Lead agency – Port Operations and Regulations	Curtis Borland Curtis.e.borland@uscg.mil	
NOAA	Marine Mammals – IHA		Received IHA on October 27, 2016 for decommissioning work.
NOAA-NMFS	Fisheries Impacts	Ben Laws benjamin.laws@noaa.gov	Cooperating agency with NOAA.
Stellwagen Bank National Marine Sanctuary	Sanctuary Management	Leila Hatch leila.hatch@noaa.gov	Cooperating agency with NOAA.
Pipeline & Hazardous Materials Safety Administration (PHMSA)	Pipeline Safety	Bob Smallcomb robert.smallcomb@dot.gov	Reviewed Discussion Draft Decommissioning Plan and advised that no specific approval or permit required.
US EPA, Ocean and Coastal Unit	Ocean Impacts	Phil Colarusso colarusso.phil@epa.gov	Reviewed Discussion Draft Decommissioning Plan. No specific requirements identified.
US EPA, Air Unit	Air Emissions, Clean Air Act	Donald Dahl dahl.donald@epa.gov	Reviewed Discussion Draft Decommissioning Plan. Provided flaring details and confirmed this activity does not exceed thresholds required to obtain specific permit. Advised additional review may be required.
Bureau Safety and Environmental Enforcement (BSEE)	Offshore Facilities and ROW	Bimal Shrestha bimal.shrestha@bsee.gov Peter Hosch Peter.Hosch@bsee.gov	Reviewed Discussion Draft Decommissioning Plan. Permit to Relinquish Pipeline ROW in Federal waters required. Permitting requirements regarding removal and/or abandonment of port structures in Federal Waters has been provided.
US Army Corps of Engineers (USACE)	Dredging – Section 10 and 404.	Christine Renzoni Christine.M.Renzoni@usace.army.mil	Reviewed Discussion Draft Decommissioning Plan. Advised a new permit required to authorize the work as defined by the Plan. In progress.

Neptune LNG Decommissioning Plan  
November 2016

MA DEP	State Waters Environment	Lealdon Langley lealdon.langley@state.ma.us	Reviewed Discussion Draft Decommissioning Plan. Advised a license amendment may be necessary for any components left in place within the DEP's jurisdiction.
Coastal Zone Management	Coastal Zone	Robert Boeri Robert.boeri@state.ma.us	Reviewed Discussion Draft Decommissioning Plan. Requested supplemental details on assessment of removal of suction piles, trawl protectors, and decommissioning timeline, which have been included herein. Supplemental information on the trawl protectors will be provided during the engineering phase.
<b>Townships:</b>			
Marblehead	Chapter 91	Rebecca Cutting rebeccac@marblehead.org	Initiated Notice of Intent as requested by MDEP to review and permit Decommissioning activities in municipality.
<b>Others:</b>			
Pilots Association			Communication plan will be developed during operational planning phase to communicate with commercial and recreational uses of the work areas.
Fishermen & Lobstermen Associations			
Whale Watchers			
Harbormasters from Salem, Beverly, Gloucester, Manchester-by-the-Sea and Marblehead			
Yacht Clubs from Salem, Beverly, Gloucester, Manchester-by-the-Sea and Marblehead			

### **3.2 Discussion Draft Reviews**

The Discussion Draft contained details regarding the abandonment and removal of the Port components as defined in the Port Decommissioning section of the Port License, approved by MARAD and the cooperating agencies the exception being the abandonment of the suction piles and placement of a trawlable protection device over each abandoned pile.

Comments and input received have been addressed and/or incorporated into this current version of the Plan. Inter-agency interaction is ongoing and specific permits which have been identified are being pursued by Neptune LNG concurrently with the submittal of this Plan to MARAD.

### **3.3 Final Plan Development**

The Plan incorporates comments received from the various agencies reviewing the Discussion Draft.

Notable changes made to the Discussion Draft include the following:

- Alternatives Analysis - The Port Decommissioning scope approved by the Port License indicated that the suction anchor piles would be removed or cut 15 feet below the mudline. Initial agency review of the Plan demonstrated the need for incorporating the alternatives analysis associated with the removal of the suction piles. The details and results of this analysis are provided in Section 5.
- Contingency Plans - Supplemental information regarding contingency measures that may be implemented were incorporated into Section 6.
- Safety and Environmental - Additional details regarding the mitigation measures being implemented to minimize environmental and safety concerns were incorporated into Section 4.

## **4. Safety and Environment**

### **4.1 Safety**

Neptune LNG is fully committed to performing this work safely while taking all diligent measures to prevent, minimize, and mitigate any potential adverse environmental effects. Neptune's Contractor will develop procedures and utilize equipment that will help ensure the safety of all personnel and protection of all property and the environment.

Neptune LNG has gone through a thorough vetting process and has chosen Subsea 7 as the Prime Contractor performing all offshore work. Subsea 7 has demonstrated experience and a proven track record of performing similar offshore works safely (See Attachment F). Subsea 7 has several vessels in their fleet capable of performing this work and has proposed using the *7 Falcon* or the *7 Pacific* DP vessels (See Attachment G). These vessels are based out of St. John's Newfoundland. Subsea 7 anticipates utilizing a local port, either Cashman's or the East Mineral Salt Dock for mobilization.



During the planning stages and prior to any work, Risk Assessments and Hazard Reviews will be performed. The Contractor will perform daily Job Safety Analysis (JSA) and Tool Box Talks on site and will stop work and perform a JSA for specialized tasks or if there is a change in the Plan.

All personnel, whether a Contractor or Neptune LNG employee, have stop work authority should a safety or environmental issue be observed.

All Contractor and Neptune LNG personnel will receive additional environmental and marine mammal awareness training as defined by the PMMP.

All personnel will be required to wear the appropriate Personal Protection Equipment (PPE) as defined by Neptune LNG's safety policies, the Contractor's safety policies or OSHA, with the most stringent PPE requirements taking precedence.

#### **4.1.1 Surface Work**

For the safety of all personnel and the public, an exclusion zone in close proximity of all activities will be established and monitored throughout operations. This zone will be identified during the development of the detailed engineering and procedures and will be coordinated with the USCG prior to mobilization.

The Contractor also will develop a Communication Plan prior to mobilization that will identify all required notifications including the Local Notice to Mariners (LNM). Broadcasts will be made when vessels are moving into or out of the exclusion zones as well when there will be major movements within the zone.

In addition to notification to the USCG, Neptune LNG will issue notifications to the local Harbormasters and to area interests such as local marinas, yacht clubs, fishermen (Lobstermen), tour boats, etc. to assure all in the area are aware of the activities.

Subsea 7 will provide a "Safe Boating Plan" 30 days prior to mobilization to the work-site which will include, in addition to the above, other information such as the pre-determined safe harbor location for the assets in the event of a storm and emergency evacuation procedures.

#### **4.1.2 Subsea Work**

As this work involves the use of divers, additional considerations are made to assure their safety. The Contractor chosen uses highly trained and experienced divers and dive support personnel as well as state of the art diving systems. As the depths of water involved with this project range between 125 and 275 feet, Saturation Diving will be utilized. This method of diving allows for longer duration work times on bottom and minimizes the need for repeated exposures of the divers to decompressions. Decompression will occur in a pressurized system within a controlled environment.

All diving and decommissioning activities will be conducted in strict adherence to all required governing agency commercial diving regulations, including but not limited to those of the USCG<sup>1</sup>. All diving activities are to follow the Contractor's Commercial Diving Rules and Regulations as detailed in their Group Diving Management System. The Contractor is a member of International Marine Contractors Association (IMCA) and its diving practices are based on IMCA standards.

---

<sup>1</sup> Commercial Diving Operations, 46 C.F.R. §197-Subpart B

All divers will be fully qualified for the tasks they will undertake and will be Operator Qualified (OO'd) for the specific tasks they will be performing.

The vessel from which they will be operating has been designed and used for such diving operations and the vessel crew is familiar with all the special requirements for the divers. It will be a Dynamically Positioned (DP) Class 2 (Double Redundancy) vessel. The vessel crew is highly trained and certified as well as experienced.

Whenever feasible, certain operations will be performed using a Remotely Operated Vehicle (ROV) which will help reduce the exposure of divers to certain potentially hazardous operations.

#### **4.1.3 Lifting**

During the planning stages, the Contractor will develop a lifting plan for all heavy and atypical lifts. Should conditions change, the lifting will cease until a new plan has been developed and reviewed.

Prior to any special lift, work will stop and the lifting plan will be reviewed with all crew and dive team members.

#### **4.1.4 Transport of recovered materials**

In addition to developing the lifting plan, the Contractor will perform engineering analyses of the loading of certain recovered materials onto ABS certified barges and a "Loading Plan" will be issued.

At this time Subsea 7 anticipates using Schnitzer Metals Recycling Yard, in Everett, MA for the disposal of recovered materials. Although none are anticipated, any recovered materials containing lead, asbestos, polychlorinated biphenyl, or any other regulated material, will be disposed of in accordance with required regulations.

### **4.2 Environmental Protection**

#### **4.2.1 Marine Mammals & Fisheries**

As required in Sections 4 and 5 of the July 11, 2011 National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) Letter of Authorization and reflected in the IHA issued on October 7, 2016 (Attachment B), "Acoustic Monitoring and Mitigation Plan for Neptune Deepwater LNG Port Decommissioning" pending before NOAA, and the Operations PMMP (Attachment A), both visual and acoustic monitoring will be conducted during the decommissioning of the DWP.

Two Protected Species Observers (PSOs) will conduct continual visual watches on a shift basis during all daylight hours. Daytime PSOs will monitor the acoustic alert program when not on active visual watch. During the night, one PSO will monitor the acoustic alert program and will scan the area around the vessel using a thermal imaging or similar enhancement device.

The Right Whale auto-detection buoys will continuously record and analyze underwater sounds, particularly calling whales, throughout the entirety of the decommissioning period. When the program detects a Right Whale call, the buoy sends the recorded audio data for the detected signal via a radio link to a computer display or handheld device that is monitored by the PSO on duty.

#### 4.2.2 Air Quality

The volume of natural gas contained in the pipeline is estimated to be 12 million standard cubic feet. Neptune LNG anticipates that the Contractor will deploy a U-Shaped Burner Boom to perform the flaring operations. Although emissions information isn't available directly from the supplier, Neptune provides the emission estimate as shown below:

- a) Destruction Efficiencies – 99.9%
- b) Time to flare – 21 Hours (flaring from South Riser Manifold) + 2 Hours (flaring from Transition manifold for the 16" spool)
- c) Btu flaring rate-600Btu/hr
- d) Natural gas HHV: assume 1,050 Btu/scf

Estimated Emissions		
	lbs/hr	tons/yr
NOx	40.8	0.43
CO	186.0	1.95
VOC	342.0	3.59
SO <sub>2</sub>	0.34	0.004
PM <sub>10/2.5</sub>	4.34	0.05
Pb	0.0003	3.0E-06
CO <sub>2e</sub>	---	737.7

The EPA has reviewed the emissions associated with the flaring operations and concur that they are a temporary, one-time event and do not require a specific air permit<sup>2</sup>.

All other emissions associated with decommissioning the DWP were accounted for in Section 4.8 of the Final Environmental Impact Statement.

#### 4.2.3 Water Quality

All vessels performing the work will be inspected and prepared, prior to mobilizing to the field, to verify the Contractor has the equipment and procedures in place to ensure unauthorized discharges do not occur. As referenced in Section 3 and throughout the PMMP, each vessel involved with the project will have a spill prevention, control, and countermeasures plan (SPCC) and equipment required by the SPCC plan.

#### 4.2.4 Benthic Zone

The activities described by this Plan are associated with very localized and limited areas of the seabed, namely the Hot Tap, North Buoy and South Buoy. Specific post decommissioning monitoring of the

---

<sup>2</sup> Neptune LNG's Dan McPherson communicated with EPA's Donald Dahl in April 2016 to determine if a specific permit was required. On October 18, 2016, Neptune contacted Donald Dahl again and confirmed that the volume of gas being flared results in emissions that are below the thresholds established by 310 CMR, Section 7.02.

benthic resource recovery is not planned. The current Plan, which includes abandoning the suction anchors in place and placing trawl protectors, minimizes the area of seabed disturbance. Removal or cutting the piles 15 feet below the seabed results in significantly higher seabed disturbance as shown in Section 5 – Suction Pile Removal Alternatives Analysis.

#### **4.2.5 Post Decommissioning Use of the Port Area**

Neptune LNG anticipates that all existing regulated navigational areas (i.e. safety and security zone, no anchoring area and area to be avoided) presently enforced around each STL Buoy and mooring array and charted on NOAA charts will be removed and the area can be returned to uses that occurred prior to the DWP installation. Neptune LNG will coordinate with the appropriate USCG authorities to have the NOAA charts updated as appropriate.

The water depth and location of each suction pile, once capped, do not pose an obstruction or hazard to navigation since the capped suction piles will not restrict, endanger or interfere with navigation. The proposed over-trawlable caps (See Attachment E) are designed to allow fishing equipment that drags the bottom to pass over the suction piles without becoming a hazard.

