# 2018-22 Impact Report


## Southeast New England Program

## Watershed Implementation Grants

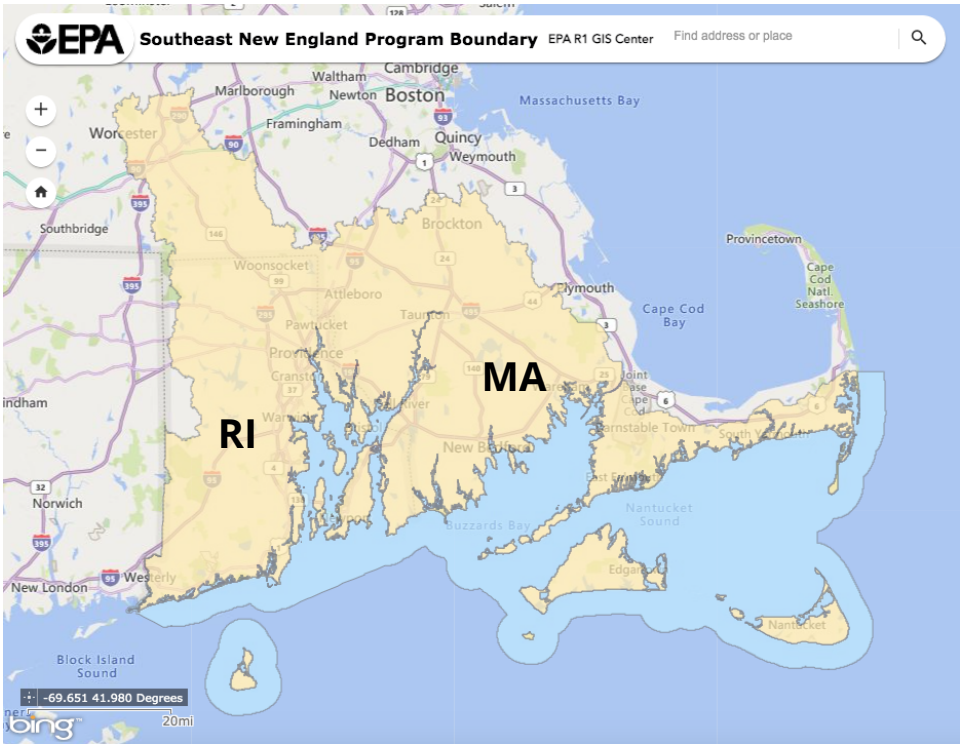
SNEP
Watershed Implementation Grants

# ABOUT SNEP

In 2012, Congress tasked the U.S. Environmental Protection Agency (EPA) with convening and leading a comprehensive regional effort to protect, enhance, and restore the coastal environment of southern New England. To meet this challenge, EPA Region 1 in Boston established the Southeast New England Program (SNEP). Today, SNEP is a leader in environmental policy and action, bringing together hundreds of organizations in a shared effort to tackle the region's most pressing environmental challenges.

Since its inception, SNEP has provided more than $37 million to communities and organizations working to restore coastal ecosystems in Rhode Island and Southeastern Massachusetts. The work of the program is guided by the SNEP Strategic Plan, developed with input from stakeholders throughout the region. The Strategic Plan's vision for Southeast New England is built on three goals:

- A resilient ecosystem of safe and healthy waters;
- Thriving watersheds and natural lands; and
- Sustainable communities.




The geography of the SNEP program is defined on an ecosystem basis, encompassing all coastal waters between Long Island Sound to the west and Cape Cod to the east, fresh waters flowing into these coastal waters, and the watershed lands or drainage areas that are the source of these fresh-water flows. The SNEP region, therefore, includes nearly all of Rhode Island and much of Southeastern Massachusetts, extending as far north as Worcester and Brockton, MA, the headwaters of the Blackstone and Taunton Rivers, respectively, which flow into Narragansett Bay. It encompasses small and large estuaries, including Narragansett and Buzzards Bays, as well as the inshore and offshore islands of Rhode Island and Southeastern Massachusetts, such as Block Island, Nantucket and Martha's Vineyard.

