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Secretary Matthew A. Beaton
Executive Office of Energy and Environmental Affairs (EEA)
Attn: MEPA Office
Page Czepiga, EEA No. 16008
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Beaton:

The Division of Marine Fisheries (MA DMF) has reviewed the Expanded Environmental Notification Form (EENF) for the New Bedford Department of Public Infrastructure's West Beach Berm Nourishment project on Clark's Cove in the City of New Bedford. MA DMF attended a pre-application meeting on November 22, 2017 and a MEPA site visit on April 23, 2019 for this project. The overall project area includes a 3,830 foot section of shoreline along West Rodney French Boulevard extending from the boat ramp north to the hurricane barrier. Proposed work consists of the installation of nine stone T-headed groins that would each contain a wooden trunk running perpendicular to the shoreline. In addition to the nine proposed new T-headed groins, the project also proposes modifications to three existing groins to create L-shaped groins. Proposed new T-headed groins would occupy 24,271 square feet of seafloor. To offset the addition of new hard structures, the project also proposes to remove the northernmost existing groin in the project area and the seaward ends of two additional groins totaling 25,577 square feet. Following T-headed groin installation, 31,150 cubic yards of beach nourishment material is proposed to be deposited on a 1:6 (v:h) slope. The proposed project design life is estimated to be 9-12 years with regular maintenance required to maintain shoreline protection objectives. Existing marine fisheries resources and habitat and potential project impacts to these resources are outlined in the following paragraphs.

As documented in the EENF, eelgrass (*Zostera marina*) beds are present immediately seaward of the proposed nourishment and groin installation sites. The Massachusetts Department of Environmental Protection (MA DEP) has mapped eelgrass along much of the project shoreline, and diver surveys performed by Stantec in May 2017 documented an even greater eelgrass footprint than the area previously mapped by MA DEP. MA DMF surveyed this area in June 2018 and also observed extensive eelgrass along several sections of the project area. Eelgrass beds provide one of the most productive habitats for numerous marine species (Jackson et al. 2001; Heck et al. 2008) and are designated "special aquatic sites" under the Federal Clean Water Act 404(b) (1) guidelines.

The project footprint also contains mapped habitat for several shellfish species. Specifically, the overall project footprint is mapped habitat for both bay scallop (*Argopecten irradians*) and quahog (*Mercenaria mercenaria*). The northern section of the project also contains mapped habitat for American oyster (*Crassostrea virginica*), razor clam (*Ensis directus*), and soft shell clam (*Mya arenaria*). Mapped razor clam and oyster habitat is also present in the southern section of the project. A shellfish survey performed by Stantec in May, 2017 identified bay scallops and

quahogs within the project area. The project area is particularly important as a recreational quahog harvest site.

Clark's Cove has also been identified by MA DMF as winter flounder (*Pseudopleuronectes americanus*) spawning habitat (Evans et al. 2011). Winter flounder 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).

MA DMF offers the following comments for your consideration:

- This project should develop additional alternatives that reduce the footprint of proposed new T-headed groins to the maximum extent possible. The EENF presents alternative design types, but alternative versions are not presented for the proposed T-headed groin with nourishment preferred alternative. Alternative layouts could include a) the use of smaller footprints, b) the use of T-headed groins only in areas with high sediment transport rates (sediment transport modeling depicted in Figure 4.8 of the EENF shows low net sediment transport along the southern extent of the project footprint between the boat ramp and the Aquidneck Street groin that would seem to suggest additional structures in this sub-section may not be necessary to maintain sediment in the nourishment footprint), and c) a phased approach as a way of field-testing modeled sediment transport and retention and anticipated avoidance of impacts to adjacent eelgrass resources (since the more northerly beaches were nourished and retained their sand via existing groin structures, it is unclear why the T-headed groins are really necessary).
- MA DMF does not object to removing the portions of the existing hard structures that serve no shoreline protection function (northernmost groin and seaward sections of several groins within the proposed T-headed groin footprint).
- Land side construction is anticipated for T-headed groin construction, but seaward approach via floating barge is also considered in the EENF supplemental filing. As eelgrass has been mapped in the nearshore environment seaward of the proposed T-headed groin locations, best management practices need to be further detailed to ensure avoidance of eelgrass impacts if a barge is used. Given that the mapped eelgrass is as close as 30 feet to the proposed T-headed groins in some locations, the proponent should clarify how they will mark the shoreward extent of the eelgrass as mapped in the pre-construction survey so construction activities do not accidentally impinge on the eelgrass. No anchoring, sediment movement, or fill placement should occur within 25 feet of the eelgrass.
- The EENF project plan includes annual diver surveys in late May to map eelgrass habitat for the first two years post-construction. Survey data should also be collected in late May prior to the construction period to provide the most up-to-date delineation of eelgrass habitat prior to nourishment. The survey plan for assessing construction impact should be reviewed and approved by MA DMF.
- Given existing shellfish resources and an active recreational quahog fishery within the project footprint, the applicant should consult with the shellfish constable to minimize disturbance to shellfish resources and fisheries. MA DMF expects this project to result in unavoidable impacts to quahog habitat, which will likely require mitigation in the permitting process.
- The design of the T-headed groins should incorporate materials and methods to maximize the biological value of the hardened structure such as creating tide pools and creating a wide variety of pore spaces.
- Since winter flounder utilize Clark's Cove as spawning habitat, the project should be designed to minimize work within the time of year (TOY) restriction period of **January 15 to November 15** (Evans et al. 2011). This TOY period is designed to protect sensitive life history phases of all of the marine resources outlined previously (winter flounder, shellfish, and diadromous fishes).

Questions regarding this review may be directed to John Logan in our New Bedford office at (508) 742-9722.

Sincerely,



David E. Pierce, Ph.D.
Director

cc: New Bedford Conservation Commission
John Ramsey, Applied Coastal Research and Engineering, Inc.
Thomas Ringuette, New Bedford Shellfish Constable
Alison Verkade, NMFS
David Wong, DEP
Robert Boeri, CZM
Ed Reiner, EPA
Richard Lehan, DFG
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References

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- Jackson EL, Rowden AA, Attrill MJ, et al (2001) The importance of seagrass beds as a habitat for fishery species. *Oceanogr Mar Biol Annu Rev* 39:269–303

DP/JL/sd