# Massachusetts DFG In-Lieu Fee (ILF) Program



ILF Projects funded to date (July 2019)

# **Summary Information Project Fact Sheets**

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- o Marine Habitat Enhancement, Yarmouth MA Artificial Reef
- o Eelgrass Restoration Project, Salem Sound MA

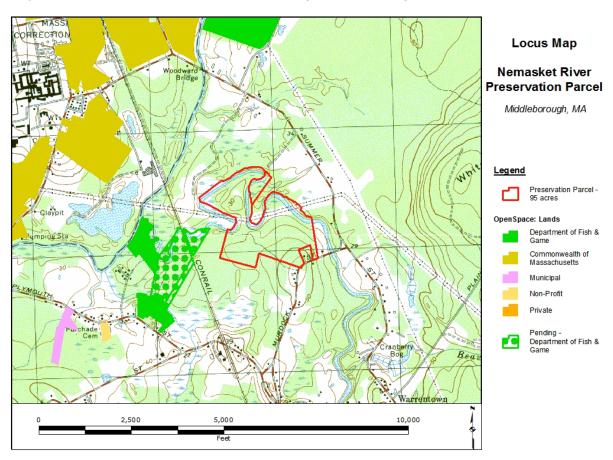
For additional information on the ILF Program and Mitigation Projects, contact Aisling O'Shea, ILF Program Administrator, (617) 626-1605 or email at aisling.oshea@mass.gov

# Nemasket River Preservation Parcel, Middleborough, MA

<u>ILF Funding</u> \$405,000

ILF Service Area Coastal-South Service Area

Project Location Murdock Street, Middleborough MA (Lat/Long -70.931154, 41.9335165)



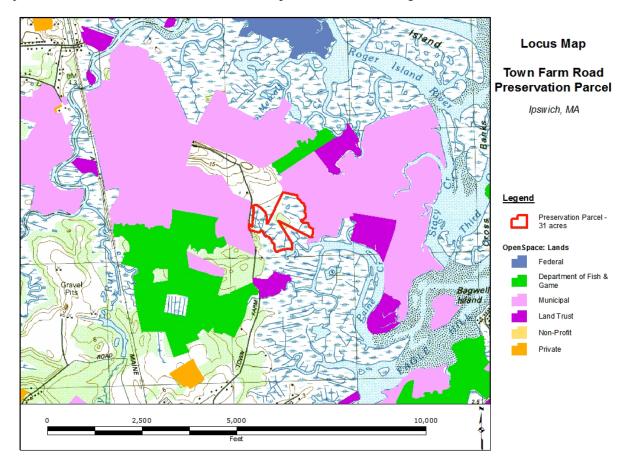
Project Summary The Department of Fish and Game/Division of Fisheries and Wildlife (DFG/DFW) Land Protection Program was awarded \$405,000 In Lieu Fee Program funds for the fee interest acquisition of a 95-acre property, comprising two parcels (90 acres and 5 acres), located off Murdock Street in Middleborough, MA. This property, which is under threat of development, includes over a mile of frontage on the Nemasket River in the upper Taunton River watershed and contains BioMap2 Aquatic Core, Wetlands Core, and Species of Conservation Concern Core, as well as substantial upland buffers to these resources. The site is of significance for connectivity, ecological integrity, and climate change resiliency; it is identified as a BioMap2 Critical Natural Landscape (CNL) Landscape Block<sup>1</sup>, a DEP Important Habitat<sup>2</sup>, and a TNC resilient site<sup>3</sup>. The property had the potential for as many as 13 house lots. Permanent protection of this 95-acre property preserves important high quality palustrine wetland and riverine resources in the Coastal South Service Area. The Long-Term Management Plan for the property addresses vegetation management and other best management practices (BMPs) to ensure protection of endangered species and aquatic resources on site.

