UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
NORTHEAST REGION
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Gloucester, MA 01930-2276

John R. Kennelly
Chief of Planning
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U.S. Army Corps of Engineers, New England District
696 Virginia Road
Concord, Massachusetts 01742-2751

AUG 21 2013

Re: Searsport Harbor Navigation Improvement Project

Dear Mr. Kennelly:

We have received your letter, dated August 9, 2013, in response to our Essential Fish Habitat (EFH) conservation recommendations for the Searsport Harbor Navigation Improvement Project. The proposed project is located in the Penobscot Bay near Searsport, Maine, and involves improvement dredging of approximately 892,000 cubic yards (cy) and maintenance dredging of approximately 37,100 cy.

As you know, the Magnuson-Stevens Fishery Conservation and Management Act (MSA) require federal agencies to consult with one another on projects such as this. Insofar as a project involves EFH, as this project does, this process is guided by the requirements of our EFH regulations at 50 CFR 600.905, which mandates the preparation of an EFH assessment and generally outlines each agency's obligations in this consultation procedure. In addition, these regulations require us to provide comments and EFH conservation recommendations to Federal or state agencies on actions that affect EFH. Such recommendations may include measures to avoid, minimize, mitigate, or otherwise offset adverse effects on EFH resulting from actions or proposed actions authorized, funded, or undertaken by that agency. Pursuant to the MSA and EFH regulations, we provided EFH conservation recommendations for the proposed project to you in a letter, dated May 6, 2013.

According to your response letter on August 9, 2013, you intend to accept conservation recommendation #2 (i.e., to the extent practicable, avoid dredging areas deeper than the authorized depth but shallower than the overdepth), and at least part of conservation recommendation #3 (i.e., conduct pre- and post-construction eelgrass surveys along the western shore of Sears Island and in Long Cove). However, it is unclear if you are accepting the second part of recommendation #3 (i.e., a compensatory mitigation plan should be developed, if the post-construction monitoring identifies impacts to eelgrass beds from the dredging project). Your letter also indicated you do not intend to accept conservation recommendation #1 (i.e., March 15 to July 15 time-of-year window to protect winter flounder spawning and egg development habitat, and windowpane and Atlantic herring larval and juvenile development habitat), or conservation recommendation #4 (i.e., develop a plan to avoid and minimize shallow water habitat impacts from the proposed dredging and side-slopes).

Unfortunately, we continue to have significant concerns regarding the proposed project's impacts on our trust resources. The information provided in your August 9, 2013 letter, as well as personal communications with your staff indicated the amount of impact to shallow water habitat from the proposed improvement dredging would be much greater than our understanding based upon the information contained within the Environmental Assessment (EA), dated December 2012. Furthermore, because this new information was not available during the EFH consultation, and because the new information would affect the basis of our EFH conservation recommendation, we are reinitiating a distinct EFH consultation for the proposed project, pursuant to 50 CFR 600.920(l), and providing additional conservation recommendations.

As you know, our letter dated March 29, 2013, requested that you extend the consultation process pursuant to 50 CFR 600.920(i)(5) so that you may provide us with additional information to complete the EFH assessment and allow us to develop EFH conservation recommendations, as necessary. As part of this request for additional information, we requested an assessment of impacts to shallow water habitats in the proposed maneuvering area east of the State Pier in Long Cove due to a proposed change in depth from less than -20 feet MLLW to -40 feet MLLW (plus 2 feet allowable over-depth). This assessment included the encroachment on adjacent shallow water habitat from the equilibrium slope (or side slope) established at the margins of the maneuvering area, changes to sediment composition within and adjacent to the proposed maneuvering area due to deepening the area, and an assessment of impacts to fish and invertebrate communities and eelgrass beds due to the deepening. You rejected our request to extend the consultation process and gather additional information about potential adverse effect on our trust resources, and we were obligated by our regulations to provide our EFH conservation recommendations using the best scientific information available.

According to the EA, the existing depths of the maneuvering area are between 20 feet and 30 MLLW, except for the northwest corner that is less than -20 feet MLLW. Furthermore, the EA stated the proposed deepening of the maneuvering area to -40 feet MLLW would not substantially change the depth in the area. However, according to the information provided in your August 9, 2013 letter, it appears that a 200-foot long by 400-foot wide area, approximately 80,000 square feet (1.84 acres), at the north end of the maneuvering area is currently less than -20 feet MLLW in depth. In addition, your letter indicated that the side slope impacts from the dredging will encroach beyond the designated footprint of the maneuvering area and into habitats shallower than -20 feet MLLW by distance of at least 100 feet, impacting areas currently as shallow as 0 feet MLLW. As a result, the total area impacted by the improvement dredging that is currently at -20 feet MLLW or shallower would be approximately 120,000 square feet (2.75 acres), or about one-third of the entire maneuvering area. Furthermore, according to information provided in your letter, almost one-half of this area, or approximately 53,579 square feet (1.23 acres), is currently at depths of -13 feet MLLW or less. Based upon this new information, we have concluded that the proposed dredging would result in a substantial change in the depth of the area with significant effects on shallow water benthic habitats. Because the existing shallow water areas that would be impacted by the dredging have not been dredged in the past, the proposed project represents significant new and permanent losses of shallow water habitats.

