The Coastal and Estuary Habitat Restoration Program and Trust Fund

R.I.G.L.CHAPTER 46-23.1

Projects Approved for Funding
FY2007

CRMC

COASTAL RESOURCES MANAGEMENT COUNCIL

Application and Approval Process

The Coastal and Estuary Habitat Restoration Program and Trust Fund, legislation allocating $250,000 from the Oil Spill Prevention, Administration and Response Fund (OSPAR), established within the Coastal Resources Management Council a Rhode Island coastal and estuarine habitat restoration trust fund. Pursuant to the legislation, the "trust shall be available for disbursement by the council in accordance with the restrictions and purposes of this chapter and subject to an annual appropriation by the legislature." (RIGL §46-23.1-3).

The Rhode Island Habitat Restoration Team, an advisory technical committee as mandated by the Coastal and Estuary Habitat Restoration Program and Trust Fund, drafted and adopted the State Estuary and Coastal Habitat Restoration Strategy. This program describes the state's coastal and estuarine habitats, restoration goals, inventory of restoration projects, projected comprehensive budget and timeline to complete the goals, funding sources, outreach elements, and provisions for updating the plan and project inventory.

The Team met on January 16, 2007 to evaluate submitted project proposals and make funding recommendations to the Coastal Resources Management Council for FY2007. On January 23, 2007, the Council unanimously approved funding for nine coastal habitat restoration projects chosen by the Restoration Team.

An open and competitive state-wide process was used to solicit applications for projects that seek to restore coastal and estuarine habitats including seagrass beds, salt marshes and river systems. The information requested from the applicants that was used to evaluate each project included: the type of restoration initiative to take place, the historical impact to the site, the natural resources benefited and impacted (target species), any physical, ecological, biological, cultural/historical, geological and survey data collected to date, a site map, any available aerial photography and photographs of the site, preliminary restoration drawings, maps and engineering plans, and proof of property owner permission for the restoration activity to take place. Projects were evaluated and ranked for funding based on these factors to be considered for the purposes of granting monies for estuary and coastal habitat restoration activities, as stated in the legislation:

(1) consistency with the state estuary and coastal habitat restoration strategy, the Narragansett Bay comprehensive conservation and management plan, the state coastal nonpoint pollution control plan, the coastal resources management program, the department of environmental management regulations, and pertinent elements of the state guide plan;

(2) the ability of the applicant to provide adequate personnel funding, and authority to carry out and properly maintain the estuary and coastal habitat restoration activity;

(3) the proposed monitoring plan to ensure that short-term and long-term restoration goals are achieved;
(4) the effectiveness of any nonpoint source pollution management efforts upstream and the likelihood of re-impairment;

(5) whether the estuary and coastal habitat restoration activity can be shown to replace habitat losses that benefit fish and wildlife resources;

(6) potential water quality improvements;

(7) potential improvements to fish and wildlife habitats for species which are identified as rare or endangered by the Rhode Island Natural History Survey or the federal Endangered Species Act;

(8) the level and extent of collaboration by partners (e.g., municipality, nongovernmental organization, watershed council, federal agency, etc.); and

(9) potential direct economic benefit to a community or the state.

FY2007 Project Descriptions

Town Pond (Boyd's Marsh) Salt Marsh Restoration ($50,000)
Location: Portsmouth, RI

Partners: US Army Corps of Engineers, RIDEM, NBEP, RICRMC, Town of Portsmouth, RI Corporate Wetlands Partnership, Ducks Unlimited, Aquidneck Island Land Trust, Save the Bay, Common Fence Point Improvement Association, NOAA, US Fish and Wildlife Service, NRCS, USEPA, RI Mosquito Abatement Program, Roger Williams University, URI, Narragansett Electric, RI Habitat Restoration Team, US Senators Reed and Chafee and Congressman Patrick Kennedy

The Town Pond project area is a 40-acre salt pond complex owned by RIDEM and located between Anthony Road and the south shore of Mount Hope Bay in Portsmouth, RI. The U.S. Army Corps of Engineers has identified the Town Pond project site as eligible for federal restoration activities under Section 1135 of the Water Resources Development Act of 1986 (PL 99-662). The Narragansett Bay Estuary Program (NBEP), R.I. Department of Environmental Management (RIDEM) and the Corps worked with federal, state and local partners through the R.I. Habitat Restoration Team to develop a restoration plan for Town Pond. The project features an innovative restoration design and is the larges wetland restoration project undertaken to date on Narragansett Bay. The design, engineering and permitting phases of the project are complete,

and construction is underway to regrade approximately 100,000 cubic yards of existing dredge material.