# Town Farm Road Preservation Parcel - Ipswich MA

ILF Funding \$40,000

ILF Service Area Coastal-North Service Area

Project Location 171 Town Farm Road, Ipswich, MA (Lat/Long: 42.7120765,-70.840616)



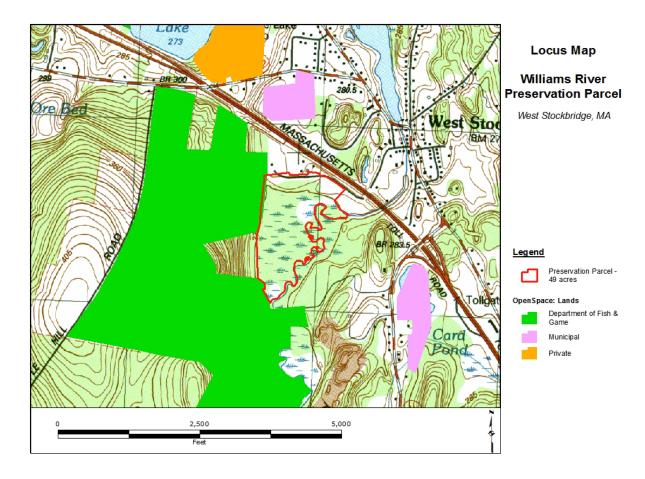
Project Summary The Department of Fish and Game/Division of Fisheries and Wildlife (DFG/DFW) Land Protection Program was awarded \$40,000 in In Lieu Fee Program funds for the fee interest acquisition of a 31-acre parcel, located on Town Farm Road in Ipswich, MA. This property provides an important connection between protected areas owned by the Ipswich Conservation Commission and the Essex County Greenbelt Association. It is also in close proximity to conservation lands and salt marsh owned by DFW. This 31-acre parcel contains 2 acres of coastal woodland and approximately 27 acres of estuarine intertidal wetland resources. The parcel also includes frontage on Town Farm Road, with a small gravel parking area. Without permanent protection, this parcel was at risk of degradation by clearing of maritime shrub and coastal forest for a house or cabin on the upland island. The property is located within the Parker River watershed and the Great Marsh Area of Critical Environmental Concern (ACEC). It is identified as BioMap2 Aquatic Core habitat, Priority Natural Communities Core habitat, Species of Conservation Concern Core habitat<sup>1</sup>. The parcel is also mapped as BioMap2 Critical Natural Landscape (CNL) Landscape Block and Aquatic Buffer, as well as Tern Foraging Habitat. In addition, it contains DEP Important Habitat<sup>2</sup> and is identified as an important Coastal Adaptation area.

#### Williams River Preservation Parcel - West Stockbridge, MA

LF Funding \$13,447

ILF Service Area Berkshire/Taconic Service Area

Project Location Moscow Road, West Stockbridge, MA (Lat/Long: -73.374,42.3316)



Project Summary The Department of Fish and Game/Division of Fisheries and Wildlife (DFG/DFW) Land Protection Program was awarded \$13,447 in In Lieu Fee Program funds for the fee interest acquisition of a 49-acre property, located off Moscow Road in West Stockbridge, MA. This property is adjacent to the DFW Maple Hill Wildlife Management Area and includes approximately ±5,000 feet of frontage on the Williams River and 38 acres of freshwater wetlands. The property was under threat of development, with 500 feet of frontage on Moscow Road and potential for residential housing lots. The Williams River, which is major tributary of the Housatonic River, is an identified Coldwater Fisheries Resource. Wetlands on-site are identified as BioMap2 Wetlands Core habitat<sup>1</sup>. The Williams River preservation parcel is of significance for connectivity, ecological integrity, and climate change resiliency; it is identified as BioMap2 Critical Natural Landscape Upland Wetland Buffer, a DEP Important Habitat<sup>2</sup>, and a TNC resilient site<sup>3</sup>. Acquisition and management of this parcel by DFW ensures the preservation of these aquatic resources and ±10 acres of upland buffer.

