Conservation Stewardship Collaborative SNEP is a participant in the Conservation Stewardship Collaborative which works to advance long-term protection and stewardship of terrestrial, aquatic, coastal, estuarine, and marine areas in Rhode Island that have been conserved by fee, easement or other means. The group works to achieve its mission by promoting stewardship and advising the Rhode Island Foundation on dispersing the Conservation Stewardship Endowment Fund. SNEP contributed funds and staff support in fiscal year 2009 to support invasive species preparedness to improve our collective understanding of invasives in Rhode Island; provide accurate information about the state of invasives in Rhode Island to instate and external stakeholders and direct those preparing for or managing invasives to appropriate resources. SNEP and Rhode Island National Wildlife Refuge Complex staff are designing an invasives brochure for landowners to raise awareness to.

Supporting Rhode Island Land Trusts

SNEP supports Rhode Island land trusts through mapping assistance for land acquisition prioritization. In addition to mapping support, SNEP assists with developing habitat management actions and assists land trusts in finding funds to support acquisition and management activities.

Thanks to All Our Partners

Rhode Island Department of Environmental Management, Rhode Island Corporate Wetlands Restoration Partnership, Save the Bay, University of Rhode Island, Rhode Island Land Trust Council, Woonasquatucket River Watershed Council, Wood-Pawcatuck Watershed Association, Providence Water, Salt Ponds Coalition, Rhode Island Audubon Society, Rhode Island Natural History Survey, Rhode Island Sea Grant, Rhode Island Coastal Resources Management Council, Environmental Protection Agency, Fish America Foundation, National Oceanic and Atmospheric Administration, Natural Resources Conservation Service, U.S. Coast Guard, National Fish and Wildlife Foundation, Ducks Unlimited, The Nature Conservancy, Trout Unlimited, and U.S. Army Corps of Engineers.

Least Tern chicks



For additional information or questions, contact:

Sharon Marino, Project Leader U.S. Fish and Wildlife Service Southern New England - New York Bight Coastal Program 50 Bend Road Charlestown, RI 02813 401/364-9124 401/364-0170 fax

Federal Relay Service for the deaf and hard-of-hearing 1 800/877-8339

U.S. Fish & Wildlife Service 1 800/344 WILD http://www.fws.gov August 2009



What is the Southern New England-New York Bight Coastal Program?

The Southern New England-New York Bight Coastal Program (SNEP) is one of 21 coastal programs nationally within the U.S. Fish & Wildlife Service that facilitate local conservation strategies. The SNEP area covers coastal watersheds in seven states, with habitats ranging from shorelines to forest (see map on back page). The staff in the SNEP office carefully selected eight focal areas to concentrate their conservation efforts. These areas are high in biodiversity and are home to endangered or threatened species.

Cooperating for Conservation

From 2004 to 2008, SNEP worked with dozens of partners on 32 projects in our focus areas. This work contributed to the protection, enhancement or restoration of nearly 1,000 acres of habitat and 11 river miles supporting dozens of migratory and federally protected species. SNEP provides technical assistance and in some cases, funding to partners, to achieve on the ground protection, conservation and restoration. Our areas of expertise include: river restoration, fish passage, invasive species control and removal, acquisition assistance and surveying, and monitoring of fish, wildlife and plants and their habitats.



Newly built fishway on the Wood/ Pawtucket River

The Pawtuxet River once supported

annual runs of river herring, shad and Atlantic salmon. Dam construction during the 19th century blocked fish passage into the river system, leading to the decline of the runs. The project will restore fish passage with a partial dam removal, reopening seven river miles of fish habitat in the main stem of the Pawtuxet River. The restoration workgroup partners have collected and reviewed data on sediments, fisheries, water quality, and hydrological data; preformed restoration alternatives and impacts analysis; and conducted public outreach. SNEP staff have provided technical assistance and funds for this project for more than six years.

Lower Pawcatuck River Restoration Team

The Bradford Fishway repair involved the redesign and rehabilitation of the

U.S. Fish & Wildlife Service

Year in Review - 2009

Activities and Accomplishments in the Rhode Island Portion of the Southern New England - New York Bight Coastal Program



The loss of estuarine and nearshore habitat is the greatest long-term threat to the health of our coastal ecosystems.

The following is a summary of activities and accomplishments this federal fiscal year which ends September 30.

Fish Passage Activities

Pawtuxet River Restoration Workgroup

Bradford Fishway to prevent structural failure, improve efficiency and ensure sustained anadromous fish passage to the Pawcatuck River system. By improving fish access to ten miles of upstream spawning and nursery habitat, the team, led by the Wood/Pawcatuck Watershed Association, aims to increase the size of anadromous fish runs. Target species include American shad, river herring, alewife, blueback herring, American eel and brook trout.

