

Great Marsh Phragmites Management

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Management Project

Why: Your Project Purpose/Identified Need

- Invasive *Phragmites australis* has begun colonize the northern end of the broad marsh (high marsh) portion of the Great Marsh in recent years
- *Phragmites* crowds out native high marsh vegetation as it expands through the marsh altering habitat and dislocating native species.
- Without a management plan and follow up actions, *Phragmites* will continue to expand into the high marsh.

What: Project Goals and Desired Outcome

- Remove/reduce invasive Phragmites in the broad marsh of the Great Marsh.
- Areal extent of Phragmites stands and plants is mapped (at several levels) mid growing season following a treatment session
- Desired ultimate outcomes
 - Short-term: Reduce Phragmites to the point where only occasional maintenance level treatments are needed.
 - Long-term: (1) Manage hydrology to naturally control Phragmites (2) Reduce large upland-edge Phragmites stands which significantly contribute to the seed source.

Phragmites Target Area

Phragmites Sites on the Great Marsh



- This phase of Phragmites control is limited to stands growing in the the open, high marsh of the Great Marsh (not upland-edge stands)
- Stands are measured in acres as well as by stand count (primarily for estimating future treatment cost)

Who is doing the work and When are you doing it?

- Merrimack Valley Planning Commission/MassBays National Estuary Program
- US Fish and Wildlife Service (PRNWR), NE MA Mosquito Control and Wetlands District, Great Marsh Legislative Delegation, Innovative Mosquito LLC, Great Marsh Revitalization Task Force, others
- This project has been ongoing since 2007 on an annual basis and is currently funded through
- A hydrologic model of the northern Great Marsh was developed to determine if it would be possible to improve/modify drainage and flow in Plum Island Sound that would impede Phragmites growth once native vegetation has been re-established.

How

- Treatment and Management has been funded (depending on the year) through US fish and Wildlife Service (NAWCA), Army Corps of Engineers, MA Dept of Conservation and Recreation, MA Division of Marine Fisheries, Merrimack Valley Planning Commission National Fish and Wildlife Foundation, private land owners, etc.
- The Phragmites management effort is through various partnerships including the MA/NH/ME Invasives Work Group, Great Marsh Revitalization Task Force, Great Marsh Partnership, etc.