*Cover: At work on the Woonasquatucket River Greenway. Photo courtesy of WRWC.*

# ABOUT SWIG GRANTS

The SNEP Watershed Implementation Grants (SWIG) program funds the achievement of SNEP's vision and goals by supporting programs, projects and partnerships that restore clean water, healthy ecosystems and sustainable communities throughout the region. In 2017, EPA partnered with Restore America's Estuaries (RAE) under a cooperative agreement to manage the SWIG program. Since then, SWIG has completed four annual grant rounds, awarding 52 grants totaling more than $10.3 million. Grantees and partners are contributing an additional $6 million in non-federal match. This report covers the first four years of this continuing partnership.

SWIG has supported more than 150 organizations throughout the SNEP region. SWIG directly funds municipalities, non-profit organizations, universities, state agencies, regional planning organizations, tribal governments and others; indirectly, much of SWIG's funding supports private-sector firms engaged in engineering, construction, legal services and other support work. RAE provides technical support to all SWIG grantees along with rigorous fiscal and programmatic oversight to ensure that SWIG grants, which are federal funds, adhere to legal requirements and best practices while maximizing the benefit to communities.

Each community in Southeast New England is unique; yet there are common needs and challenges across the SNEP region. SWIG takes a grass-roots approach to grantmaking, ensuring that projects are developed at the community level to meet local needs, with strong support from the stakeholders who will implement them.

*Nick Nelson of Inter-Fluve at the Childs River restoration site.*

In a region as diverse as Southeast New England, this approach has led SWIG to fund a remarkable variety of projects, all of which support SNEP goals. Individual grants can be as large as $500,000 and are generally awarded for two years, allowing grantees to develop and implement large and complex projects that would be difficult to fund with other sources.

In managing the SWIG program, RAE developed innovative approaches to grants management that broaden the reach of SNEP funding and ensure social, environmental and geographic equity in grant making. For example, RAE provides technical assistance to grantees in order to ensure that smaller organizations with limited administrative or programmatic capacity can successfully execute complex SNEP projects. This approach builds capacity among local organizations, strengthens stakeholder networks, and connects them with one another, bolstering the ecosystem of stewardship organizations working to improve the environment of Southeast New England. The program relies on an interdisciplinary, inter-agency Application Review Committee to advise RAE and EPA on award decisions, ensuring rigorous technical and programmatic review of applications. In making awards, RAE pays close attention to geographic diversity, funding projects throughout the SNEP region; project diversity, funding a wide variety of solutions, both innovative and established; and environmental justice (EJ), ensuring that historically underrepresented communities are fairly served by the program.

Over the past four years, SWIG grants have funded clean-water restoration projects such as stormwater management; wetland restorations including salt marshes and former cranberry bogs; dam removal projects to restore river ecology; "green streets" and other urban restorations; environmental job training in EJ communities; municipal training; environmental research and monitoring; and innovative technologies to improve water quality. SWIG has funded large-scale, multi-community and interstate collaborations that could not have been funded through individual state grant programs. And SWIG facilitates knowledge-sharing through meetings, conferences, webinars, publications and outreach – ensuring that practitioners, scientists and stakeholders throughout the region can benefit from the experience of each SWIG-funded project.

*With funding from a 2020 SWIG grant, Buzzards Bay Coalition and Save The Bay scientists tested innovative techniques for improving salt marsh resilience to climate change impacts on Buzzards Bay. Photo courtesy of BBC.*