### **5. Suction Pile Removal Alternatives Analysis**

Neptune LNG commissioned an evaluation of decommissioning scenarios associated with the suction anchor piles. The evaluation included a conservative geotechnical and structural review of the soil properties and suction anchor design. A description and pertinent issues or concerns with each scenario is provided below along with the final conclusions and methodology established based on the technical, environmental and safety considerations.

#### **5.1 Removal**

Removal of the suction anchor piles was considered using the reverse installation method which involves attaching a crane to the lifting points and attaching a pump to the suction pile receptacle located on the top of each suction pile. Sea water will be pumped into the pile while the crane on the DSV applies a lifting load.

The potential failures of the reverse installation method include the inability to achieve the required internal pressurization, the inability to produce a flowrate capable of achieving and maintaining the necessary pressure to unseat each suction anchor, or the structural failure of the pile top plate. The evaluation concludes that the soil pressure capacity is insufficient to safely overcome the required extraction pressures.

A potentially immitigable risk could occur during this operation if a suction pile becomes lodged in a partially removed condition in which pumping water into the pile no longer produces internal pressure and the lifting forces exceed the capacity of the crane or the lifting padeyes. A partially removed suction pile potentially jeopardizes the safety of the diving personnel and DSV and results in a significant seafloor obstruction. There is additional unavoidable risk that certain partially removed conditions cannot safely be rectified. For example, if one (or more) of the padeyes fail, the ability to control the



center of gravity and safely support the partially removed pile in a controlled manner necessary to perform other contingency measures, such as cutting the pile at the seafloor will not be possible.

There is also a high likelihood that plugs or masses of soil will remain adhered to portions of the internal and external walls of the suction pile, upsetting the center of gravity and/or exceeding the safe limits of the lifting padeyes. Monitoring the lifting load during the process would allow the operation to cease prior to exceeding the safe working loads but could result in a partially removed pile.

## 5.2 Cut Suction Pile 15 feet below Mudline

This approach was identified in the original Port License as an alternate to full removal. Due to the internal structure of the suction pile, internal access by divers and use of internal cutting methods cannot be performed. The work would then require circumferentially excavating a considerable trench around each pile in order for the diver and/or ROV to cut the pile 15 feet below the mudline externally using any of several methods, such as cold cut saws or by underwater burning.

As shown in Figure 5-1, assuming a gradient of 3:1, the minimum width and depth of the excavation required are 54 feet and 18 feet respectively and results in considerable seabed impacts as well as the generation of significant turbidity in the water column. Further impacts would occur to return the seabed to pre-existing conditions filling the void created by the removal activities.

Other environmental impacts associated with this scenario include prolonged noise from construction vessels being on site for an extended duration potentially adversely affecting Marine Mammals.

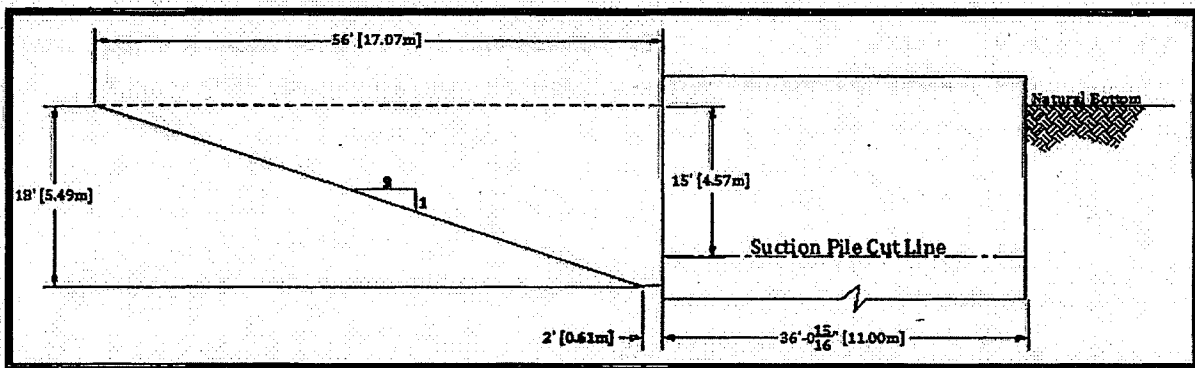


Figure 5-1 – 15 foot Trench Cross Section

15 Foot Excavation Area and Volume									
Dia.	width ft	Depth Ft	Area ft2		Surf Area ft2	Vol / pile		QTY	Total
						ft3	yd3		cu yds    Acres
5 m - 16.4 ft	56	18	522		12,737	88,193	3,266	11	35,930    3.22
9 m - 29.52 ft	56	18	486		15,045	109,708	4,063	4	16,253    1.38
11 m - 36.08 ft	56	18	486		16,199	120,466	4,461	1	4,461    0.37
Grand Totals									56,645    4.97

### 5.3 Cut Suction Pile 3 feet below Mudline

This approach was identified as an alternative to the 15 feet cutting of the suction piles. The work will require circumferentially excavating a considerable trench around each pile in order for the diver and/or ROV to cut the pile 3 feet below the mudline using any of several methods, such as cold cut saws or by underwater burning.

As shown in Figure 5-2, assuming a gradient of 3:1, the minimum width and depth of the excavation required are 17feet and 5 feet respectively and results in considerable reduction in seabed and benthos impacts as well as the generation of significant turbidity in the water column when compared to removal of 15 feet of each suction pile. Further impacts would occur when returning the seabed to pre-existing conditions filling the void created by the removal activities.

Other environmental impacts associated with this scenario include prolonged noise from construction vessels being on site for an extended duration potentially adversely affecting Marine Mammals.

[Remainder of page intentionally left blank]

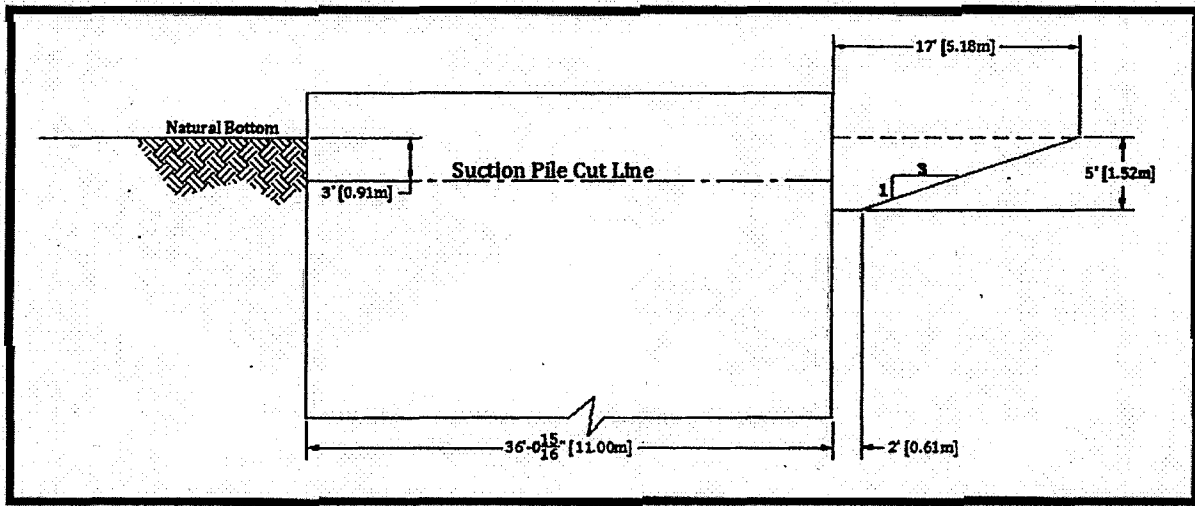


Figure 5-2 - 3 feet Trench Cross Section

### 3 Feet Excavation Area and Volume

Dia.	Width ft	Depth ft	Area ft <sup>2</sup>	Surf Area ft <sup>2</sup>	Vol ft <sup>3</sup>	yd <sup>3</sup>	QTY	Total cu yds	acres
5 m - 16.4 ft	17	5	47.5	1,783	4,159	154	11	1,694	0.45
9 m - 29.52 ft	17	5	47.5	2,484	6,117	226	4	906	0.23
11 m - 36.08 ft	17	5	47.5	2,834	5,899	218	1	262	0.07
Grand Totals								2,863	0.74

In order to avoid these unfavorable scenarios and to reduce the environmental impacts associated with excavation, turbidity and duration on location Neptune LNG proposes the placement of concrete mats or some other over-trawlable protection device.

#### 5.4 Trawl Guard

This scenario entails installation of a prefabricated over-trawlable structure, shown in Attachment E and similar to Figure 5-3 below, over the "as-is" protruding top section of each suction pile. Each structure for the DWP suction piles will have a Trawl Guard fabricated (by diameter and height) to fit over the pile onto which it will be installed. The installation of these structures can be completed by either divers or ROV.

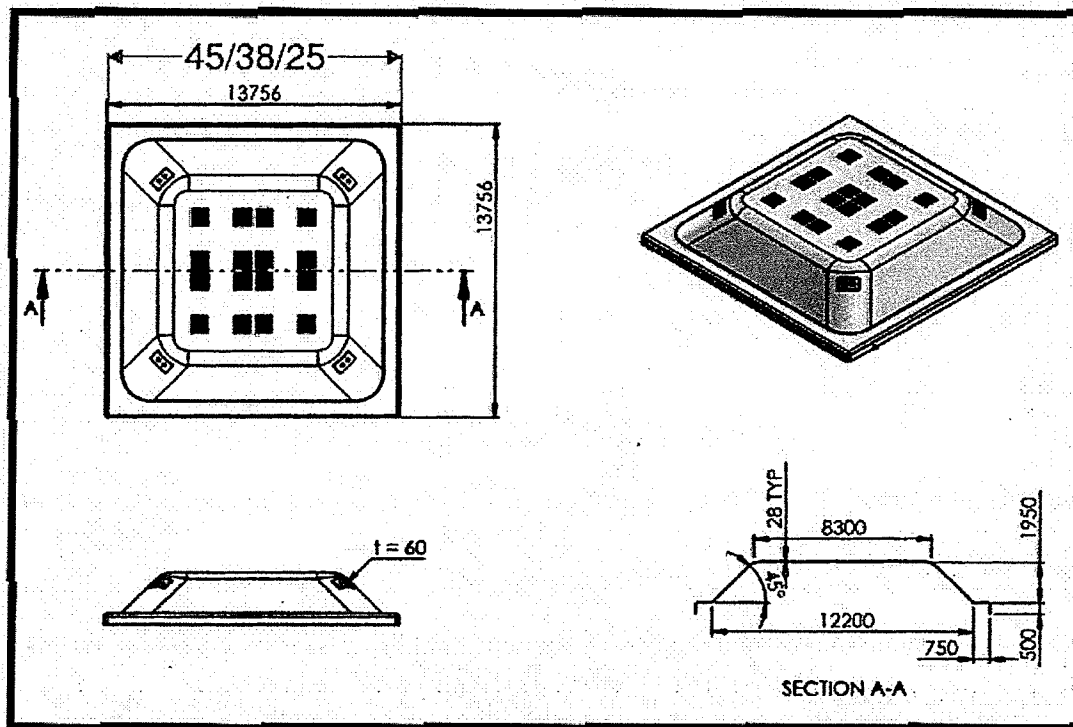


Figure 5-3 – Over-trawlable Protection

Neptune LNG will submit the final design, specifications and installation methodology of the Trawl Guard for review and approval once the detail design has been completed.

Trawl Protection Dimensions		
<i>Pile Dia.</i> (m)	<i>Approximate Guard Length and width</i> (m)/(ft)	<i>Height</i> (m)/(ft)
5	7.8 / 25.5	1.9 / 6.4
9	11.7 / 38.5	1.9 / 6.4
11	13.7 / 45.1	1.9 / 6.4

## 5.5 Final Conclusion

The following evaluation table provides a summary of the review of each decommissioning scenario for the piles against the decision criteria with ratings from 1-5 where 1 is the least impact/risk or most favorable outcome and 5 is the greatest impact/risk or least favorable outcome.

Suction Pile Scenario Evaluation							
Scenario Description	Decision Criteria						Final Weighting
	Safety Risk (x3)	Likelihood of Success (x2)	Execution Duration	Noise Disturbance	Water Turbidity	Fisheries Impact	
Remove All Piles	3	N/A	3	3	2	2	N/A
Cut Piles 15 ft below Mudline and Remove Top Section	5	5	5	5	5	2	42
Cut Piles 3 ft below Mudline and Remove Top Section	4	3	3	4	4	2	31
Install Trawl Protection	1	1	1	2	1	1	10

Taking into consideration safety risks to the diving and construction equipment as well as the environmental impacts associated with the removal or cutting of the suction piles, the most suitable, safest, and least environmental impact approach for the decommissioning of the suction piles is to abandon them in place and cap them with the over-trawlable protection devices.

## 6. Contingency Plan

Neptune LNG has approached the decommissioning of the DWP with due consideration for potential delays and risks associated with the work. As a result, Neptune LNG has developed the construction plan so as to minimize the opportunity for unexpected issues to occur during the course of the work.