As discussed in our previous letters, Searsport Harbor and Penobscot Bay contain productive habitats for a number of federally-managed species and their prey. Penobscot Bay, including

Searsport Harbor area, is known to provide spawning and nursery habitat for nearshore spawners with demersal and adhesive eggs, which are typically abundant during the winter-spring periods (Bigelow and Schroeder 1953). Nearshore spawners, such as winter flounder, depend upon shallow, protected areas of Penobscot Bay for nursery habitat (Lazzari 2001). Because the larvae of demersal fish eggs are less likely to be transported away from nearshore nursery grounds, the shallow-water habitats of Penobscot Bay play an important role in early life history stage development. A study by Lazzari and Stone (2006) found direct evidence of shallow water habitat (< 6 m depth) in the Gulf of Maine, including Penobscot Bay, as critical facultative nursery habitat for economically and ecologically important species. This study also reported larvae and young-of-year juveniles of species that spawn in deeper, offshore areas, such as Atlantic cod, Atlantic herring, and windowpane flounder, utilize shallow water habitats in Penobscot Bay as nursery areas.

The winter flounder EFH Source Document (Pereira et al. 1999) reported a depth range for inshore egg and larvae habitat of 4.5 meters (14 feet) and less; young-of-year juveniles use inshore habitats 12 meters (37 feet) and less. Because the maneuvering area contains areas identified as EFH for spawning, egg development, larvae and young-of-year winter flounder, we have determined that the proposed project would permanently impact winter flounder EFH.

In addition, as discussed in our previous letters, winter flounder spawn in the Gulf of Maine region from March to May. Collette and Klein-MacPhee (2002) reported spawning near Boothbay Harbor commences about March 1 and continues until about May 10 or 15, and egg development takes between two and three weeks before hatching. Because eggs could be directly affected by elevated suspended sediments and turbidity during dredging, including delayed hatching, developmental defects on larvae, and mortality (Klein-MacPhee 2004; Berry et al. 2004, 2011; Wilber et al. 2005), we recommended a time-of-year restriction from March 15 to July 15 to protect winter flounder spawning and egg development habitat that may be present within the maneuvering area but also in adjacent shallow water habitats. The EA reported the sediments in the dredging area are comprised of greater than 90% silt and clay, suggesting these highly mobile sediments could impact winter flounder habitat beyond the direct impact of the dredging footprint. We continue to believe the proposed dredging window from November 8 to April 9 would adversely affect spawning and egg habitat for winter flounder, and recommend that this work window be modified to end on March 14.

We appreciate your agreement to conduct pre-construction eelgrass surveys in Long Cove and the western shore of Sears Island. As noted in our previous letters, the Maine Office of GIS eelgrass maps provide a relatively coarse depiction of eelgrass distribution, and typically do not capture low-density beds or beds of less than 14 meters in diameter (http://www.maine.gov/dmr/rm/eelgrass/maps/6-upperpenbay.pdf). In-water, site specific eelgrass surveys are more appropriate for project-level assessment of eelgrass beds. An accurate determination of eelgrass distribution in the project area will ensure that impacts to eelgrass habitats in the project area will be avoided. As noted in your April 24, 2013 letter, the State of Maine GIS eelgrass database indicates a significant loss of eelgrass beds in Long Cove and the western shore of Sears Island. This trend of declining distribution of eelgrass in Searsport Harbor is reason to take a risk-averse approach in conducting dredging activities in areas of the

remaining eelgrass beds. We are available to discuss eelgrass survey methods and to offer any assistance you may seek on these surveys.

Essential Fish Habitat Conservation Recommendations

Section 305(b)(2) of the MSA requires all federal agencies to consult with us on any action authorized, funded, or undertaken by that agency that may adversely affect EFH. The Searsport Harbor and Penobscot Bay have been identified as EFH under the MSA for 16 federally-managed species. We recommend, pursuant to Section 305(b)(4)(A) of the MSA, that you adopt the following additional EFH conservation recommendation:

1. The proposed project should be modified to avoid any dredging in areas less than -20 feet MLLW in the maneuvering area. If you determine the proposed project cannot be modified to avoid these areas, a compensatory mitigation plan should be developed to offset the lost functions and values of the impacted shallow water habitat. The compensatory mitigation plan should be developed in consultation through an interagency review team to determine the appropriate type, amount, and location for the compensatory mitigation. The final compensatory mitigation plan should be provided to us for review and approval before implementation.

Conclusion

In summary, because we received additional information regarding this project that changes the basis for some aspects of our original consultation on May 6, 2013, we are reinitiating EFH consultation. Based upon the new information, we recommend the proposed project be modified to avoid any dredging in areas less than -20 feet MLLW in the maneuvering area. If impacts to shallow water habitat cannot be avoided, a compensatory mitigation plan should be developed to offset the lost functions and values. The compensatory mitigation plan should be developed in consultation through an interagency review team and the final plan should be provided to us for review and approval. We look forward to your response to the supplemental EFH recommendation for this project. If you have any questions regarding these comments and recommendations, please contact Michael Johnson at 978-28I-9130 or at mike.r.johnson@noaa.gov.

Sincerely,

Louis A. Chiarella
Assistant Regional Administrator
for Habitat Conservation

Colligan/Tierney, PRD
Rogers/Blumeris/Mackay, USACE
Mahaney, USFWS
Green, ME DEP
Nault, ME DMR

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