# NEW GRANTS - 2021

In 2021, SWIG awarded 14 grants in Rhode Island and Massachusetts totaling nearly $2 million, including several important projects in environmental justice communities. SWIG21 is supporting greenway and public park development in Pawtucket and Woonsocket, RI; wetland restoration in Worcester and Harwich, MA; coastal resilience work in Tiverton, RI and New Bedford, MA; river restoration in Warren and Middletown, RI; and stormwater management throughout the region. Like all SWIG-funded work, each of these projects was developed by the grantee community and will provide multiple benefits to the community. The New Bedford grant, for example, will fund Groundwork South Coast to provide job training for at-risk youth while restoring clean water and public access in a neighborhood that's been disproportionally affected by industrial pollution. The Woonsocket grant will support the City's effort to redevelop Truman Drive, removing pavement to increase public greenspace, beautify the historic downtown, treat urban runoff before it can reach the Blackstone River, and foster economic development in this EJ community. The Warren grant is supporting the Bristol County Water Authority's efforts to remove two dams from the Kickemuit River, restoring clean water, fisheries and estuarine habitat on Narragansett Bay while increasing coastal resilience in the face of climate change.

# LOOKING AHEAD

*Commercial Fisheries Research Foundation is working to remove "ghost fishing gear" from Rhode waters with the support of a 2021 SWIG grant. Photo courtesy of CFRF.*

In 2022, SWIG will award up to $1.85 million to support communities and organizations in Rhode Island and Southeastern Massachusetts working to restore clean water, healthy ecosystems and sustainable communities. In addition, we'll be working with EPA and the SNEP Network to share the experiences of SWIG grantees and other SNEP stakeholders through workshops, webinars and other venues – fostering regional learning and, together, improving our collective ability to protect, enhance, and restore coastal waters and watersheds throughout Southeast New England.

# PROJECT HIGHLIGHTS

Here are just a few examples of recently completed SWIG projects. A complete list of SWIG grants, 2018-2021, is provided at the end of this report, while more information on all these projects is available at snepgrants.org.

**Providence Stormwater Innovation Center – $177,532 – Audubon Society of Rhode Island**

In 2019, SWIG provided start-up funding to launch the Providence Stormwater Innovation Center (PSIC), a partnership between the Audubon Society of RI (ASRI) and the City of Providence. PSIC is headquartered at Roger Williams Park, a 435-acre city park which provides greenspace to hundreds of thousands of visitors annually, including nearby EJ communities in Providence and Cranston. PSIC works to install stormwater practices at the Park; monitor the results of the installations; and provide training to municipalities, non-profits and others in stormwater construction and maintenance. PSIC also has education and outreach efforts in the community to raise awareness about stormwater, green infrastructure and water quality through volunteer monitoring programs, school outreach programs, and a neighborhood arts and science festival. PSIC's work is providing cleaner water for a series of shallow, connected lakes located within the Park, ultimately benefiting downstream waters in the Pawtuxet River and Narragansett Bay. Following the initial SWIG grant, PSIC received funding from the Robbins de Beaumont Foundation, the SNEP Network, the RI Department of Transportation, the City of Providence, the Narragansett Bay Estuary Program and ASRI members, establishing a sustainable institution to help achieve SNEP's goal of building knowledge and practice to improve capacity for stewardship throughout the SNEP region. In addition to ASRI and the City, partners contributing to the project include The Nature Conservancy, University of Rhode Island (URI), University of New Hampshire Stormwater Center, RI Dept. of Environmental Management, RI Dept. of Transportation, the SNEP Network, and the RI Green Infrastructure Coalition.