The planning of the decommissioning has proceeded with the goal of establishing methodologies and timing that would maximize the ability to execute the work with predictable results. An assessment of project risks was performed and resulted in specific decisions taken to minimize construction issues, such as:

### 6.1 Weather Downtime

- ◆ Selection of a time-of-year for construction that minimizes potential impacts from weather delays and impacts to the marine environment.
- ◆ Development of a construction schedule with reasonable allowances for mobilization of the contractor prior to commencement of in-field work and for traditional weather downtime delays.

### 6.2 Construction Methodology

- ◆ Selection of construction equipment and techniques that are proven (See Attachment F)
- ◆ Plan for optimized construction vessel and location usage so as to minimize the overall decommissioning duration for the facilities.

### 6.3 Spill Prevention, Control and Countermeasures

As previously identified in section 4.2.3, all vessels performing the work will be inspected and prepared, prior to mobilizing to the field, to verify the Contractor has the equipment and procedures in place to ensure discharges do not occur. During the planning stages the Contractor will develop spill prevention, control, and countermeasures plans (SPCC) (See Attachment D) specific for each vessel involved with the project following all permit and regulatory requirements. The Contractor will work to assure "Zero Discharge". In the unlikely event of an incident, all work will cease and all efforts will be focused on any countermeasures that may be required and all required notifications will be made.

### 6.4 Regional Considerations

- ◆ Neptune LNG has selected a proven and experienced marine contractor utilizing specialized equipment that does not exist locally.

Neptune LNG has identified several scenarios that may potentially cause delays to the planned construction activity and the overall schedule. Table 6-1 outlines several scenarios and their proposed contingency measures.

Table 6-1. Issues that Could Impact the Overall Schedule		
Issue/Scenario	Evaluate Impact	Contingency Measures/Actions
Delay in construction vessels mobilization/arrival	Assess the length of the delay and evaluate impact to project schedule	If the construction start date is delayed in a manner that jeopardizes completion within the required window, require the contractor to supply additional vessels or equipment to perform portions of the work. The present schedule has sufficient buffer should there be minor delays
Significant mechanical failure(s)	Discuss options with contractor and evaluate schedule impact	Inspect records and equipment prior to mobilization to insure equipment is fully functional and maintained and require the contractor to provide redundant systems where possible and/or replacement parts for components that are likely to experience failure
Lifting points of components to be recovered damage.	Identify condition. Assess alternate removal procedures	Devise alternate lifting points or disassemble components and remove in multiple pieces
Slower than expected progress	Review options with contractor and overall schedule impacts	Isolate issue causing delay and require contractor to increase resources. Subsea 7 has several vessels and equipment in their fleet that could perform the work

**Table 6-1. Issues that Could Impact the Overall Schedule**

Marine Mammal Presence within Construction Zone	Review options with contractor and overall schedule impacts	Implement procedures outlined in the Marine Mammal Detection Plan. Seek potential alternate location to continue work that will not be impacted by Marine Mammal Presence
---	---	---

## **7. Construction Equipment and Schedule**

Neptune LNG is presently engaged in discussions with the Contractor regarding the specific construction equipment that will perform the work. The information provided below is intended to describe the type of equipment anticipated. These vessels will be similar to what was used during the installation; with the exception of pipe lay equipment which is not required for decommissioning.

All of the vessels will operate 24 hours per day and seven days per week, with the exception of weather conditions that are deemed unsuitable for safe operations. Neptune LNG anticipates that the decommissioning work will occur over an approximate 10-12 week period.

### **7.1 Dive Support Vessel (DSV)**

This vessel will be dynamically positioned and will support diving and ROV operations required to perform the work.

This vessel will perform the pipeline depressurization and flooding operations, minor and localized equipment exposure activities, and support of the Heavy Lift Vessel (if required). It may remove and recover components, if appropriate.

### **7.2 Support Barge and Tug**

One or more support barges and associated tugs may be required to stage recovered components for transport to a dockside facility for proper disposal. A separate anchored barge may be used to support flaring activities.

### **7.3 Survey Vessel**

Once all decommissioning activities are completed and all the components have been recovered a small survey vessel may perform an "As Left Survey" if this activity is not performed by the DSV ROV.

### **7.4 Crew Boat**

A small vessel will be utilized periodically to transport personnel to and from the work site.

### **7.5 Preliminary Schedule**

Neptune LNG is planning to perform the decommissioning work as described by this plan in the spring and summer of 2018 and anticipates an overall estimated duration of 10-12 weeks to perform all field activities. All activities will be completed by no later than November 30, 2018. The work will be performed between May 1 and November 30.

A detailed schedule and notification of actual work dates will be provided before March 31, 2018.



## **8. Scope of Work**

This Scope of Work is intended to provide an overview of each major phase of the work and does not necessarily capture every activity. The sequence of activities will be finalized upon award of the decommissioning contract and prior to the start of field work.

### **8.1 Hot Tap Tie-in**

Neptune LNG has collaborated with Algonquin to confirm their requirements for the final disposition and configuration of the Hot Tap Assembly that will remain attached to the HubLine pipeline once the DWP has been decommissioned.

To isolate the DWP pipeline extending from the HubLine pipeline, the 20" valve attached to the hot tap must be uncovered and closed. The Hot Tap fitting and 20" valve will be left in place. As illustrated in Figure 8-1, all other components, which include the check valve and associated support clamps, will be removed. Once the spool and structural clamps are removed, a blind flange will be installed and the assembly will be covered with sand bags and concrete mats.

The isolation of the Hot Tap valve and depressurization of the tie-in spool may be performed as pre-work prior to the remaining decommissioning activities to ensure that the valve operates properly and does not pose a safety risk to the divers.

In order to verify that the 20" Tap Valve closes properly and does not leak, the 16" Tie-in Spool between the Transition Manifold and the Hot Tap valve must be depressurized. The 16" Tie-in spool is approximately 100 feet in length and contains an estimated volume of 6000 standard cubic feet of natural gas. This volume of natural gas will be flared at the hot-tap location.

The depressurization of the 16" Tie-in Spool will be accomplished by installation of a high pressure hose to a blowdown valve on the Hot Tap Assembly. The venting hose will be run to the surface and connected to a flare stack positioned on the barge supporting this operation where the gas in the spool will be flared off.

[Remainder of page intentionally left blank]

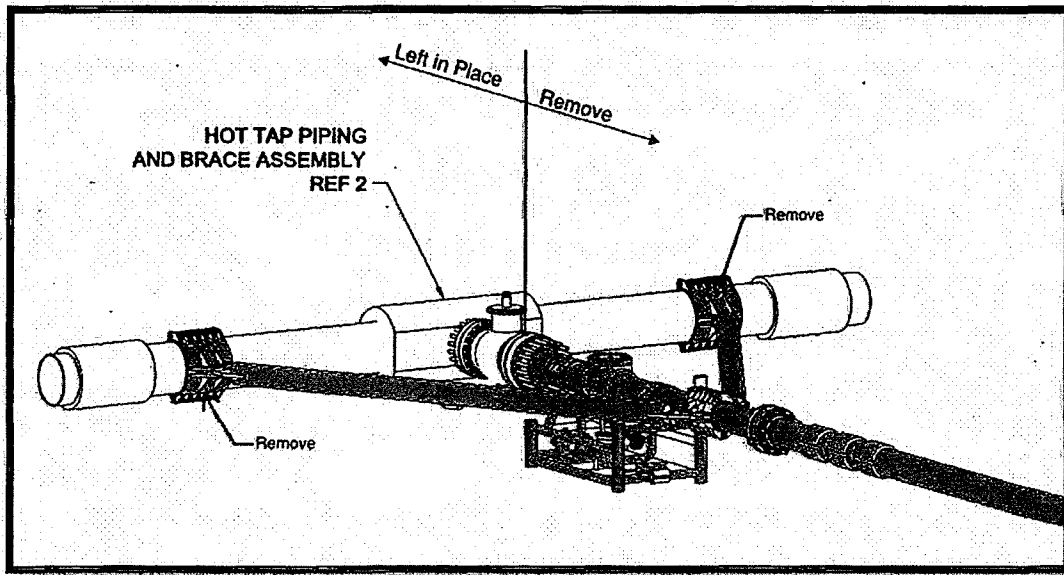


Figure 8-1 - Hot Tap Assembly

The anticipated Hot Tap isolation and Spool Assembly removal methodology is as follows:

Step	Description	Vessel
1.	Mobilize DSV to location	DSV
2.	Divers will uncover the Hot Tap piping and brace assembly	DSV
3.	Divers will close the 20" Hot Tap valve and the valve on the Transition manifold to isolate the 16" tie-in spool	DSV
4.	The spool will be depressurized by connecting a high pressure hose from the spool to a flare stack on the support barge and flaring the gas at the surface will take place. The spool will then be flooded	DSV/Barge
5.	Divers will disconnect the spools and check valve from the 20" hot tap valve and the transition manifold valve and recover the spools and check valve assembly to the surface	
6.	Divers will install a blind flange on the 20" Hot Tap valve	DSV
7.	Divers will remove and recover the two brace clamps from the HubLine pipeline	DSV
8.	Divers will install sand bags over the Hot Tap Valve and cover the area with concrete mats	DSV

Additional pre-work activities may also include disconnecting the hydraulic lines in the two buoy umbilicals from the PLEMS and at the Buoys and flushing and recovering the environmentally safe hydraulic oil from them. At this time the detailed engineering for that operation is in development.

## 8.2 Pipeline Decommissioning

In accordance with Section 8.2 and other relevant provisions of the PMMP, and with 49 CFR Section 192.727, Neptune LNG will decommission and abandon the pipeline in place.

The pipeline lies in water depths ranging between 260 feet (MLLW) at the South Buoy and 122 feet (MLLW) at the Hot Tap. The last pressure reading obtained from the pipeline was 793 psig. The total length of the pipeline is approximately 13.1 miles and presently contains approximately 12 million standard cubic feet of natural gas.

The pipeline decommissioning includes depressurization of the pipeline by installation of a high pressure hose to a blowdown valve on the PLEM adjacent to the South Buoy location. The hose will be connected to a flare stack positioned on the vessel supporting this operation and the gas in the pipeline will be flared off in federal waters.

Temporary pig launchers and receivers will be installed at each end of the pipeline. Once the pipeline has been depressurized, a poly pig will be launched and propelled using seawater to flood the pipeline. Any remaining gas will continue to be combusted at the surface through the flare stack.

The volume of untreated, filtered seawater required to flood the pipeline is approximately 1.5 million gallons. The intake screen will be sized to ensure the intake velocity does not exceed 0.5 feet per second, will have slots cut and will be placed strategically in the water column to minimize entrainment of sea life in accordance with Section 3.2.3 of the PMMP. The flow rate during the flooding activity will range between 1500 and 3000 gallons per minute.

Later in the decommissioning process, once the PLEMS, Transition Manifold and associated spools have been removed, each end of the pipeline will be plugged, buried and covered with concrete mats.

The anticipated pipeline decommissioning methodology is as follows:

Step	Description	Vessel
1.	Mobilize flaring barge to field and set up at South PLEM location	Barge
2.	Set-up DSV at Transition Manifold Location	DSV
3.	Install temporary pig launcher, with preloaded poly pigs, on Transition Manifold	DSV
4.	DSV relocates to South PLEM	DSV / Barge
5.	Install temporary pig receiver on South PLEM	DSV
6.	Set up flare on barge and connect high pressure hose between flare and pig receiver	DSV / Barge
7.	Perform pipeline depressurization, flaring gas	DSV / Barge
8.	Once pipeline has been depressurized, pipeline flooding will commence. DSV will transition to Transition manifold Location	DSV
9.	A pig will be launched from the Transition manifold Pig launcher and propelled with untreated, filtered seawater towards the South PLEM	DSV / Barge
10.	Flooding of the pipeline is completed once the pig is received at the South PLEM	DSV / Barge
11.	The temporary pig receiver and pig may be removed and recovered from the South PLEM or may remain attached until PLEM is recovered	Barge
12.	The temporary pig launcher may be removed and recovered from the Transition	DSV

	Manifold or may remain attached until the Manifold is recovered	
--	---	--

### 8.3 Risers and Umbilicals

Once the pipeline has been depressurized and flooded, the risers and umbilicals will be disconnected and removed. The contractor will verify that the riser has been depressurized and the umbilical has been disconnected from the buoy and PLEM. The riser will be cut utilizing a hydraulic sheer, or an ROV mounted cutting wheel, recovered to the work vessel and properly disposed of at an appropriate onshore disposal facility.