Fish Passage Restoration in the Upper Pawcatuck River

Fish passage through the upper Pawcatuck River will be provided by either removing dams or constructing fishways at Fishing Falls Dam, Horseshoe Falls Dam, and Kenyon Dam. The owners of all three dams support of restoring fish passage through the project area. Providing passage at the three dams will restore access to seven miles of riverine habitat and nearly 1,300 acres of spawning or rearing habitat, including the 1,000-acre Worden Pond, on the upper Pawcatuck River. A feasibility study has been completed.

Ten Mile River Fishways with Save the Bay

The Ten Mile River was once home to a historic fish run that supported river herring and American shad, anadromous fish that live as adults in salt water but spawn in fresh water. Dam construction on the Ten Mile River over the last 150 years has prevented herring from swimming upstream to spawn. Each spring, herring return from the ocean to the mouth of the Ten Mile River, remnants of the once abundant fish run A few of these fish make it upstream, thanks to the efforts of local fisherman who scoop the herring up and over the first dam to spawn in the waters of Omega Pond.



Hunt Mill Dam

The Ten Mile River was dammed at its mouth early in the twentieth century to create an industrial water supply, today called Omega Pond. This first dam and the next two dams upstream, the Hunts Mill and Turner Reservoir dams, are the proposed sites for fish ladders, staircase like structures, that allow fish passage over the dams. Building fishways at these three dams will provide river herring with access to approximately 340 acres of spawning habitat and three miles of riverine habitat. This spawning habitat will support a fish run of over 200,000 river herring and potentially 25,000 American shad. SNEP has supported this partnership over the years and will contiue to provide technical expertise to this project.

Habitat Restoration and Protection

Management of Sandy Point Island SNEP biologists have been working with the Avalonia Land Conservancy (Avalonia) on conservation initiatives in coastal Rhode Island and eastern Connecticut including land management plans and active resource management. Sandy Point Island in Little Narragansett Bay is owned by Avalonia and is the site of one of the projects. Sandy Point Island is a beautiful barrier island used by the public for recreation



Piping Plover exclosure at East Matunuck Beach

and is also excellent habitat for beach nesting birds including Piping Plover, American Oystercatcher, and Least Tern as well as important feeding and loafing for the federally endangered Roseate Tern. Working in partnership with Avalonia, SNEP biologists enclosed those areas used by the nesting birds with symbolic fencing. Biologists monitor the birds to assess their success and help determine which areas are safest for the recreating public.

East Matunuck Beach Habitat Restoration

This habitat restoration project was done cooperatively with Rhode Island Department of Environmental Management to enhance 6.5 acres of beach dune and back-dune habitat for Least Tern and Piping Plover nesting at East Matunuck beach in Rhode Island. The project goal was to generate conditions normally created in beach systems from winter storms that irregularly over wash the beaches into the back-barrier salt ponds. Until recent years, this site was regularly used by nesting Least Tern. As shrubby vegetation has overtaken the area due to a lack of storm over wash, terns have not been able to use the site for nesting. After management was completed a nesting pair of Piping Plover successfully used this site during the summer of 2009.

New England Cottontail Habitat *Restoration*

SNEP provided financial support to Rhode Island Department of Environmental Management (RI DEM) to restore five acres of degraded pitch pine-scrub oak barrens at Arcadia Management Area for New England cottontail. Creating an open canopy will stimulate natural regeneration of native grasses, forbs, sedges and lichens associated with these natural communities. This project benefits shrubland dependent migratory birds like American Woodcock, Prairie Warbler, 😤 Blue-winged Warbler and Eastern Towhee. SNEP is also working with the RI DEM and Rhode Island Natural

Resources Conservation Service to provide GIS mapping support to identify locations of New England cottontail use and important areas for future management actions.

Cards Pond Tidal Circulation Restoration

A SNEP biologist provided biological and engineering suggestions to the restoration team to improve water circulation and movement in the four Cards Ponds by replacing undersized culverts with larger culverts or walk-over structures. One hundred thirty meters of former tidal channel will be restored to improve tidal flow and circulation between adjacent ponds. Partial funding for the restoration was provided by **SNEP** Coastal Program and Partners for Wildlife though the competitive U.S. Fish & Wildlife Service Northeast Region grant programs.

This is a multi-phase project that has already removed 27 acres of invasive *Phragmites* along the shoreline and coves. The long-term vision of this partnership with Ducks Unlimited, Rhode Island Department of Environmental Management, Town of Charlestown and the Rhode Island National Wildlife Refuge Complex is to complete a landscape-scale restoration that will return coastal wetlands and ponds to sustainable, functioning wildlife habitat for wetland-dependent species and migratory birds.

