Massachusetts Executive Office of Environmental Affairs

Neponset Salt Marsh Restoration Project
Boston / Quincy / Milton, Massachusetts

ESS Group, Inc. is in the final design phase of a culvert replacement project that will restore tidal flushing to 12 acres of tidally restricted salt marsh. This project is part of a larger state-sponsored effort to restore sections of the 250-acre salt marsh infested with the invasive plant *Phragmites australis*. The site was bermed and filled with dredge material in the 1940s, 50s, and 60s, and includes a utility access road, which created a hydraulic restriction. The restoration involves excavation and relocation of fill material, creation of pannes and creeks, breaching of berms, and replacement of under-sized culverts with appropriately sized structures.

ESS staff helped the state secure a US Fish and Wildlife Service (USFWS) Coastal Wetland Restoration grant for $425,000 for project construction, and corporate sponsors contributed over $500,000 in funds and services toward implementation.

Federal Coastal America partners contributed additional funds and services worth over $100,000. The following services were performed: baseline salinity and tidal investigations were conducted by ESS staff and volunteers, design and permitting were completed in partnership with agency property owners, a Technical Advisory Group participated in project design, and review and necessary pre-approvals for on-site management of excavated soils were attained.

Plans were presented to interested community groups, and final restoration plans were developed. Project partners included the US Army Corps of Engineers, USFWS, National Oceanic and Atmospheric Association-National Marine Fisheries Service, US Environmental Protection Agency, MA Department of Environmental Protection, MA Wetlands Restoration & Banking Program, The Gillette Company, Watershed Associations, and Municipalities.

Relevant Services Include:

- Civil Design for Culvert Replacement
- Hydraulic/Hydrologic Analyses
- Development of Remediation Action Alternatives
- Wetland Resource Area Delineation and Characterization
- Salt Marsh Creation/Restoration
- Baseline Salinity and Tidal Investigations