The anticipated Riser and Umbilical removal methodology is as follows (South Buoy described below; similar activities are performed at the North Buoy):

Step	Description	Vessel
1.	Position DSV to South Buoy Location	DSV
2.	A clump weight will be installed on the Riser near the PLEM cut point	DSV
3.	Hydraulic shears or an ROV cutting tool is deployed to cut the Riser near the bottom of the buoy and near the PLEM	DSV
4.	The cut Riser and disconnected umbilical will be recovered to the vessel	DSV
5.	The vessel will transition to the North Buoy and repeat the steps	DSV

[Remainder of page intentionally left blank]

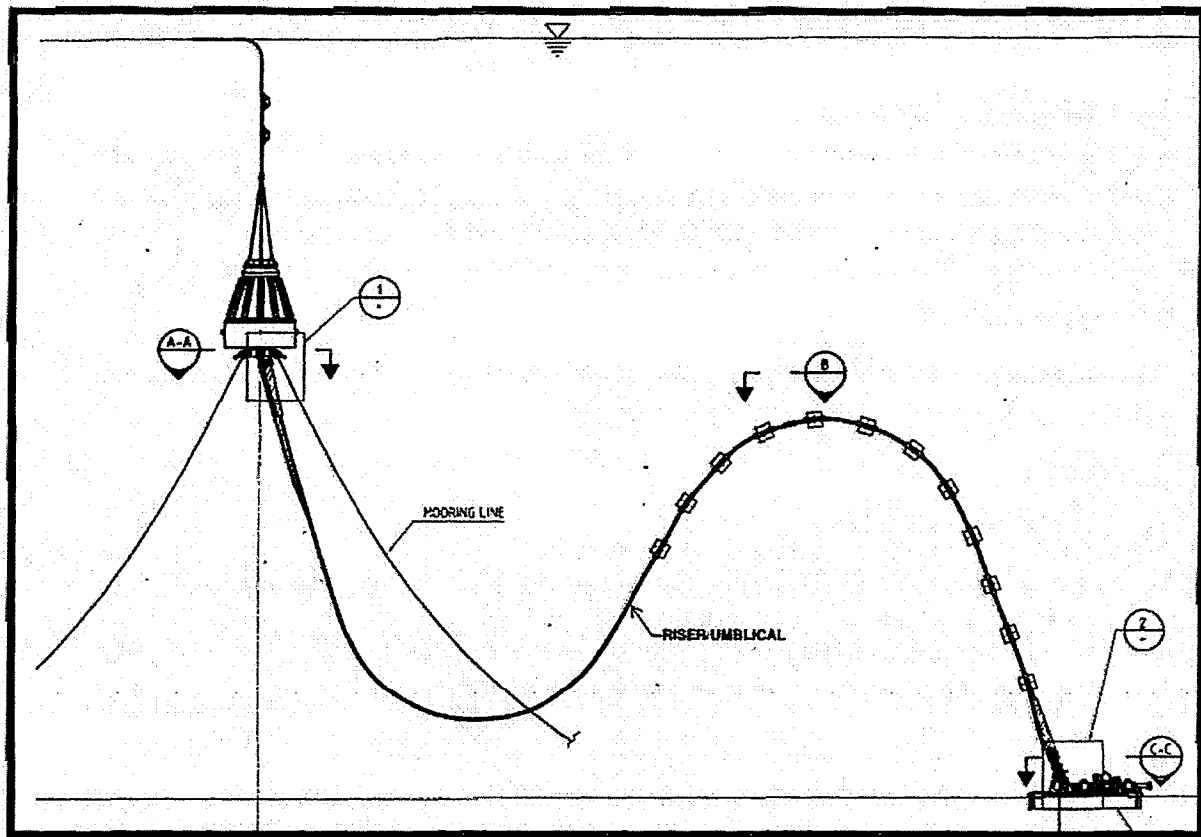


Figure 8-2 – Riser and Umbilical Removal

#### 8.4 STL Buoys

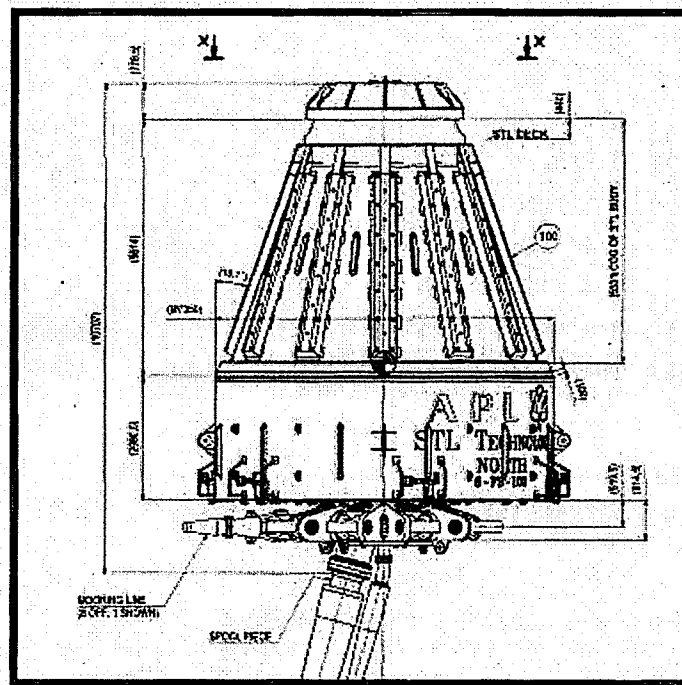
The STL Buoy removal plan involves cutting each of the eight mooring lines that connect the buoy to the piles. A hydraulic shear or ROV mounted cutting tool will be deployed to cut each mooring line close to the buoy, freeing the buoy for retrieval. The Contractor will attach the proper rigging to either lift the buoy onto the work vessel or to tow the buoy to a quayside facility for salvage. The process will be repeated for each buoy.

The buoy locations and physical parameters are as shown in the table below:

	Latitude:	Longitude:	Diameter mm (ft)	Height mm (ft)	Weight Kg (sT)
North Buoy	N 42°29'12.61"	W 70°36'29.77"	7350	10707	161,174
South Buoy	N 42°27'20.70"	W 70°36'07.28"	(24.1)	(35.1)	(177.7)

The anticipated STL Buoy removal methodology is as follows (South Buoy described below; similar activities are performed at the North Buoy):

Step	Description	Vessel
1.	A hold back weight will be deployed and rigged to the Buoy to stabilize the buoy prior to cutting of mooring lines	DSV
2.	The vessel crane or a tow line will be attached to the buoy	DSV
3.	Hydraulic shears or an ROV cutting tool will be deployed to cut each of the eight mooring lines near the buoy	DSV
4.	The Buoy will either be recovered to the vessel or towed to a dockside facility	DSV
5.	The vessel will transition to the North Buoy and repeat the steps	DSV



### Figure 8-3 – STL Buoy

## 8.5 Suction Piles

A review of the engineering challenges and environmental impacts associated with the reverse installation methodology for the removal and recovery of the suction piles was conducted. The purpose of the review was to determine the most environmentally responsible and safest manner to decommission the suction piles considering several factors which include minimizing environmental impacts, personnel safety and long term post port uses.

Based on the review, Neptune LNG plans to abandon the suction piles in place and to cover the suction piles with trawl protectors.

Pile No	Position (US)		Height (m)	Dia. (m)	Weight (Te)	Penetration Depth (m)	Volume (gal)	Protrusion above Seafloor (m)
	E (ft)	N (ft)						
N1	1206666.98	15439222	16.4	5	64.3	15.8	85,066	0.6
N2	1209438.72	15439501	14.7	5	59.4	14	76,248	0.7
N3	1209405.85	15436713	16.7	5	64.8	15.7	86,622	1
N4	1208735.54	15434845	16.5	5	64.3	15.9	85,584	0.6
N5	1206862.25	15434697	12.1	11	112.8	11.5	303,769	0.6
N6	1205669.5	15435390	16	5	62.9	15.4	82,991	0.6
N7	1205138.6	15436531	16.1	5	63.1	15.2	83,510	0.9
N8	1205343.98	15437951	10.9	5	47.9	10	56,537	0.9
S1	1208432.49	15427870	13.9	9	101.7	13.2	233,600	0.7
S2	1210231.6	15426980	18.3	5	69.5	17.2	94,921	1.1
S3	1210868.51	15425063	17.9	5	68.4	17.1	92,846	0.8
S4	1210012.47	15423210	13.2	9	98.5	12.4	221,836	0.8
S5	1208103.78	15423116	13.1	9	97.9	12.35	220,155	0.75
S6	1207005.13	15424169	13.3	9	98.9	12.7	223,516	0.6
S7	1205070.19	15425472	11.5	5	49.9	10.5	59,650	1
S8	1206198.28	15427603	9.8	5	45.3	9.2	50,832	0.6

The anticipated suction pile decommissioning methodology will be as follows (South Buoy described below; similar activities are performed at the North Buoy):

Step	Description	Vessel
1.	The DSV will mobilize to one of the suction pile locations	DSV
2.	Trawl protectors will be transported to the field to rendezvous with the DSV vessel	Barge
3.	The trawl protectors will be lowered to the seafloor and placed over each respective suction pile	DSV
4.	Divers will secure the trawl protectors to the seabed (either gravity based, screw anchors, or similar method)	DSV
5.	The vessels will transition to the North Buoy and repeat the steps	DSV

## 8.6 Mooring Lines - Anchor Chain and Wire Rope

Each anchor chain will be cut as close to the suction pile as practical and recovered.

The wire rope that attached the chain to the buoy will be recovered and properly disposed of.



Neptune LNG Decommissioning Plan  
November 2016

The anticipated anchor chain removal methodology is as follows:

Step	Description	Vessel
1.	The DSV will mobilize to one of the suction pile locations	DSV
2.	Divers or an ROV will cut the anchor chain as close to the suction pile as practical	DSV
3.	The DSV will attach to the end of the chain and recover the chain and wire rope to the vessel or barge	DSV
4.	The vessel will repeat the anchor chain and wire recovery for all remaining suction piles	DSV

This process will be repeated for all 16 mooring lines.

Line	Chain Length (A)	Chain Weight in Air (Te)	Wire Rope length	Wire Rope Weight in Air (Te)
N1	675m	265.1	150m	12.86
N2	1070m	420.3	150m	12.86
N3	675m	265.1	150m	12.86
N4	675m	265.1	150m	12.86
N5	450m	176.7	150m	12.86
N6	375m	147.2	150m	12.86
N7	375m	147.2	150m	12.86
N8	470m	184.5	150m	12.86
S1	675m	265.1	150m	12.86
S2	675m	265.1	150m	12.86
S3	675m	265.1	150m	12.86
S4	690m	270.9	150m	12.86
S5	520m	204.3	150m	12.86
S6	375m	147.2	150m	12.86
S7	845m	331.9	150m	12.86
S8	825m	324.1	150m	12.86

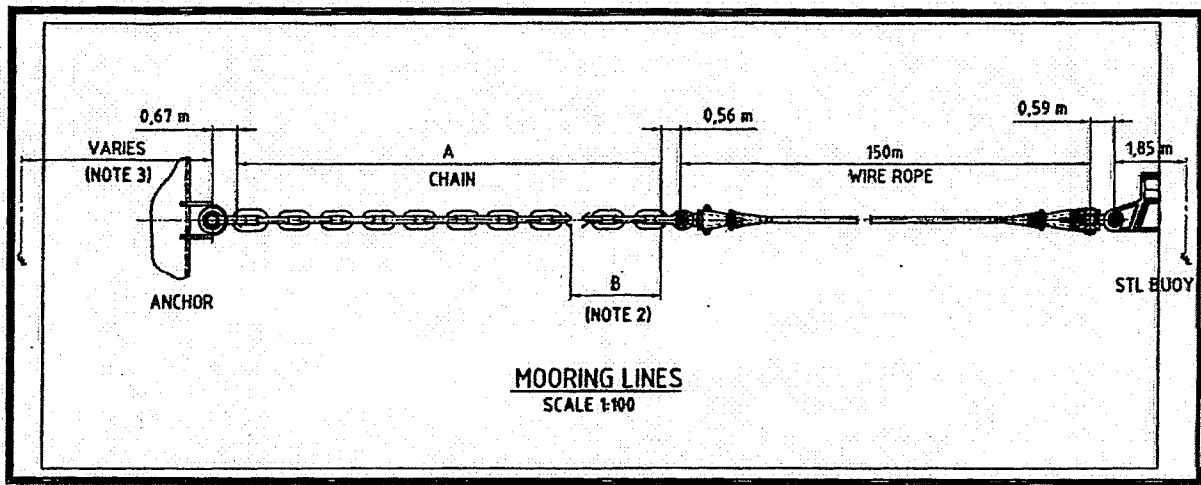


Figure 8-4 - Mooring Line Detail

### 8.7 PLEMS / Transition Manifold

The DWP consists of three manifolds, South PLEM, North PLEM and the Transition Manifold with a protection cover.

The details of each manifold and associated spools that will be removed and recovered are provided in the table and figures below:

Details	North PLEM	South PLEM	Transition Manifold	
			Roof Structure	Transition Manifold
Length (m)	12	12	12.5	8.5
Width (m)	12	12	12.5	8
Height (m)	4.3	4.7	3.5	3
Weight (Kg)	91200	120100	45000	31000

Note: The PLEMs, Transition Manifold and associated spools will only be removed once the pipeline has been flooded and the riser/umbilical has been detached.