Narrow River Grassland Enhancement

The Narrow River Land Trust owns a 25-acre parcel of land in the coastal zone of Rhode Island adjacent to portions of the Rhode Island National Wildlife Refuge Complex. The property borders the tidal portion of the Narrow River and consists of salt marsh, ten acres of adjacent fields, and coastally influenced forest land. The land trust's primary goal has been to maintain the field habitat as coastal grasslands and shrub to benefit native wildlife, with a secondary goal of accommodating public access to the land and adjacent water. SNEP staff plan



New England cottontail



Spraying Larkin Pond and perform the mowing each year, coordinating with the land trust, adjacent land owners and refuge staff.

Invasive Species Management

Invasive Species Inventory, Management and Education SNEP has partnered with the Rhode

Island Natural History Survey to conduct invasive species inventories. SNEP will provide financial and staff support in fiscal year 2009 to conduct these inventories on Providence Water property, The Nature Conservancy preserves, land trust properties, state land, and refuge land. These inventories will help to develop treatment recommendations for landowners; assist with targeted purple loosestrife biocontrol and *Phragmites* control; to provide outreach and training to raise the awareness of invasives in Rhode Island; and increase the level of early detection and rapid response efforts in the state. Partners will use the information gained identified in the agreement to manage their lands for the benefit of migratory birds and other trust species.

Long Pond, Tucker Pond and Larkin Pond Phragmites Control

Three freshwater ponds located in the forested upland within the glacial moraine in South Kingstown lack any significant input or drainage streams; they also have minimal human development around their shores and support a diverse set of plants and animals, including some on the Rhode Island state rare-species list. The multiyear plan is to eradicate *Phragmites* along the shores of the ponds before it spreads and becomes more costly to control. Trained herbicide applicators met with U.S. Fish & Wildlife Service biologists at the pond to review treatment protocols and identify the plants needing treatment as well as the rare plants to avoid when applying the herbicide.

Habitat inventory and Assessment

Rhode Island For a number of years, SNEP has provided assistance to the U.S. Coast Guard Captain of the Port Area Committee in Providence. SNEP biologists provide biological expertise for prioritizing sensitive habitats along the coast; this information is critical for the Coast Guard's oil spill contingency plan and other efforts. The importance of such planning cannot be overestimated in terms of its value on the coastal environment; four billion barrels of oil and two billion barrels of gasoline move through the area annually, as do 173 vessels, 40 to 60 cruise ships and 3.6 million ferry passengers.

Eelgrass Mapping Surveys

Eelgrass beds are among the richest and most productive of all biotic communities, providing a diversity of habitats for marine life. Eelgrass is an endangered habitat in Rhode Island waters, with only a fraction of the once thousands of acres remaining. Since 1996, SNEP has been an active participant in regional eelgrass mapping, including the mapping of eastern Long Island Sound in 2002 and 2006. SNEP received the Coastal America Award in 1997 as part of the Rhode Island Eelgrass Team for the first aerial mapping of eelgrass resources in Narragansett Bay. This year we are in partnership with the University of Rhode Island, Rhode Island Department of Environmental Management and the Narragansett Bay National Estuarine Research Reserve to map the eelgrass resources on the coastal ponds from the Massachusetts border to the Connecticut border. We are also working with this group to develop a rapid assessment methodology that could be used annually in between years when aerial photos are not available.



Oil Spill Contingency Planning in

SNEP also supports Save the Bay on their pilot eelgrass restoration project in the coastal salt ponds and Little Narragansett Bay to determine the feasibility of larger scale restoration.

Rhode Island Ocean Special Area Management Plan Roseate Tern Work SNEP biologists/boat captains have been engaged by the University of Rhode Island and the Coastal Resource

Management Council to provide biweekly cooperative surveys of the Rhode Island Sound to document Federally endangered Roseate Tern use of the area. The Rhode Island Ocean Special Area Management Plan is a proactive effort to understand the resources and user conflicts that are present in the offshore Rhode Island area and to provide a basis for siting energy and other infrastructure in appropriate zones.

Salt Pond Coalition

SNEP is working with the Salt Pond Coalition to provide mapping support and analysis on the impacts of development to wetlands in coastal towns.

SNEP Supports Partner Conservation Rhode Island Coastal Habitat

Restoration Trust Fund

SNEP represents the Service on a team responsible for implementing the Rhode Island Coastal Habitat Restoration Program and Oil Spill Trust Fund. The trust fund allocates annual funding to groups for coastal habitat restoration projects. Six projects were recommended for funding in fiscal year 2008 for a total of \$225,000, which leveraged an additional \$4 million. The projects restored habitat, with a strong emphasis on fish passage, salt marsh restoration work and mosquito abatement.