The project will restore more than 20 acres of historic salt pond habitat that has become a monoculture of the invasive reed *Phragmites australis.* This will be accomplished by regrading approximately 100,000 cubic yards of existing dredge material that was disposed at the site as part of a navigational improvement project around 1950. The project will also restore fringing wetlands, coastal grassland habitat, and public access to the shoreline, improving spawning habitat for winter flounder as well as critical habitat for a variety of valuable estuarine plants and animals, including oysters, blue crabs, menhaden and waterfowl such as brant.

Additional benefits of the project include the protection of nearby freshwater resources, continued maintenance access to existing electric transmission lines, and improved public access and viewing of the restored habitat. Overall, the project will result in an improvement of the estuarine environment of Mount Hope Bay and Narragansett Bay.

Gooseneck Cove Salt Marsh Restoration ($50,000)
Location: Newport, RI

Photo courtesy of Save the Bay

Partners: City of Newport, NOAA, NRCS, Save the Bay

Gooseneck Cove is a city-owned, 63 acre salt marsh and open water cove bordered by Block Island Sound in Newport, RI. The cove is tidally restricted by three structures: the Ocean Drive Causeway, a small dam, and an unimproved dirt road (Hazard Road). These restrictions impound freshwater and restrict salt water flow in and out of the upper cove, which exhibits signs of habitat and water quality degradation.

The goals of this restoration project are to restore the salt marsh plant community, to prevent future subsidence of the marsh, and to improve the cove's water quality by restoring tidal flushing of the cove. The project will also improve public access to the northern cove area for recreational activities such as bird watching, crabbing, and launching canoes and kayaks. These goals will be accomplished by implementing one of several restoration alternatives developed by NOAA and professional consultants. The restoration alternatives include resizing a culvert at Ocean Drive, removing the dam structure and resizing the culvert at Hazard Road, or raising Hazard Road. The preferred restoration alternative will be selected in consultation with the project partners. CRMC funds will be used for construction of the preferred restoration alternative.

Jacob's Point Salt Marsh Restoration ($48,000)
Location: Warren, RI

Photo courtesy of Save the Bay

Partners: Warren Land Conservation Trust, NOAA, NRCS, Save the Bay, RIDEM Mosquito Abatement Coordinator, Audubon Society of Rhode Island

Jacob's Point salt marsh is a 47 acre marsh along the Warren River in Warren, RI, that is owned by the Warren Land Conservation Trust. The site was identified as a potential restoration project in 1996 through Save the Bay's salt marsh evaluation program. It includes high and low salt marsh communities, *Phragmites australis*, open water and mudflats. Tidal flow into the interior of the marsh is restricted by an earthen footpath with two collapsed stone culverts across the middle of the marsh. This combined with an increased amount of freshwater runoff entering the marsh due to increased development throughout the watershed in the past 20 years has caused a

documented increase in *Phragmites australis* in the southern portion of the marsh. It was determined from maps developed by Save the Bay that during the two-year period from 1997 to 1999 the average lateral expansion rate of the *Phragmites australis* was 1.3 meters.

The goals of this restoration project are to reintroduce tidal flow to the marsh to reestablish the characteristic high and low marsh plant communities, to decrease the height and vigor of *Phragmites australis*, reduce the mosquito production in the marsh and increase use of the marsh by fish, shellfish and aquatic birds. This will likely be accomplished through removal of sections of the earthen footpath and excavation of choked tidal creeks. A hydrologic model for the site is being finalized by NRCS, and will provide the basis for project engineering plans. Public access to the marsh will be enhanced through continued use of the foot path, educational programming and signage.

Atlantic Mills Fish Passage Restoration ($36,750)
Location: Providence, RI


Photos courtesy of Woonasquatucket River Watershed Council

Partners: City of Providence, Providence Parks Department, NRCS, Woonasquatucket River Watershed Council

Atlantic Mills Dam is located at the former Riverside Mills site. The goal of this project is to restore fish passage at this location. Preliminary surveys by state and federal fisheries biologists have found suitable habitat and conditions for river herring (blueback herring and alewife) and possibly American shad in the lower Woonasquatucket River. Restoration of river herring to the Woonasquatucket River will provide ecological benefits to the river and upper Narragansett Bay by restoring historic anadromous fish spawning and rearing areas. This project is part of a larger restoration effort that will enhance depleted spawning populations of river herring and possibly shad which are an important forage base recreationally and important to pelagic species such as striped bass and bluefish.

Low Ground Pressure Utility Vehicle ($12,500)

Location: Statewide

Partners: RIDEM

The rubber tracked, low-ground-pressure (LGP) utility vehicle that will be purchased with the awarded funds will be used to transport soil excavated from salt marsh water management projects to upland disposal sites. It can also serve as a platform for spraying herbicide as part of *Phragmites* control projects. The machine will be available to salt marsh restoration projects being conducted in Rhode Island at limited or no cost.