<sup>&</sup>lt;sup>1</sup> <u>BioMap2</u> is designed to guide strategic biodiversity conservation in Massachusetts by focusing land protection and stewardship on the areas that are most critical for ensuring the long-term persistence of rare and other native species and their habitats, exemplary natural communities, and a diversity of ecosystems. *Core Habitat* identifies key areas to ensure the long-term persistence of species of conservation concern, exemplary natural communities, and intact ecosystems across the Commonwealth. *Critical Natural Landscape* identifies larger landscape areas that are better able to support ecological processes, disturbances, and wide-ranging species.

<sup>&</sup>lt;sup>2</sup> Developed by UMass, the Massachusetts Ecological Integrity Maps (IEI) are based on a computer software program and a method to prioritize land for conservation based on the assessment of ecological integrity for ecological communities (e.g., forest, shrub swamp, headwater stream). Using the IEI values, the MassDEP maps of Habitat of Potential Regional or Statewide Importance (MassDEP Important Habitats) depict areas representing 40% of the landscape with the highest wildlife habitat value.

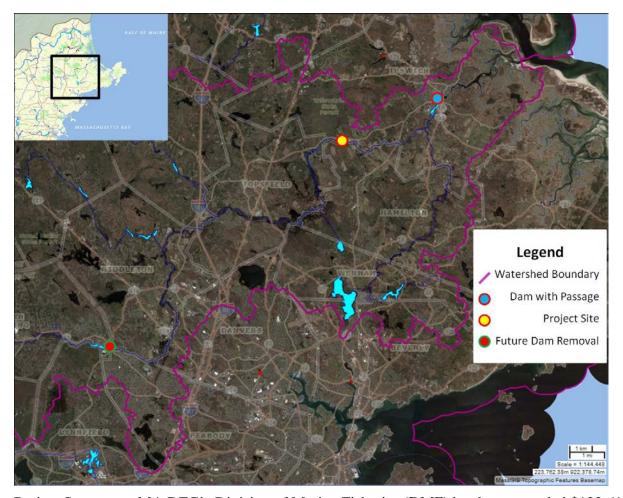
<sup>&</sup>lt;sup>3</sup> <u>The Nature Conservancy's Resilient Sites for Terrestrial Conservation</u> project identifies the areas estimated to be the most climate resilient for each of 62 characteristic environments in Eastern North America.

# Improving Diadromous Fish Passage on the Ipswich River

<u>ILF Funding</u> \$122,611

Project Location Willowdale Dam, Ipswich MA Lat/Long 42.659880, -70.894150

<u>ILF Service Area</u> Coastal (Coastal-North Subarea)



<u>Project Summary</u> MA DFG's Division of Marine Fisheries (DMF) has been awarded \$122,611 in ILF funds for installation of a new Alaska steeppass-style fishway, to be sited on river left at the Willowdale Dam in Ipswich, MA. This new fishway will replace a failing and poorly-sited weir-pool fishway that is currently sited on river right. The project is primarily targeting River herring, a Federally-recognized Species of Concern, and will restore passage to 14.5 miles of mainstem spawning and nursery habitat for both alewife and blueback herring, and passage to additional tributary river miles and pond acreage. The aquatic resource benefits of the project include enhancement of freshwater riverine ecosystem and essential fish habitat, improved connectivity, food webs and nutrient transport among marine, estuarine, riverine tidal and riverine freshwater ecosystems.