*Water quality monitoring at Roger Williams Park*
*Photo courtesy of PSIC.*

*Members of the Childs River restoration team on site.*

**Childs River Restoration – $695,000 (two grants) – Falmouth Rod and Gun Club**

The Childs River is a stream in Falmouth, on Cape Cod, that flows southward into the coastal waters of Nantucket Sound. The river was once surrounded by natural wetlands such as Atlantic cedar swamps but, during the 19th century, the wetlands were converted to cranberry production. Cranberry bogs—the iconic Cape agriculture—have been becoming less profitable there, and many owners have discontinued harvesting. Left fallow, the bogs have little ecological or habitat value. SWIG awarded two grants, in 2018 and 2019, to a partnership led by the Falmouth Rod & Gun Club and Association to Preserve Cape Cod for an innovative project to restore more than 30 acres of former cranberry bogs back to more natural wetlands. The partnership removed a small dam, re-established ponds and stream channels, and planted the area with wetland trees. Dozens of other wetland plants sprung up from century-old seeds hidden in the soil. Today, native brook trout and other wildlife are returning to the Childs River, and the area is now open to the public for hiking and other outdoor recreation. Cranberry bog restoration is an example of SWIG's ability to build regional capacity for restoration: the Harwich Conservation Trust used the experience gained at Childs River to design a bog restoration in Harwich, to which SWIG awarded a separate $146,700 grant in 2021.

**Pawtucket Green Streets – $376,490 – City of Pawtucket, RI**

In June, 2022, the City of Pawtucket, RI, completed work on a "green streets" project funded by SWIG and the RI Infrastructure Bank. With these grants, the City completely redesigned a blighted post-industrial city street and installed a variety of green infrastructure features along it, as well as safety and amenity improvements for pedestrians and cyclists. The green streets project is part of a new "transit-oriented district," or TOD, that the City is developing around the construction of a new commuter rail station. The completed project is improving water quality in the watershed of the Blackstone River, Narragansett Bay's largest tributary, by reducing stormwater runoff of nutrients and bacteria. Beyond its water quality goals, however, the work provides multiple benefits to the community – reducing the "heat island" effect of unbroken impervious surface; beautifying the area; improving transportation options; and creating new opportunities for economic development in an environmental justice community. Since stormwater practices such as those installed along Pine Street require proper maintenance in order to function in future years, the City developed training videos and a maintenance manual for Pawtucket public works employees, which will also help other municipalities with similar needs. While the project will benefit the community and the environment of Pawtucket, its impact will extend throughout the SNEP region. To access the training videos and manual, click **HERE**.

**Three Bays Restoration – $595,000 (two grants) – Association to Preserve Cape Cod**

The Three Bays Watershed is the drainage basin for several interconnected estuaries on the South Shore of Cape Cod: North Bay, West Bay, Cotuit Bay, Prince Cove and the Seapuit River. Land uses in this densely populated watershed generate stormwater runoff, polluted by nutrients and pathogens, that degrades estuarine habitats and limits human uses of the estuaries. In order to improve water quality, reduce shellfish and beach closures, and restore habitat for fish, shellfish and other wildlife in the Three Bays, the Association to Preserve Cape Cod (APCC) initiated an integrated approach to estuarine restoration, including improvements to stormwater management through green infrastructure installation as well as education and outreach aimed at changing behaviors to reduce use of fertilizers and chemicals on lawns. In partnership with the Town of Barnstable and Horsley Witten Group (HWG), APCC completed a six-year, $2 million project that supported planning, assessment, design, permitting, construction, and maintenance of green infrastructure best management practices (BMPs) within the watershed. In addition to SNEP, the project was funded by the Mass. Office of Coastal Zone Management.


The Three Bays project began with a watershed-scale assessment and comprehensive stormwater management plan. APCC used the plan's guidance, along with community input, to construct nine BMPs, including three bioretentions, a sand filter, a gravel wetland, and four dry swales. These installations have greatly reduced the amount of suspended solids, bacteria, and nutrients flowing into the Three Bays system. In addition to its on-the-ground results, the project served to increase municipal capacity to better address stormwater management in the Three Bays watershed, Town of Barnstable, and across the region. APCC and HWG provided training to the town staff on maintaining the BMPs. As a result of the Three Bays Project, the Town initiated an annual capital funding program for funding stormwater improvements at impaired ponds. This program requires low impact development and nature-based solutions where possible, and provides funds that can be used to leverage grant requests. Using this new source and the Three Bays management plan, the Town is constructing additional stormwater BMPs. The Three Bays project has become a regional model for partnership between non-profit organizations and municipalities in restoring estuarine water quality, leading to similar projects elsewhere on Cape Cod.