#### 8.7.1 South PLEM and Tie-In Spools

The South PLEM and tie-in spools will be removed, recovered and properly disposed of once the two tie-in spools have been disconnected. The end of the pipeline will be plugged and covered with concrete mats.

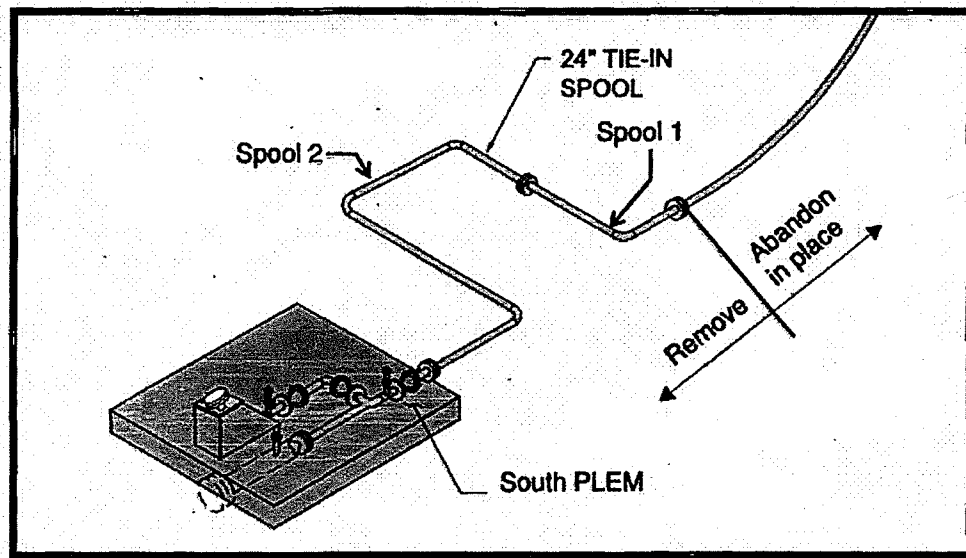


Figure 8-5 - South PLEM and Tie-in Spools

The anticipated South PLEM removal methodology will be as follows:

Step	Description	Vessel
1.	The DSV will mobilize to the South PLEM location	DSV
2.	Divers will disconnect spools 1 and 2 and recover spools	DSV
3.	Divers will plug the end of the 24" pipeline and cover with mats	DSV
4.	Divers or the ROV will attach rigging to the South PLEM and the vessel will recover the PLEM	DSV

#### 8.7.2 North PLEM and Tie-In Spool

The North PLEM and tie-in spool will be disconnected from the pipeline removed, recovered and properly disposed of. The end of the pipeline will be plugged and covered with concrete mats.

[Remainder of page intentionally left blank]

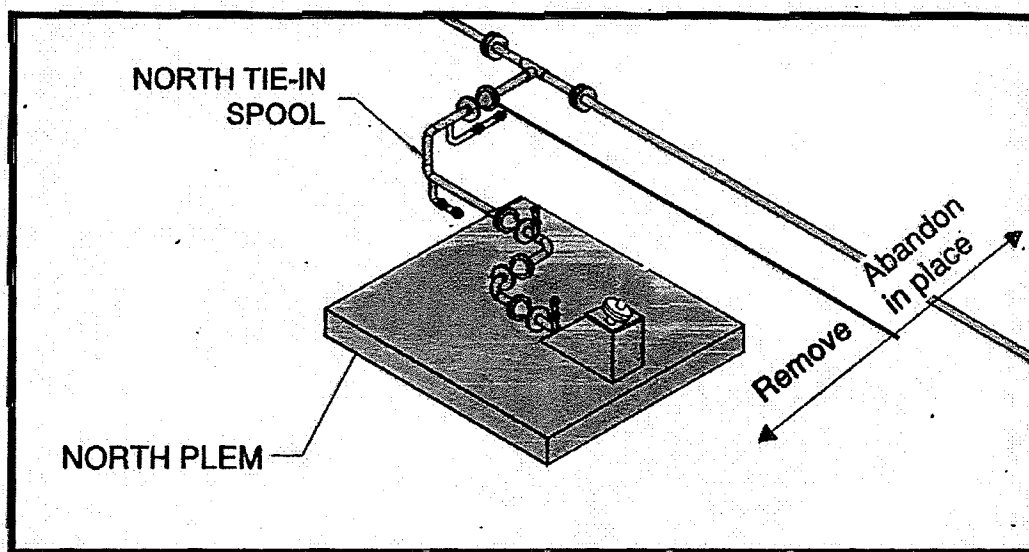


Figure 8-6 - North PLEM and Tie-in Spool

The anticipated North PLEM removal methodology is as follows:

Step	Description	Vessel
1.	The DSV will mobilize to the North PLEM location	DSV
2.	Divers will disconnect the North Tie-in spool and recover spool	DSV
3.	Divers will plug the "Tee" end of the 24" pipeline and cover with mats	DSV
4.	Divers or the ROV will attach rigging to the North PLEM and the vessel will recover the PLEM	DSV

### 8.7.3 Transition Manifold and Tie-In Spools

The components that will be removed in conjunction with the Transition Manifold include the 24" Tie-in Spool, the 16" Tie-in Spool and the Protection Cover as shown in Figure 8-7 below. The Transition Manifold, Protection Cover, Hazard Buoy and tie-in spools will be recovered and properly disposed of. The hazard buoy marking the location of the transition manifold will also be recovered.

Once disconnected, the end of the pipeline will be plugged and covered with concrete mats.

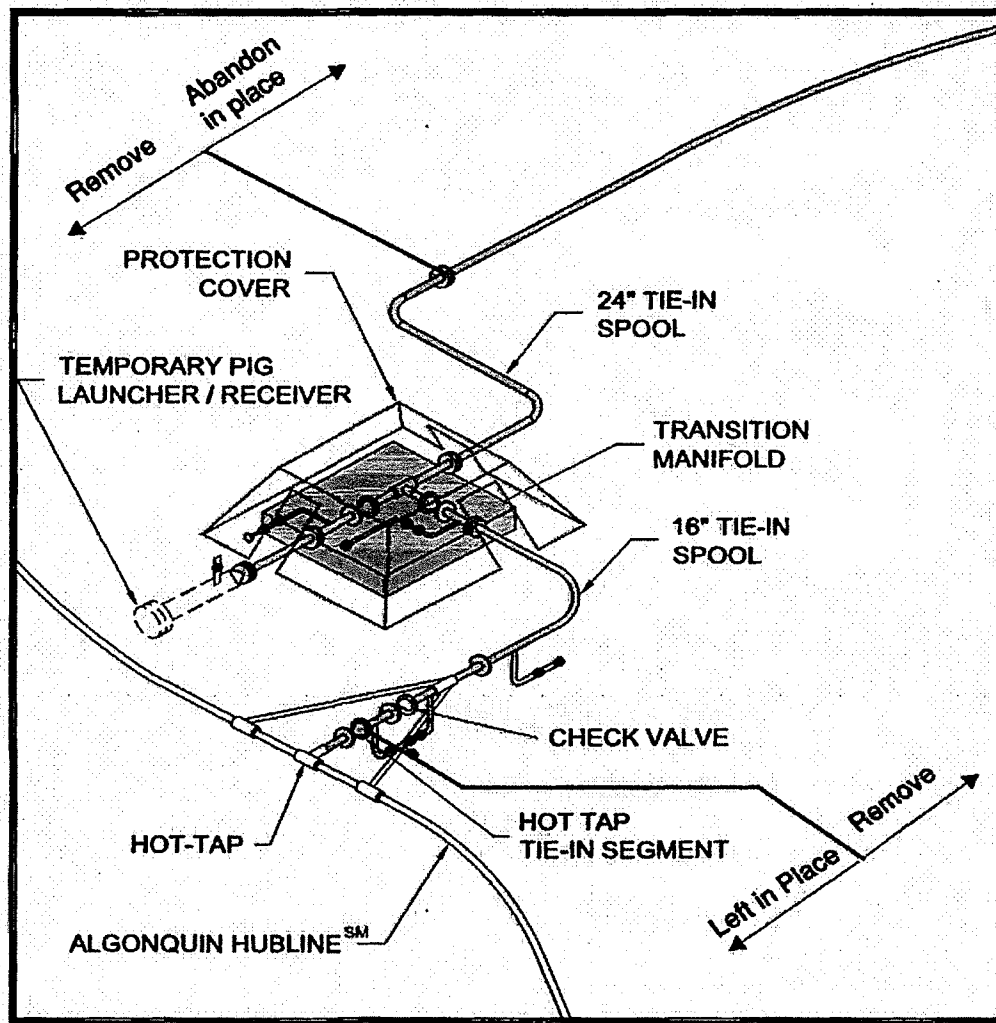


Figure 8-7 - Transition Manifold

The anticipated Transition Manifold removal methodology will be as follows:

Step	Description	Vessel
1.	The DSV will mobilize to the Transition Manifold location	DSV
2.	Divers to remove and recover access doors/panels on the Protective Cover	DSV
3.	Divers will disconnect the 24" Tie-in spool and recover spools	DSV
4.	Divers will plug the end of the 24" pipeline and cover with mats	DSV
5.	Divers or the ROV will attach rigging to the Protective Cover and the vessel will recover the cover	DSV
6.	Divers or the ROV will attach rigging to the Transition Manifold and recover the manifold	DSV

## 8.8 Seafloor Position Transponders

The two Transponders, one located at each buoy position, will be recovered and properly disposed of onshore.

### **8.9 As Left Survey**

Once all of the activities defined in the plan have been completed, an "As Left Survey" of the seabed will be performed to confirm that there is no debris associated with the DWP left behind.

A final drawing of the survey will be prepared illustrating the final contours and seabed elevation in the area where each component was removed.

## **9. Final Documentation**

The As Left Survey and any required reports will be submitted to all required agencies along with any required notifications that decommissioning is complete will be made.

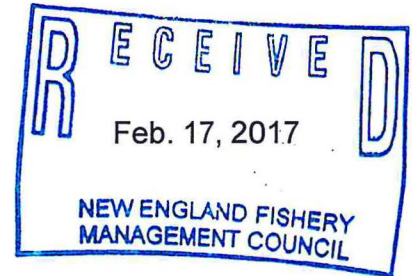
Submitted this 1<sup>st</sup> day of December, 2016





UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
GREATER ATLANTIC REGIONAL FISHERIES OFFICE  
55 Great Republic Drive  
Gloucester, MA 01930-2276

FEB 17 2017



Michelle Morin  
Chief, Environment Branch for Renewable Energy  
Bureau of Ocean Energy Management  
Environmental Branch for Renewable Energy  
45600 Woodland Road, VAM-OREP  
Sterling, Virginia 20166

**Re: Bay State Wind Offshore Wind Farm Project Site Assessment Plan, Lease OCS-A 0500, Massachusetts Wind Energy Area**

Dear Ms. Morin:

We have reviewed the Bay State Wind Site Assessment Plan (SAP) for Lease OCS-A 0500 offshore Massachusetts. Bay State Wind (BSW) plans to install and operate two floating light and detection ranging buoys (FLIDARs) and one metocean/current buoy (collectively referred to as met buoys) to be located within Lease OCS-A 0500 within the Massachusetts Wind Energy Area (WEA). The stated purpose for the met buoys is to collect wind resource and metocean data to support development of offshore wind energy within the lease area. The location of the proposed met buoys would fall within three (328 feet (ft) by 328 ft) sites with a mean low water depth ranging from 135.5 ft to 180.4 ft. The FLIDAR buoys would be attached to the seafloor by means of a u-mooring design comprised of a chain that connects the buoy to primary and secondary clump weights, at 5.5 tons and 2.5 tons, respectively, and a pendant buoy. The clump weights would sit on the seabed for a total area of 42 square feet (ft<sup>2</sup>). Anchor chain sweep associated with long-term operation of the FLIDAR buoys is expected to be approximately 22.7 acres, based on anchor chain radii of approximately 513.8 ft and 226.4 ft on the seafloor. The mooring design for the metocean/current buoy, referred to as TRIAXYS buoy, would consist of a 49 ft rubber cord which would run from the buoy to a polyethylene line attached to two floats located at one-half the water depth. The floats would be attached via polyethylene line to at 0.4 ton chain that will rest on the seafloor in an area of approximately 16 ft<sup>2</sup>. No anchor sweep is anticipated from operation of the TRIAXYS buoy. The SAP addresses the installation, operation, and decommissioning of the met buoys.

#### **Essential Fish Habitat**

The project area has been designated as essential fish habitat (EFH) for over 35 federally managed species, including red hake (*Urophycis chuss*), Atlantic cod (*Gadus morhua*), haddock (*Melanogrammus aeglefinus*), winter flounder (*Pseudopleuronectes americanus*), yellowtail flounder (*Pleuronectes ferruginea*) windowpane flounder (*Scophthalmus aquosus*), monkfish (*Lophius americanus*), bluefish (*Pomatomus saltatrix*), summer flounder (*Paralichthys dentatus*), scup (*Stenotomus chrysops*), black sea bass (*Centropristis striata*), and ocean quahog



mb 2/17/17



(*Artica islandica*). The project area does not overlap with any designated habitat areas of particular concern (HAPCs).

