



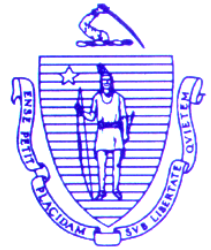
Paul J. Diodati
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October 16, 2014

Mr. Derek Standish, Environmental Analyst
DEP, Waterways Regulation program
1 Winter Street, 3rd Floor
Boston, MA 02108

Dear Mr. Standish:

The Division of Marine Fisheries (*Marine Fisheries*) has reviewed the Waterways License Application for the U.S. Army Corps of Engineers to perform maintenance dredging of Menemsha Creek in the Towns of Aquinnah and Chilmark. Proposed dredging would target shoaled areas of the navigation channel and anchorage basin and fill material would be deposited on Lobsterville Beach. Project plans also include responses to a National Marine Fisheries Service (NMFS) essential fish habitat (EFH) recommendations for this project submitted on August 27, 2014. *Marine Fisheries* provides information on existing marine fisheries resources in the project vicinity as well as recommendations to avoid and minimize impacts to these resources in the following paragraphs.

The proposed dredge track contains mapped shellfish habitat for bay scallop (*Argopecten irradians*), blue mussel (*Mytilus edulis*), quahog (*Mercenaria mercenaria*), razor clam (*Ensis directus*), soft shell clam (*Mya arenaria*), and surf clam (*Spisula solidissima*). The region of Menemsha Bight bordering the Lobsterville Beach placement site is also mapped as bay scallop habitat. Waters within the project site have habitat characteristics suitable for these species. Several aquaculture grants are also present within Menemsha Pond. Land containing shellfish is deemed significant to the interest of the Wetlands Protection Act (310 CMR 10.34) and the protection of marine fisheries.

Menemsha Pond also provides habitat for a variety of diadromous fish species, including alewife (*Alosa pseudoharengus*), blueback herring (*Alosa aestivalis*), American eel (*Anguilla rostrata*), Atlantic tomcod (*Microgadus tomcod*), and white perch (*Morone americana*) [1]. *Marine Fisheries* has placed a ban on river herring (alewife and blueback herring) harvest due to population declines [2]. Habitat impacts should be minimized to aid recovery of these species.

Marine Fisheries has identified Menemsha Pond as spawning habitat for winter flounder (*Pseudopleuronectes americanus*) [1]. Winter flounder enter the area and spawn from January through May, laying clumps of eggs directly on the substrate. These demersal eggs hatch approximately fifteen to twenty days later. The Atlantic States Marine Fisheries Commission has designated winter flounder spawning habitat as "Habitat Areas of Particular Concern" (HAPC). A recent stock assessment has determined that Southern New England/Mid Atlantic winter flounder populations are at only 16% of the recommended recovery level [3]. Given the

current winter flounder stock status, every effort should be made to protect winter flounder and their spawning habitat.

The northern shoreline of Menemsha Pond and the shoreline west of the entrance channel have been mapped as horseshoe crab (*Limulus polyphemus*) spawning habitat. Horseshoe crabs deposit their eggs in the upper intertidal regions of sandy beaches from late spring to early summer during spring high tides [4]. The eggs hatch approximately two to four weeks later. Recent stock assessments show a decline in horseshoe crab abundance in the New England region [5], indicating a need for protection from coastal construction activities.

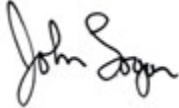
Much of the proposed dredge track has been mapped by DEP as an eelgrass (*Zostera marina*) meadow, one of the most productive habitats for numerous marine species [6,7]. Eelgrass has declined in Massachusetts by approximately 20% in the past decade, an estimated 3 acres of eelgrass lost per year [8]. Every effort should be made to avoid impacts to remaining eelgrass habitat.

Marine Fisheries offers the following comments for your consideration:

- While the revised dredge footprint now avoids direct impacts to identified eelgrass beds, the southern portion of the proposed dredge area still closely borders eelgrass (within 5 feet in certain sections). This minimal buffer is likely insufficient to prevent indirect impacts to bordering eelgrass through smothering and siltation during dredging and as a result of side slumping post-dredging. As stated in a previous letter for the Public Notice for this project, *Marine Fisheries* continues to recommend a minimum 25 meter buffer between the dredge footprint and existing eelgrass beds.
- In response to the Public Notice for this project, *Marine Fisheries* recommended a work window of November 15 to January 15 (time of year (TOY) restriction of **January 15 to November 15**) to protect diadromous fish passage as well as winter flounder spawning and egg survival. In responses to NMFS EFH recommendations, the Corps advocated for a work window of October 1 to January 31. The justification for working within the winter flounder TOY restriction was that the strong tidal currents in Menemsha Creek channel would provide less suitable spawning habitat than the calmer waters of Menemsha Pond. The diadromous TOY restriction was similarly countered based upon the dredge channel characteristics (coarse grain size, high velocity) being unlikely to cause sediment plumes that would interfere with fish passage. *Marine Fisheries* continues to recommend a TOY restriction of January 15 to November 15 since the proposed dredge channel covers the only connection between the Menemsha Creek and Pond system and the open ocean. While winter flounder may not use the dredge area as a primary spawning location, the dredge area is a necessary migratory corridor for any spawning adults traveling to Menemsha Pond from the Creek or Menemsha Bight. Similarly, the dredge channel contains the main migratory corridor for juvenile river herring emigrating out of this system in the fall. Dredge activity could inhibit both migration pathways and working outside of these migration time periods would minimize these potential impacts.
- To protect spawning horseshoe crabs, a TOY restriction of **May 1 to July 31** is recommended for the nourishment component of this project.

Questions regarding this review may be directed to John Logan in our New Bedford office at (508) 990-2860 ext. 141.

Sincerely,



John Logan
Fisheries Habitat Specialist

cc: Aquinnah Conservation Commission
Chilmark Conservation Commission
Brian Vanderhoop, Aquinnah Shellfish Constable
Isaiah Scheffer, Chilmark Shellfish Constable
Christopher Boelke, Alison Verkade, NMFS
Tay Evans, Greg Sawyer, Christian Petitpas, DMF

References

1. Evans NT, Ford KH, Chase BC, Sheppard J (2011) Recommended Time of Year Restrictions (TOYs) for Coastal Alteration Projects to Protect Marine Fisheries Resources in Massachusetts. Massachusetts Division of Marine Fisheries Technical Report, TR-47.
2. Taylor K, Hendricks M, Patterson C, Winslow S (2009) Review of the Atlantic States Marine Fisheries Commission fishery management plan for shad and river herring (*Alosa* spp.). October, 2009. Washington, D.C.
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5. ASMFC Horseshoe Crab Stock Assessment Subcommittee (2009) Stock assessment report no. 09-02 (supplement A) of the Atlantic States Marine Fisheries Commission horseshoe crab stock assessment for peer review. 113 p.
6. Jackson EL, Rowden AA, Attrill MJ, Bossey SJ, Jones MB (2001) The importance of seagrass beds as a habitat for fishery species. *Oceanography and Marine Biology: an Annual Review* 39: 269-303.
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JL/cp