Third Beach Dune Restoration ($9,373)
Location: Middletown

Photos courtesy of Norman Bird Sanctuary

Partners: Norman Bird Sanctuary, US Fish and Wildlife

This project site is owned by the Norman Bird Sanctuary (NBS) and is located between Third Beach Road and the Sakonnet River in Middletown. In 2003 with tremendous community

support, NBS purchased 23 acres of environmentally sensitive beach, dunes, marshland and grasslands, to be preserved as protected conservation land. NBS has developed a comprehensive management plan for the area with assistance from Dr. Numi Mitchell, a biologist from the Conservation Agency. Several restoration activities have taken place since 2003 to improve and restore the wildlife habitat value of the site, including the replanting of native grasses, the removal of twelve cottages located on the dunes, and the installation of guardrails to minimize human disturbance to the dunes.

The goal of this project is to create a protective sand berm along Third Beach Road to hold and form the dune and create a visual obstruction for beach users, limiting access to the beach through a designated footpath. This will be accomplished by moving over 200 cubic yards of sand to the restoration site, and planting American beach grass and native shrubs along the berm. The vegetation will help to prevent erosion and preserve the coastal dune habitat, which is utilized by piping plover, an endangered species, among other species.

Rhode Island Oyster Gardening for Recreation and Enhancement (RI-OGRE) ($8622)
Location: Greenwich Bay, Bristol, Prudence Island

Partners: Roger Williams University, RI-OGRE Program, Rhode Island Shellfishermen's Association, RIDEM, Blount Seafood, NRCS

The goal of this project is to successfully reintroduce the American oyster as a viable population in Narragansett Bay and the South County Ponds and to improve the habitat quality of the bay bottom through establishing oyster beds throughout the area. Oysters are known to remove nutrients contaminating the bay from land-based sources. They also contribute a three-dimensional structure to the bay bottom thereby enhancing the complexity and quality of the benthic habitat. The RI-OGRE program recruits volunteer coastal landowners to assist in rearing juvenile oysters to eventually be free planted in established oyster beds.

Monitoring and Management of Rare Plant Populations ($6,505)
Location: Narragansett, Statewide

Photos by: Ailene Kane, New England Wild Flower Society

Partners: Invasive Plant Atlas of New England, New England Plant Conservation Program, Rhode Island Natural Heritage Program, Rhode Island Natural History Survey, and Rhode Island Wild Plant Society

This project has two components: 1) Surveys will be conducted in Rhode Island's coastal habitats to update information and assess management needs for rare plant populations; and 2) An invasive species removal project will be performed as a "case study" and to benefit rare plant species at a site located on a rocky shore in Narragansett.

For the past fifteen years, NEWFS has collaborated with the Rhode Island Natural Heritage Program (RINHP), New England Plant Conservation Program, and the Plant Conservation Volunteer Corps to conduct field surveys and monitor rare plant populations around the state. The first component of this project will build on these past collaborations to survey and evaluate management needs for rare plant populations in coastal and estuarine habitats. The species to be surveyed will include plant taxa that are listed as rare or endangered by RINHP and RIHNS, and occur in salt marshes, estuaries, rivers, coastal plain ponds, beaches, and dunes in the state.

For the second project component, invasive species will be removed from an ecologically important rocky shore natural community located off of South Ferry Road in Narragansett using mechanical removal and/or target-specific chemical applications of herbicide. The site is home to state listed and globally rare plant species, and is currently overrun with three highly invasive non-native species: Japanese honeysuckle (*Lonicera japonica),* Asiatic bittersweet *(Celastrus orbiculatus),* and black swallowwort (*Cynanchum louiseae).*

The goal of the project is to further knowledge of Rhode Island's coastal flora conservation needs and to provide an educational hands-on opportunity to protect the state's coastal ecosystems that will benefit future restoration efforts.

Stillhouse Cove Salt Marsh Restoration ($3,250)
Location: Cranston

Photo courtesy of Save the Bay

Partners: Edgewood Waterfront Preservation Association, City of Cranston, NRCS, Save the Bay, RIDEM Mosquito Abatement Program

Stillhouse Cove, located on the Providence River, is a salt marsh that was impacted by runoff from surrounding high density development and historic filling. Stormwater runoff discharged into the marsh resulting in sediment accumulation on the marsh surface and the colonization of the sediment by *Phragmites australis.* This project is in its second phase and includes removal of fill material from sections of the upper marsh, treatment of *Phragmites*, and seeding of the upland edge of the marsh with warm season grasses. Habitat fund monies will be used for the *Phragmites* treatment and warm season grass seeding portions of the project.