Information provided in the SAP and the Geophysical Site Investigation Environmental Field Report indicated the sediment type to be impacted by the met buoys include medium-coarse sand, fine sand, and shell hash. The installation areas were relatively flat with notable trawl scars. According to the SAP, the location selected for installation of the met buoys provides habitat for annelids, arthropods, echinoderms, cnidarians, and molluscs. The project site does not include any seagrass, hard bottom, or unique sensitive habitats.

Installation, operation, and decommissioning of the met buoys may have adverse impacts on EFH. The benthic habitat and associated organisms may be directly impacted by the footprint and weight of the buoy anchor systems and support vessel anchoring. Some scouring of the sea floor may also occur from sweeping of the anchor system during operation. Direct impacts from all three met buoys are expected to be approximately 45 acres. Indirect impacts from changes in water quality, largely from turbidity and suspended sediments, are expected to occur from construction and from anchor sweep through long-term operation. Other impacts to EFH may include physical habitat modification, reduced prey availability, and elevated noise levels. Given the fact that sensitive habitats have been avoided and the project effects would be short-term, temporary, and localized, impacts to EFH are expected to be minimal. As a result, we have no EFH conservation recommendations to provide at this time.

### **Commercial and Recreational Fishing**

The project area and the locations of the met buoys are within areas of moderate commercial and recreational fishing activity. This area is open to a variety of mobile gear (i.e., otter-trawl, mid-water trawl, purse sein, dredge, rod and reel) and fixed gear (i.e., gillnets, lobster traps, fish traps) fishing vessels, which target several different species. Due to the small area in which the met buoys will affect, and the temporary impacts associated with their installation, it is not likely to adversely impact commercial or recreational fishing, the total catch of fish and shellfish, or navigation over any substantial period. The installation and operation of the met buoys may cause some vessels that fish this area to be displaced; however, any displacement is expected to be temporary and result in negligible impacts to fishing. The project does occur within the Southern New England Scallop Dredge Exemption Area, which may displace limited access scallop vessels fishing within the location of the three met buoys. The delineated project boundary does not overlap within any habitat protection areas, Atlantic cod spawning areas or exempted fishing areas, where fishing activity may be more restrictive. Therefore, impacts to commercial and recreational fishing activities associated with installation and operation of the proposed met buoys are expected to be minimal.

### **Endangered Species Act**

We issued a programmatic Biological Opinion to your agency on April 10, 2013 that analyzed the effects of site assessment activities to be carried out in the Massachusetts, Rhode Island, New Jersey and New York WEAs. This Opinion considered the effects to listed species associated with reasonably foreseeable site characterization scenarios associated with leasing (including

geophysical, geotechnical, archeological and biological surveys), and for the RI/MA and MA WEAs site assessment activities (including the installation, operation and decommissioning of meteorological towers and buoys).

The programmatic consultation established a procedure for reviewing future actions to determine if they were consistent with the scope of the 2013 Opinion. We are currently waiting for a determination from your office regarding consistency between the SAP and the Opinion. Once we receive that determination, we will coordinate with our Office of Protected Resources to make determinations under the Marine Mammal Protection Act and Endangered Species Act as appropriate.

### **Agency Coordination**

We appreciate your coordination with us throughout the offshore wind leasing process. We understand additional site characterization surveys will be conducted for development of the Construction and Operation Plan. We recommend that you continue to coordinate with us in the development of these surveys to ensure impacts to sensitive habitats be avoided and minimized throughout the process. We look forward to the opportunity to review and comment on applicable surveys to ensure our concerns and information needs are addressed early in the process. Our staff is committed to full coordination on surveys, monitoring plans, and other material associated with this and other offshore wind projects moving forward. Should you have any questions about this matter, please contact Sue Tuxbury at 978-281-9176 or by email at [susan.tuxbury@noaa.gov](mailto:susan.tuxbury@noaa.gov). If you have any questions regarding this ESA coordination, please contact Julie Crocker at (978) 282-8480 or [Julie.Crocker@Noaa.gov](mailto:Julie.Crocker@Noaa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read 'Louis A. Chiarella', with a long horizontal flourish extending to the right.

Louis A. Chiarella  
Assistant Regional Administrator  
for Habitat Conservation

cc: Brian Hooker, BOEM  
Julie Crocker, NMFS PRD  
Mike Pentony, NMFS SFD  
Thomas Nies, NEFMC  
Christopher Moore, MAFMC  
Lisa Havel, ASMFC



PAUL R. LEPAGE  
GOVERNOR

STATE OF MAINE  
DEPARTMENT OF MARINE RESOURCES  
21 STATE HOUSE STATION  
AUGUSTA, MAINE  
04333-0021

PATRICK C. KELIHER  
COMMISSIONER

Mr. Thomas A. Nies  
Executive Director  
New England Fishery Management Council  
50 Water Street  
Newburyport, MA 01950

February 9, 2017



Dear Tom.

I am responding to your letter dated February 8, 2017 concerning the possibility of scheduling a workshop with Maine lobster industry members about the proposed Outer Schoodic Ridge and Mt. Desert Rock coral management areas with the goal to modify the areas so that they conserve sensitive coral habitats while minimizing impacts to local fisheries.

As you are aware the Maine Department of Marine Resources (DMR) and the Maine lobster fishery have provided considerable fishing effort, Atlantic large whale co-occurrence and socio-economic data to the Council, and twice requested that lobster gear be totally exempted from the two proposed coral management areas. This position has not changed.

Modifying the proposed areas will not mediate the significant socio-economic impacts or address unknown consequences to Maine's pro-active large whale take reduction efforts. While I greatly appreciate your offer to assist in outreach to Maine lobstermen, DMR recently met with the Lobster Advisory Council to begin educating fishermen and the Maine Lobstermen's Association has begun engaging with its board. DMR plans to host an informational seminar at the Maine Fishermen's Forum and will schedule multiple industry meetings later in the spring before the Council's public hearings.

Thank you for reaching out, and I hope to see you and your staff at the upcoming Fishermens Forum.

Sincerely,

Terry Stockwell  
Director of External Affairs

Cc: Patrick Keliher

mbc 2/10/17



New England Fishery Management Council

50 WATER STREET | NEWBURYPORT, MASSACHUSETTS 01950 | PHONE 978 465 0492 | FAX 978 465 3116  
John F. Quinn, J.D., Ph.D., *Chairman* | Thomas A. Nies, *Executive Director*

February 8, 2017

Mr. E.F. "Terry" Stockwell  
Director of External Affairs  
Maine Department of Marine Resources  
21 State House Station  
Augusta, ME 04333-0021

Dear Terry:

As you are aware, the Council is currently developing a Deep-Sea Coral Amendment. Two of the coral management areas under consideration are in eastern Maine, specifically Outer Schoodic Ridge and southwest of Mt. Desert Rock. Based upon the effort data we have examined to date, recent landings in and around these two areas are almost entirely comprised of trap-caught lobster, although it is possible that other fisheries overlapped the areas historically. We hope to fully engage lobstermen operating in and around these areas as we refine the proposals in the amendment and proceed towards final Council action later this year.

To this end, we are considering whether a workshop with industry members would be a productive way to gather their feedback about these two areas. During the workshop, Council staff would present data about the coral management areas, and lobstermen would provide information about their fishing practices in and around the sites. The goal would be to modify the management areas so that they conserve sensitive coral habitats while minimizing impacts to local fisheries.

Please let me know if you think we should pursue this approach further, or if you have alternate suggestions for outreach to the Area 1 lobster fishery. As always, my staff is happy to answer questions from lobstermen or other Maine fishermen. Please have them contact Michelle Bachman at 978-465-0492 x 120, or [mbachman@nefmc.org](mailto:mbachman@nefmc.org).

Sincerely,

Thomas A. Nies  
Executive Director





**From:** Michael Pierdinock [<mailto:cpfcharters@yahoo.com>] **Sent:**

Tuesday, January 31, 2017 6:13 PM

**To:** Benjamin Cowie-Haskell

**Cc:** John Armor - NOAA Federal; [russelldunn@noaa.gov](mailto:russelldunn@noaa.gov); David Pierce; John Bullard; Tom Nies; Barry Gibson; Dave Waldrup; Jim Donofrio; John Depersenaire; Melanie Griffin; Peterson George (FWE); King MaryLee (FWE)

**Subject:** SBNMS Advisory Council - Recent Recreational/Charter Boat Appointment

Ben:

Consistent with our recent telephone conversation, Captain Tim Brady of the Stellwagen Bank Charter Boat Association (SBCBA) was not appointed to the Primary Recreational/Charter Boat Seat to the SBNMS SAC. This is the first time that the primary seat has not been held by a representative of the SBCBA and/or the individual recommended by the SBCBA. This is disappointing and hard to believe that the SBCBA that consist of charter boat captains and/or the for hire fleet and recreational anglers that are the primary stakeholders utilizing the Sanctuary and relying on such to make a living will not have a voting seat at the SAC.

This decision sends the wrong message and is consistent with a long term history of attempting to deny us access to the fishery (SERA I, II, DHRA, MPAs, ect) and not working with or caring to work with the SBCBA and those they represent. I thought that the recent National Sanctuary Recreational Summit that I attended was a step in the right direction going down the right road to work together with recreational and charter boat stakeholders. This does not appear to be the case and does not sit well with me or the SBCBA or reassurances that you made to me personally at the Summit concerning working together in the future. .

Needless to say I am disappointed in the recent turn or events and it is apparent that Sanctuary does not care to have are representative of the SBCBA as a voting SAC member representing the primary stakeholders of the sanctuary that rely on such to make a living. This is inconsistent with the Mission of the SAC.

I have cc'd David Waldrup who is the President of the SBCBA on this email who will respond accordingly.

If you have any questions, feel free to email or give me a call.

**Capt. Mike Pierdinock**

**CPF Charters "Perseverance" - New Bedford**

Recreational Fishing Alliance - Massachusetts Chairman

Stellwagen Bank Charter Boat Association - Board of Directors

Masachusetts Marine Fisheries Advisory Commission - Commissioner

ICCAT Advisory Committee

NMFS - Atlantic Highly Migratory Species Advisory Panel

New England Fishery Management Council - Recreational Advisory Panel

(617) 291-8914

mb 2/8/17



February 8, 2017

NOAA Office of National Marine Sanctuaries  
1305 East-West Highway, 11<sup>th</sup> Floor  
Silver Spring MD 20910

Attention: John Armor, Director

Re: Proposal to establish a marine sanctuary in Hudson Canyon

Dear Mr. Armor,

The American Bluefin Tuna Association (<http://www.theabta.com>) represents U.S. East Coast handgear fishermen who fish for Atlantic *bluefin*, *bigeye*, *yellowfin*, *skipjack* and *albacore* tunas. In addition, ABTA is concerned with other pelagic species targeted by our fishermen including *swordfish*, *wahoo* and *dolphinfish*. In 2015, 3,129 vessels were issued Federal commercial tunas fishing permits, 3,596 vessels were issued Charter/Headboat tunas permits and 20,157 vessels were issued Recreational tunas permits. ABTA represents all these participants and is active in the domestic and international management of the aforementioned fish stocks.

#### Our Fishing Methods

ABTA is committed to maintaining sustainable fishing methods and to the health of its fish stocks. All our fishermen – whether recreational, charter/headboat or commercial – fish using handgear (rod and reel, harpoon, greenstick or handline), catching one fish at a time, in accordance with Federal regulations. Bycatch in our fisheries is negligible.

#### Our Commercial Fisheries

Today, commercial fisheries worldwide are classified as industrial, semi-industrial or artisanal (small-scale). ABTA's commercial fisheries are artisanal fisheries, as they meet the definition of this term as established by the U.N. Food and Agricultural Organization (UN FAO) as well as the

American Bluefin Tuna Association P.O. Box 854 Norwell MA 02061

mb 2/15/17

definition established by the International Commission for the Conservation of Atlantic Tunas (ICCAT). This artisanal fishery is comprised of vessels approximately 35-45 ft in length.

### Our Atlantic Bluefin Tuna Fisheries

ABTA's bluefin tuna fisheries – recreational, commercial and charter/headboat - are the most highly regulated tuna fisheries in the world. *Atlantic* bluefin tuna is, by far, the healthiest stock of the three separate bluefin stocks found worldwide. The relative health of a fish stock is usually expressed by comparing the present size of spawning stock biomass (SSB) to the size of virgin SSB (prior to when the fish stock was first commercially exploited) or as compared with the earliest measurement of SSB. In the case of Atlantic bluefin tuna, the baseline year was 1970. As of 2014, West Atlantic bluefin tuna SSB was determined to be at 55% of what it was in 1970,<sup>1</sup> whereas present Pacific bluefin tuna SSB has been measured to be at 2.6% of virgin SSB<sup>2</sup> and Southern bluefin tuna SSB is presently at 2.7-7% of virgin SSB.<sup>3</sup>

### Our Fisheries in General

Our method of fishing for all the aforementioned species exclusively utilizes “surface” and “sub-surface” fishing gear. Our fishing gear does not come into contact with the sea bottom. Why is this? It is because the fish stocks we target preferentially inhabit the upper part of the water column, not the sea bottom. Therefore, our fishing gear is incapable of damaging important sea bottom attributes such as deep sea coral.