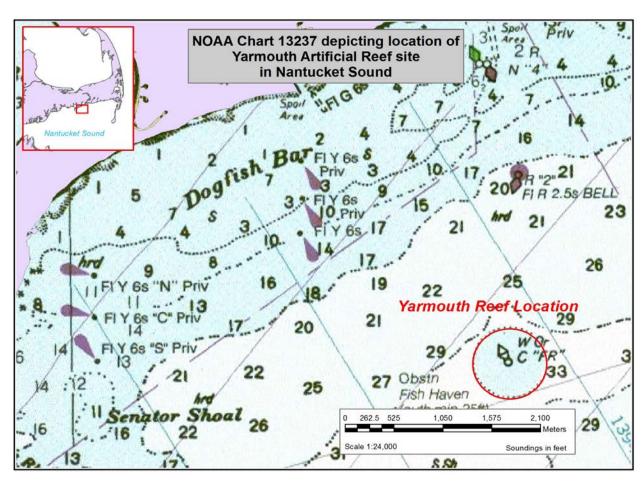
# Marine Habitat Enhancement, Yarmouth MA Artificial Reef

ILF Funding \$225,097

<u>ILF Service Area</u> Coastal (Coastal-South Subarea)

<u>Project Location</u> Corner Coordinates of 0.93 acre box within permitted reef site

NW: 41.608116 -70.194737 SW: 41.607560 -70.194737 NE: 41.608116 -70.194199 SE: 41.607560 -70.194199

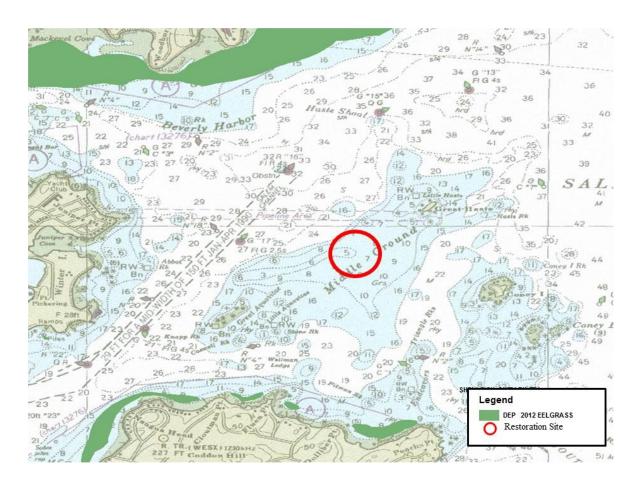


Project Summary MA DFG's Division of Marine Fisheries (DMF) has been awarded \$225,097 for a structured habitat enhancement project that will generate 0.93 acres of marine subtidal artificial reef habitat by deploying two thousand (2,000) cubic yards of materials to the site. The selected site for this project is within an undeveloped portion of a 125-acre permitted artificial reef site. Structures will be distributed in patches on the bottom, utilizing a 1:2 ratio of new structures to undisturbed natural bottom (33% material coverage to 67% undisturbed area). The project location is Essential Fish Habitat (EFH) for one or more life history stages of fifteen managed marine species including Atlantic cod, winter flounder, long-fin squid, scup, black sea bass, and surf clam. DMF will conduct a rigorous, multifaceted monitoring program utilizing divers and remote sensing equipment to observe and measure species composition and successional colonization.

# **Eelgrass Restoration Project, Salem Sound MA**

ILF Funding \$262,092

<u>ILF Service Area</u> Coastal (Coastal-North Subarea) <u>Project Location</u> Salem Sound (Middle Ground)



Project Summary MA DFG's Division of Marine Fisheries (DMF) was awarded \$262,092 in ILF funds for an eelgrass restoration project, which began in 2017. DMF chose Middle Ground in Salem Sound to plant two ¼ acre (1,011.7 m²) sites in 2017. The West ¼ acre restoration site (MGW) was planted in April and May 2017, while the East ¼ acre restoration site (MGE) was planted in the end of August and September 2017. An additional ¼ acre site was planted south of MGW in May 2018 as an adaptive management measure to compensate for storm-related losses at MGW. The project has completed its second year of the 5-year monitoring plan, which includes monitoring of mean shoot density and survival, canopy height and percent cover. DMF's eelgrass restoration project also includes monitoring of several reference sites to inform evaluation of restoration success at Middle Ground.