Commonwealth of Massachusetts

Executive Office of Energy and Environmental Affairs
Massachusetts Environmental Policy Act (MEPA) Office

Environmental Notification Form

For Office Use Only

EEA#: 16268

MEPA Analyst: Erin Flaherty

The information requested on this form must be completed in order to submit a document electronically for review under the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Duxbury Beach Nature-Based Storm-Damage Protection Project			
Street Address: 0 Dux Beach High Pines/Gurnet Rd (along 3.8 miles of Duxbury Beach)			
Municipality: Duxbury		Watershed: Atlantic Ocean & Duxbury Bay	
Universal Transverse Mercator Coordinates:		Latitude: 42°01'42.0"N Longitude: 70°37'30.0"W	
Estimated commencement date: Dec 2021		Estimated completion date: Various	
Project Type: Nourishment / Road Resiliency Improvements / Salt Marsh Restoration		Status of project design: 60 %complete	
Proponent: Duxbury Beach Reservation, Inc.			
Street Address: P.O. Box 2593			
Municipality: Duxbury		State: MA	Zip Code: 02331
Name of Contact Person: Elise Leduc			
Firm/Agency: Woods Hole Group		Street Address: 107 Waterhouse Road	
Municipality: Bourne		State: MA	Zip Code: 02532
Phone: 508-495-6234	Fax: 508-540-1001		E-mail: eleduc@woodsholegroup.com

Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?
☒Yes ☐No

If this is an Expanded Environmental Notification Form (ENF) (see 301 CMR 11.05(7)) or a Notice of Project Change (NPC), are you requesting:

a Single EIR? (see 301 CMR 11.06(8))	☒Yes ☐No
a Special Review Procedure? (see 301CMR 11.09)	☐Yes ☐No
a Waiver of mandatory EIR? (see 301 CMR 11.11)	☒Yes ☐No
a Phase I Waiver? (see 301 CMR 11.11)	☐Yes ☐No

(Note: Greenhouse Gas Emissions analysis must be included in the Expanded ENF.)

Which MEPA review threshold(s) does the project meet or exceed (see 301 CMR 11.03)?
11.03(1)(a)1, 11.03(3)(a)1.b., 11.03(3)(b)1.a., 11.03(3)(b)1.e

Which State Agency Permits will the project require?
DEP 401 Water Quality Certification, DEP Chapter 91 Waterways License, and CZM Federal Consistency

Identify any financial assistance or land transfer from an Agency of the Commonwealth, including the Agency name and the amount of funding or land area in acres:
CZM FY20 Coastal Resilience Grant Program to Duxbury Beach Reservation for $131,894 for design and permitting.

Summary of Project Size & Environmental Impacts	Existing	Change	Total
LAND			
Total site acreage	351.4 acres		
New acres of land altered		175.4 acres = sum total of all footprints	
Acres of impervious area	8.8 acres	0	8.8 acres
Square feet of new bordering vegetated wetlands alteration		0	
Square feet of new other wetland alteration		175.4 acres = sum total of all footprints	
Acres of new non-water dependent use of tidelands or waterways		0	
STRUCTURES			
Gross square footage	6,650 sf (Blakeman's, gate house, and High Pines facility)	0	6,650 sf
Number of housing units	N/A	N/A	N/A
Maximum height (feet)	N/A	N/A	N/A
TRANSPORTATION			
Vehicle trips per day	N/A	N/A	N/A
Parking spaces	N/A	N/A	N/A
WASTEWATER			
Water Use (Gallons per day)	N/A	N/A	N/A
Water withdrawal (GPD)	N/A	N/A	N/A
Wastewater generation/treatment (GPD)	N/A	N/A	N/A
Length of water mains (miles)	N/A	N/A	N/A
Length of sewer mains (miles)	N/A	N/A	N/A

Has this project been filed with MEPA before?
☐ Yes (EEA #_____) ☒No

Has any project on this site been filed with MEPA before?
☒ Yes (EEA #__15850_) ☐No

GENERAL PROJECT INFORMATION – all proponents must fill out this section

PROJECT DESCRIPTION:

Describe the existing conditions and land uses on the project site:

Duxbury Beach is a 7.5-mile long barrier beach that extends from Marshfield in the north to Gurnet Point and Saquish Head in the south. Duxbury Beach is an important barrier protecting Duxbury Bay and the mainland shore from the direct effects of ocean waves. The Duxbury Beach Reservation, Inc. (DBR) owned portion of the barrier beach is largely undeveloped, and is managed for open space, conservation, wildlife habitat, and recreation. As an unarmored barrier beach exposed to the full force of the Atlantic Ocean, Duxbury Beach is a dynamic system that is constantly undergoing changes from wind and wave action. Duxbury Beach also provides important nesting and foraging habitat for threatened and endangered species of shorebirds, including the piping plover and least tern. DBR has actively managed the property for shorebirds, including managing ORV use and vehicles along Gurnet Road to avoid impacts to these species and has an active Management and Habitat Conservation Plan. For further details see Existing Conditions in Section C.

Describe the proposed project and its programmatic and physical elements:

The Duxbury Beach Reservation applied for and received a CZM Grant in FY20 for $131,894 to fund field data collection, an alternatives analysis, and initial permitting. A previous CZM Grant (FY15) ($206,250) funded extensive site studies to understand existing conditions and potential impacts from future storms and sea level rise.

The proposed project includes four (4) key components:

- **Component 1: Oceanside beach and dune nourishment**
- **Component 2: Bayside erosion control**
- **Component 3: Flood vulnerability reductions along roadway**
- **Component 4: Powder Point Bridge abutment area erosion control**

See Project Description (Section B) for further details.

NOTE: The project description should summarize both the project's direct and indirect impacts (including construction period impacts) in terms of their magnitude, geographic extent, duration and frequency, and reversibility, as applicable. It should also discuss the infrastructure requirements of the project and the capacity of the municipal and/or regional infrastructure to sustain these requirements into the future.

Describe the on-site project alternatives (and alternative off-site locations, if applicable), considered by the proponent, including at least one feasible alternative that is allowed under current zoning, and the reasons(s) that they were not selected as the preferred alternative:

The following nineteen (19) alternatives were considered (see Section D - Alternatives Description and Section E – Assessment of Impacts for further details):

Component 1: Oceanside beach and dune nourishment

Alternative 1-1: Do Nothing
Alternative 1-2: 2016 Recommendation (dune H: 16.5ft; dune W: 50ft; berm H: 6.5ft; berm W: 90ft)
Alternative 1-3: Inc. Dune Crest Elevation (dune H: 18.5ft; dune W: 20ft; berm H: 7ft; berm W: 50ft)
Alternative 1-4: Reduced Volume (dune H: 16.5ft; dune W: 50ft; berm H: 6.5ft; berm W: 50ft)

Component 2: Bayside erosional control

Alternative 2-1: Do Nothing
Alternative 2-2: Minor Repairs to Existing Cobble Berm