Fishing quota and fishing specifications for all of our fisheries are set annually and strictly maintained by the Highly Migratory Species (HMS) Management Division of the National Oceanic and Atmospheric Administration (NOAA).

Our Atlantic bluefin tuna fishery is, for the most part, a single-species fishery (meaning, fishermen most often target a *single* species when they are targeting bluefin tuna) and this fishery has been in existence for at least half a century. This fishery is located in temperate waters on the East Coast. In the case of Hudson Canyon, bluefin tuna have been known to cross this area in late fall/early winter during their southerly migration.

Our tropical tunas fishery is a multi-species fishery in which our fishermen opportunistically target bigeye, yellowfin, albacore or skipjack tunas as well as dolphinfish, wahoo and swordfish. Our recreational fishermen also target marlin and sailfish. The “tropical tunas” fishery on the U.S. East Coast is active from late spring to fall and is primarily located at the edge of the

---

<sup>1</sup> ICCAT Report 2014-2015 (II), Executive Summary BFTW, 8.5 Atlantic Bluefin Tuna (2014), Standing Committee on

<sup>2</sup> ISC Pacific Bluefin Tuna Working Group, Pacific Bluefin Tuna Stock Assessment 2016, International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean, Japan (2016), P. 10

<sup>3</sup> Report of the Nineteenth Meeting of the Scientific Committee, Commission for the Conservation of Southern Bluefin Tuna, Auckland (2014)



Continental Shelf, in the Canyons Region as well as offshore Florida, Georgia and South Carolina.

Overwhelmingly, landings of highly migratory pelagic species that are caught by our fishermen in Hudson Canyon are dominated by the tropical tunas. Bluefin tuna landings from Hudson Canyon represent a very small percentage of overall landings of pelagic species.

#### The Canyons Region – Hudson Canyon

The Canyons Region is approximately 800 miles long, stretching from offshore North Carolina to offshore Massachusetts and is comprised of over 70 named canyons. Of these canyons, Hudson Canyon is the largest. The importance of Hudson Canyon to our fishermen cannot be overstated.

#### What fishing methods are presently active in Hudson Canyon?

Not all fishing gear types are the same. Certainly, not all commercial fishing gear types are the same. We have noted that recently established marine protected areas, specifically the Pacific Remote Islands Marine Monument and the Atlantic Marine Monument, contain a prohibition on commercial fishing while allowing recreational fishing. This is a dangerous trend for our commercial fishermen. All our fishermen, whether commercial, recreational or charter/headboat, use the same handgear fishing methods: surface and sub-surface fishing gear that does not come into contact with sea bottom and therefore has no negative impact on the marine environment.

ABTA would urge any organization that intends to develop a proposal for a marine sanctuary to investigate the different types of fishing gear in use in the area under study in order to determine the environmental impact of each gear-type. We feel that this is the only fair way to compare the impact of stakeholder use on the marine ecosystem under study. It is simply untenable that restrictions would apply to stakeholders who are using fishing gear that has no negative impact on the environment.

#### Pelagic fish stocks in Hudson Canyon are closely managed

All the fish stocks our fishermen target in Hudson Canyon are pelagic fish stocks. The U.S. is a signatory to an international treaty that regulates pelagic fish stocks in the Atlantic Ocean and adjacent seas. ICCAT is the international organization that is authorized to manage these fish stocks. ICCAT, through its scientific arm, the Standing Committee on Research and Statistics (SCRS), regularly conducts stock assessments for all species under ICCAT management.

Domestic management and enforcement of fishing quotas to maintain the sustainability of ICCAT fish stocks in U.S. waters is the responsibility of the Highly Migratory Species (HMS) Management Division of the National Oceanic and Atmospheric Administration (NOAA). None

American Bluefin Tuna Association P.O. Box 854 Norwell MA 02061

of our fish stocks found in Hudson Canyon have ever been deemed to be threatened with endangerment or endangered. The current status of the pelagic fish stocks targeted by our fishermen in Hudson Canyon is easily found on NOAA's Fishwatch website.

### **A Proposal to Establish a Marine Sanctuary in Hudson Canyon**

A proposal was tendered to NOAA Marine Sanctuaries in November 2016 to establish a marine sanctuary in Hudson Canyon.

The stakeholder community of fishing interests in Hudson Canyon is segmented by the type of fishing gear used. The HMS handgear fishing permits represented by ABTA are, in terms of number of vessels/permits, the largest segment. Clearly, we have a vested interest in any proposal that will positively or negatively affect our fisheries and, in particular, Hudson Canyon. However, ABTA was never contacted by those who are advocating for a marine sanctuary in Hudson Canyon and we know of no other fisherman organizations who were contacted. This proposal was brought to our attention by articles that appeared in the media.

### **Does this proposal adequately represent the community?**

We maintain that, given our stakeholder status in Hudson Canyon, no proposal to establish a marine sanctuary can be considered as representative of "the community" without the active involvement of our fishermen. Indeed, the absence of any attempt on the part of the proponents to engage with our fishermen is worrisome.

The proposal frequently mentions NOAA's Highly Migratory Species (HMS) Management Division, the division responsible for managing fish stocks controlled by ICCAT. ABTA communicates regularly with the HMS Management Division. Therefore, it would have been very easy for the proponents to engage the fishermen in their proposal. However, we have been advised by the HMS Management Division that no presentation has been requested or made on this proposal by the proponents at any of the regular HMS Advisory Panel meetings or at meetings of the ICCAT Advisory Committee and no materials in connection with the proposal have been distributed to our fishermen.

The lack of any attempt to engage with our fishermen can only be considered woefully negligent.

### **Broad Community Support?**

A sanctuary nomination must demonstrate support for the national marine sanctuary concept "from a breadth of community interests". Further, organizations or industries that depend on the resources in a nominated area should also be represented within the nomination.

Certainly, our fishermen, as a primary user group in Hudson Canyon, must be considered an integral part of the “breadth of community interests”. Therefore, we maintain that the proposal fails to meet this important criteria.

#### Purpose and need for a marine sanctuary in Hudson Canyon – Oil and Gas Exploration

The proponents’ argument in favor of establishing a marine sanctuary in Hudson Canyon holds that sanctuary status would facilitate a permanent prohibition on oil and gas exploration in this canyon. We are mindful that this proposal was tendered to NOAA in November 2016. However, on December 19, 2016, the Obama Administration, under the Outer Continental Shelf Lands Act, has prohibited oil and gas exploration in the Canyons Region from offshore Virginia to offshore Massachusetts, protecting nearly 4 million acres. This action includes protections for Hudson Canyon.

This Act has been used to safeguard Alaska’s Bristol Bay in 2014 and again in 2015 to protect part of Alaska’s Arctic coast. A fact sheet issued by the White House stated that the Obama Administration, under this Act, has protected 125 million acres during this period.

Consequently, the Obama Administration has effectively taken the issue of oil and gas exploration in Hudson Canyon “off the table”. Therefore, the sanctuary proposal is no longer validated by the need for these protections.

#### Purpose and need for a marine sanctuary in Hudson Canyon – Protection of deep sea coral

Protection for deep sea coral is mandated by the Magnuson Stevens Fishery Conservation and Management Act (MSA). This mandate has been in existence for several years.

In the present proposal, the proponents have given equal weight to the need for protecting these ecological attributes in Hudson Canyon as they have with the need for a prohibition on oil and gas exploration.

Forward movement on establishing these protections had to wait for NOAA to perform a survey of deep sea coral covering the entire Canyons Region. NOAA has only one vessel designed for deep water exploration, the Okeanos Explorer. Finally, in 2013 and 2014, the Okeanos Explorer conducted surveys of deep sea coral throughout the Canyons Region, including an extensive survey of Hudson Canyon. The primary intention was to determine precisely where and at what depths deep sea coral is found. The data collected by the Okeanos Explorer made it possible for the Mid Atlantic Fishery Management Council (MAFMC) to commence a lengthy regulatory process that has resulted in establishing protections for these important sea bottom attributes, in accordance with MSA. “Discrete” and “broad” protection zones were determined for all the canyons in the southern half of the Canyons Range, including Hudson Canyon, and included identifying specific areas to be protected from damage by “mobile tending bottom gear”. Protections for 38,000 square miles of the Canyons Region were thus established and

this action received accolades from numerous environmental organizations.

On December 15, 2016, approximately one month after the Hudson Canyon sanctuary proposal was tendered to NOAA, the Secretary of Commerce's signature concluded the regulatory process for what is now named the Frank R. Lautenberg Deep Sea Coral Protection Area.

The protections established in this rulemaking process have become a part of the Atlantic Mackerel, Squid and Butterfish Fishery Management Plan (FMP).

Importantly, these protections for deep sea coral have been further enhanced by the inclusion of special "framework provisions" for ease of potential future modifications to deep sea coral protection measures. These "framework provisions" are therefore an important part of the overall plan for protection of deep sea coral in that "frameworkable" provisions provide a "fast track" for specific modifications to the FMP, as compared with "regulatory provisions", which necessitate a process that can take two years or more. In real terms, this provision means that if new data is introduced that identifies not previously known areas where deep sea coral exists, the Council and NMFS can act swiftly to establish necessary protections.

As a result of the aforementioned measures and the extensive protections established, we see no useful purpose in creating a marine sanctuary in Hudson Canyon for the purpose of protecting deep sea coral and other important sea bottom attributes.

#### Purpose and need for a marine sanctuary in Hudson Canyon – Scientific research

The proponents suggest that "a marine sanctuary designation for Hudson Canyon will increase federal investment and leverage state, local and private investment in science research, monitoring, and exploration."

The proponents further state that, "To date, there has been relatively little exploration of coral presence in Hudson Canyon." This is inconsistent with the fact that the Okeanos Explorer extensively surveyed deep sea coral in the Hudson Canyon recently.

The proponents have linked future marine science research in Hudson Canyon with their desire to establish a marine sanctuary in Hudson Canyon. The implication is that establishing a marine sanctuary in Hudson Canyon will facilitate further research but they do not provide a persuasive argument that convincingly demonstrates that future scientific research is significantly dependent upon establishing this marine sanctuary. There are presently no known impediments to conducting scientific research in Hudson Canyon and there are no identified attributes in the marine sanctuary concept that would facilitate or ensure future scientific research. In summary, future scientific research is not conditional upon sanctuary status for Hudson Canyon.

### Purpose and need for a marine sanctuary in Hudson Canyon – Mineral extraction

The proposal mentions that marine sanctuary status for Hudson Canyon will facilitate a ban on mineral extraction. However, this issue is not further developed in the proposal. Elsewhere in the proposal, “mineral extraction” appears to be linked to sand and gravel extraction. While sand and gravel aren’t minerals, we assume that mention of mineral extraction may pertain to sand and gravel extraction. Our fishermen would be the first to oppose sand and gravel mining in Hudson Canyon but, due to its great distance from the shoreline and, equally, due to the tremendous depths in Hudson Canyon, we consider this activity to be economically unfeasible.

In the unlikely event that sand and gravel mining or mineral extraction should become an issue in Hudson Canyon at some indeterminate point in the future, there is a detailed procedure in place, managed by NOAA, that must be followed that intends to determine if this activity is appropriate for Hudson Canyon.

### Purpose and need for a marine sanctuary in Hudson Canyon – Public access

The proposal states, “A National Marine Sanctuary designation of the Hudson Canyon will provide many rich educational opportunities for diverse audiences to enhance their understanding and appreciation..” It goes on to say, “..designating the Hudson Canyon as a Sanctuary would bolster these efforts and help build a local marine ethic.”

Further, the proposal states, “Given its distance from shore, most local residents are unaware and/or unable to experience first-hand the astounding biodiversity of the Canyon and surrounding waters in the New York Bight.”

The head of Hudson Canyon is 90nm from the Verrazano Bridge at the entrance to New York Harbor. Therefore, the potential for the public to have access to Hudson Canyon is extremely limited and creating a marine sanctuary in Hudson Canyon has not been demonstrated to improve public access.

Hudson Canyon exists in open ocean on the edge of the Continental Shelf, where the seastate is typically not the same as it is in inshore areas. Often, the seastate is significantly more perilous than conditions found in coastal areas. Due to the distance from the nearest harbors, U.S. commercial fishing vessels transiting to Hudson Canyon are obligated by the U.S. Coast Guard to carry marine safety equipment that meets the Safety Of Life At Sea (SOLAS) Standard “A”, the highest international standard for marine safety equipment. By comparison, vessels transiting no more than 50 nm from the coast are obligated to carry safety equipment that meets the less stringent SOLAS “B” standard and vessels that operate in state waters are required to meet the lowest U.S. Coast Guard safety standards. Consequently, not all vessels are properly equipped to visit Hudson Canyon and not all mariners have experience in safely piloting vessels in open ocean, far from shore.

Any vessels that access open ocean equivalent in distance from New York to Hudson Canyon would also be required to have special provisions in their marine insurance policies to ensure insurance coverage when travelling to Hudson Canyon. Further, in order to travel safely, vessels that wish to go to Hudson Canyon must have sufficient fuel capacity for the entire trip including a sufficient amount of reserve fuel. Many vessels, both commercial and recreational, do not have adequate fuel capacity to safely transit to Hudson Canyon from the nearest harbors. Importantly, many vessel owners do not know of these necessary provisions.

Due to the foregoing, we would not recommend that anyone other than mariners with extensive experience in piloting vessels in open ocean, with vessels of a certain minimum size and fuel capacity and containing the USCG mandated safety equipment be encouraged to go to Hudson Canyon. Therefore, notwithstanding their desire to “build a local marine ethic” and promote “many rich educational opportunities for diverse audiences”, we would urge the proponents to avoid encouraging the public to visit Hudson Canyon on their own.

Transit time is a very important factor. At 10 knots, a vessel requires 9 hours from the Verrazano Bridge to the head of Hudson Canyon, in good conditions. At 20 knots, a vessel will require 4.5 hours and will result in significantly greater fuel consumption.

Due to the great distance between Hudson Canyon and New York City, New Jersey and Long Island, the potential for tourism such as bird or whale watch vessels is extremely limited. Further, there is no assurance that marine species can be viewed at any given time. Certainly, these conditions would not change if Hudson Canyon were to be given sanctuary status.

The Continental Shelf directly adjacent to Hudson Canyon has a depth range of 250-350 ft. and Hudson Canyon itself has a depth range of approximately 350-3,000 ft. Due to these depths, diving is precluded as a means for exploring Hudson Canyon. According to PADI, recreational diving depth is limited to 18 meters (59 ft.) for divers with open water certification. The depth limit for divers breathing air is 50 meters (160 ft.).

An increase in public awareness of the ecological attributes of Hudson Canyon is certainly desirable but it is not dependent upon the establishment of a marine sanctuary in Hudson Canyon.

#### Purpose and need for a marine sanctuary in Hudson Canyon – Protecting marine species

The proposal states, “The Sanctuary could help inform and protect habitat for about 50 federally managed species whose EFH designations overlap the Hudson Canyon.” However, they do not specify how sanctuary status would improve upon already highly-developed and successful fishery management plans for these species.

In the proposal, the proponents are advocating for a second or additional layer of management of certain attributes of this canyon beyond that which is already in place. As an example, the

proposal envisions a role by sanctuary management in managing the protection of deep sea coral, although adequate protections and enforcement are already in place and managed by NMFS and the MAFMC. In this particular instance, the proposal is advocating for a role in managing 50 marine species. Yet, the proposal does not detail deficiencies in the present management of these marine species and does not discuss the bona fides they possess that will enhance the existing management of these fisheries.

#### Purpose and need for a marine sanctuary in Hudson Canyon – Protecting Essential Fish Habitat

There is much discussion regarding the designation, “Essential Fish Habitat” (EFH) in the proposal. The implication is that Hudson Canyon is an essential fish habitat of greater value to the life cycle of the species that from time to time inhabit this canyon as compared with other canyons in the Canyons Range. This would be incorrect.

The discussion regarding EFH would suggest that the authors are perhaps confusing an EFH that is connected to a regulatory process resulting in the establishment of certain protections, such as fishing prohibitions, as compared with an EFH that is used purely for statistical purposes by NOAA’s Office of Habitat Conservation.

EFH data is regularly updated by NOAA for use by other agencies and by the public. For example, the Bureau of Ocean Energy Management uses EFH data when evaluating a proposal for an offshore wind farm. In such case, EFH designation tells us where a particular marine species may be found within the U.S. Exclusive Economic Zone (EEZ). In the case of highly migratory pelagic species, an EFH designation for a particular species only tells us where a species is known to exist when it is swimming in U.S. waters. The word, “essential” (syn.: crucial, imperative, obligatory, vital or indispensable) in the term EFH may create an undesirable emphasis in this context. No portion of an essential fish habitat for these pelagic species has been given more weight in terms of its importance to the life cycle of that species than any other. In actual fact, in the case of highly migratory pelagic species, it is likely that much of its annual cycle is spent outside of the U.S. EEZ and/or in the EEZ of other nations; hence, the rationale for managing most of these species by international treaty.

There is a commonly-held misconception regarding highly migratory pelagic species that must be addressed: Too often, these species are incorrectly assumed to have lifecycle attributes normally associated with most other species with which we are familiar. They are typically given the attributes of demersal perciformes that inhabit a particular region for their entire lifecycle. Common examples of such species would be sea bass, red snapper, bluefish, halibut, yellowtail snapper, etc. These are “coastal species” or species that are associated with particular bathymetric attributes such as reefs or other oceanic or inshore structure. These species are associated with the sea bottom, whereas highly migratory pelagic species inhabit the water column. Highly migratory pelagic and epipelagic species inhabit the entire pelagic ecosystem of the temperate, sub-tropical and tropical Atlantic, Pacific and Indian Oceans. The foregoing must be taken into account in any discussion regarding EFH for these species.

American Bluefin Tuna Association P.O. Box 854 Norwell MA 02061



An example of an EFH that contains protections would be the EFH that has been established in Norfolk, Lydonia and Oceanographer Canyons in 2009 to protect golden tilefish habitat. Golden tilefish in the U.S. Northeast is a healthy fish stock. This demersal species lives in pueblós (warrens) that it creates in the mud and rock on the sea bottom at depths of approximately 500-900 ft. These aforementioned canyons have been identified as having a particularly high density of pueblós. As a consequence, a separate rulemaking process was undertaken to prohibit “mobile tending bottom trawl” fishing gear, gear that drags a steel plate and a large net along the bottom, from fishing within these canyons.<sup>4</sup>

An example of an EFH that does not contain any prohibitions and is used for statistical purposes would be the EFH designations developed and updated every 5 years for each of the pelagic species found in Hudson Canyon and throughout the Canyons Region. As of today, these EFH designations do not include “findings of significant impact” to the “feeding, breeding, spawning or growth to maturity” of any of these species. An evaluation of fishing or non-fishing impacts for an EFH is conducted every 5 years, when an EFH is reviewed. To date, no regulatory processes have been undertaken that would establish prohibitions or protections for these pelagic species pursuant to an EFH, with the exception of certain spawning areas in the Gulf of Mexico.

A “shape file” is a GIS file that, in this context, identifies the habitat of a species, and this is expressed using geolocation data on a chart of the region. These shape files are updated every 5 years. For example, the EFH for adult bigeye tuna covers the entire Canyons Range (in some areas, to seaward as far as the EEZ), a large offshore area off FL, GA and SC and a large area in the Gulf of Mexico. The EFH for juvenile yellowfin tuna covers an even larger area. The EFH for adult bluefin tuna covers an area that is similar in size to that of adult bigeye tuna, in this case extending to the Canadian border.<sup>5</sup> Therefore, no single area or canyon within the EFH for any of the species targeted by our fishermen in Hudson Canyon carries any more importance – stated or implied – to the life cycle of these species than any other area within the EFH.

Bluefin, yellowfin, albacore and skipjack tuna as well as swordfish, dolphinfish and wahoo, the pelagic species that are targeted by our fishermen in Hudson Canyon, are all highly migratory species and most of them are trans-Atlantic migrants. Science indicates that certain tropical tunas found in Hudson Canyon most likely originate in the Gulf of Guinea, in West Africa or possibly in the Azores, off Spain. The U.S East Coast is not their “home” and their annual life cycle is not spent inhabiting this region. For a primer on population dynamics of the tunas, see:<sup>6 7 8 9 10 11</sup>

---

<sup>4</sup> <http://www.habitat.noaa.gov/media/news/oceancanyoncoralscape.html>

<sup>5</sup> <http://noaa.maps.arcgis.com/apps/webappviewer/index.html?id=4009f7c1195144e89fd6751b02294a0a>

<sup>6</sup> [http://www.iccat.int/Documents/SCRS/Manual/CH2/2\\_1\\_1\\_YFT\\_ENG.pdf](http://www.iccat.int/Documents/SCRS/Manual/CH2/2_1_1_YFT_ENG.pdf)

<sup>7</sup> [http://www.iccat.int/Documents/SCRS/Manual/CH2/2\\_1\\_2\\_BET\\_ENG.pdf](http://www.iccat.int/Documents/SCRS/Manual/CH2/2_1_2_BET_ENG.pdf)

<sup>8</sup> [http://www.iccat.int/Documents/SCRS/Manual/CH2/2\\_1\\_3\\_SKJ\\_ENG.pdf](http://www.iccat.int/Documents/SCRS/Manual/CH2/2_1_3_SKJ_ENG.pdf)

<sup>9</sup> [http://www.iccat.int/Documents/SCRS/Manual/CH2/2\\_1\\_4\\_ALB\\_ENG.pdf](http://www.iccat.int/Documents/SCRS/Manual/CH2/2_1_4_ALB_ENG.pdf)

<sup>10</sup> [http://www.iccat.int/Documents/SCRS/Manual/CH2/2\\_1\\_5\\_BFT\\_ENG.pdf](http://www.iccat.int/Documents/SCRS/Manual/CH2/2_1_5_BFT_ENG.pdf)

<sup>11</sup> [http://www.iccat.int/Documents/SCRS/Manual/CH2/2\\_1\\_9\\_SWO\\_ENG.pdf](http://www.iccat.int/Documents/SCRS/Manual/CH2/2_1_9_SWO_ENG.pdf)

In summary, there is no special significance to be attached to the fact that Hudson Canyon is an EFH for the species under discussion, as this is true of these species in connection with all the canyons in the Canyon Range, equally, as well as many other large areas outside of the Canyons.

#### Purpose and need for a marine sanctuary in Hudson Canyon – Shipwrecks

None of the shipwrecks in Hudson Canyon or in its immediate vicinity are accessible by divers due to the great depth.

#### Purpose and need for a marine sanctuary in Hudson Canyon – Unexploded ordinance

Mention is made in the proposal of the existence of “unexploded ordinance” in Hudson Canyon and the potential dangers this ordinance may represent. This issue is expressed as problem that is specific to Hudson Canyon. However, as any mariner in the Northeast will attest, there is unexploded ordinance found in myriad locations on the U.S. East Coast, throughout the Northeast region.

There may be less concern for unexploded ordinance in Hudson Canyon than elsewhere. The prohibition on use of “mobile tending bottom gear” in the Frank R. Lautenberg Deep Sea Coral Protection Area, specifically within Hudson Canyon, significantly reduces the possibility of interaction between this fishing gear type and unexploded ordinance.

#### **The proposal: Fishing in the proposed marine sanctuary in Hudson Canyon**

The proposal states, “We therefore recommend that fishing should continue in this economically valuable area.”

Elsewhere, the proposal states, “Fishing – *if not well managed* – probably represents the most immediate and direct threat to the living resources and habitats in submarine canyons including Hudson, particularly as demand increases, access to and abundance of coastal resources decline, and deepwater fishing technologies advance.”

This statement begs the question: who would determine if our fish stocks are well managed? Will it be our fishery managers, ICCAT or some other entity? Management of high migratory pelagic fish stocks is quite complex. RFMO management of these stocks adds additional complexity. Stock status is determined by a group of scientific experts from many countries.

It is important to note that all of these fish stocks are more successfully managed in the Atlantic by ICCAT as compared with management of the same fish stocks by the Pacific RFMO's.

Our method of fishing cannot possibly be a “direct threat to the living resources and habitats in

American Bluefin Tuna Association P.O. Box 854 Norwell MA 02061

submarine canyons including Hudson Canyon” for reasons already discussed.

The present domestic demand for our species cannot be met by U.S. fishermen and we do not expect this to change. The U.S is a net importer of most of these fish stocks. Certainly, harvesting capacity in our commercial handgear fisheries is extremely limited and this condition is not expected to change in the foreseeable future.

As regards coastal resources, our commercial HMS fishermen do not participate in the harvesting of coastal resources in Hudson Canyon. The species we harvest are oceanic species that do not preferentially inhabit inshore coastal areas.

We do not use deepwater fishing technologies so any improvements in this technology will not affect our fishing.

#### Summary

For the reasons stated herein, we oppose a sanctuary designation for Hudson Canyon. The main arguments in the proposal in favor of marine sanctuary designation for Hudson Canyon – a prohibition on oil and gas exploration and protections for deep sea coral – have been adequately addressed by presidential order and regulatory action subsequent to the submission of the proposal and are no longer valid considerations, thereby obviating the need for this sanctuary designation. The proponents’ negligence in not soliciting the involvement of the fishing community in this proposal is alone sufficient justification for NOAA to reject this proposal.

Cordially,

David Schalit, Vice President  
American Bluefin Tuna Association

cc: Samuel Rauch, Assistant Administrator for Fisheries (Acting), NOAA  
Alan Risenhoover, Deputy Assistant Administrator for Regulatory Programs (Acting), NOAA  
Margo Schulz-Haugen, Chief – Highly Migratory Species Management Division, NOAA

American Bluefin Tuna Association P.O. Box 854 Norwell MA 02061