*Crews construct stormwater BMP's in Three Bays. Photo courtesy of Gerald Beetham, APCC.*

**Wetland Restoration at Bristol Golf Course – $300,000 – Town of Bristol, RI**
Bristol's municipal golf course is a nine-hole course, surrounded by dense industrial and residential uses. The course is located on 26 acres of land that were once a wetland forest, the headwaters of two important estuaries on the east side of Narragansett Bay – Bristol Harbor and the Warren River.

With support from SWIG, the Town of Bristol restored freshwater wetlands at the golf course in order to reduce runoff of nutrients and bacteria from the course to the two downstream waterbodies, which are valued for swimming, fishing, shellfishing, boating, and many other recreational and commercial uses. In addition to its water quality benefits, the work reduced flooding, restored wetland ecology, and substantially improved the playability of the golf course, enhancing public access and enjoyment of the property.

The restoration work removed or reconfigured the man-made ponds, restored natural streams and streambanks, and replanted native shrubs, trees and grasses. Previously, the golf course provided an ideal habitat for Canada geese. The geese fed in large numbers throughout the fall and winter on the golf course, and with no buffer between the turf and wetland areas, goose waste washed directly into ponds and streams. By replanting areas adjacent to streams and ponds, the project reduced the feeding area for geese, reduced the amount of nutrient-rich runoff from the managed turf, and created a natural filter between the streams and surrounding developments. The project included a robust public outreach and engagement component with many stakeholders, including Bristol Dept. of Parks and Recreation, Golf Course Committee, Save the Bay, Save Bristol Harbor, Mt. Hope High School, and the Bristol Conservation Commission. Volunteers from these organizations provided input into the project design and assisted in the field, planting over 2,000 native shrubs and trees. In addition to SWIG, funding for the work was provided by the R.I. Dept. of Environmental Management and the R.I. Infrastructure Bank.

**Collaboration to Reduce Nitrogen to Buzzards Bay – $537,281 (two grants) – Buzzards Bay Coalition**
Beginning in 2015, the Buzzards Bay Coalition (BBC) brought together the towns of Wareham, Bourne, and Plymouth, Mass., along with the Mass. Maritime Academy (MMA), to develop a regional approach toward reducing nitrogen pollution in two of upper Buzzards Bay's most critically impaired sub-estuaries: the Agawam/Wareham River and Buttermilk Bay. With funding from SNEP, the partnership examined the feasibility of increasing the capacity of the Wareham wastewater treatment plant and relocating its outfall pipe, thereby greatly reducing the need for individual septic systems in the watershed. The initial study found that the

proposal was feasible, and that it would eliminate 90,000 pounds per year of nitrogen pollution, a very significant reduction. In addition to its ecological advantages, the project will have important economic benefits by removing constraints on downtown redevelopment, and by allowing campus growth at MMA. In 2018 and 2020, SWIG awarded BBC grants to fund critical work on the project, including ecological studies necessary to relocate the outfall; engineering studies to support plant expansion; and economic studies to help determine the ultimate costs and benefits of the project. As the benefits of the project became apparent, the Town of Marion joined the partnership, which is now pursuing next steps toward implementation of the proposal.

*The Cape Cod Canal is part of the study area for BBC's nutrient reduction project. Photo courtesy BBC.*

**Market to Metacom (M2M) Sustainable Design – $90,000 – Town of Warren, RI:**
In 2020, SWIG awarded a grant to the Town of Warren, RI, for an innovative neighborhood planning project aimed at fostering clean water and climate adaptation while promoting economic redevelopment in a vulnerable coastal community. This plan is a model for combining green infrastructure and climate change response to incentivize private investment while improving the environmental and economic resilience of the community. The M2M project engaged municipal residents and leaders in discussions about adapting to sea-level rise and restoring coastal ecology, while reimagining the development of an auto-centric commercial zone into a true mixed-use, sustainably redesigned neighborhood. The Town is now pursuing the recommendations of the project, moving forward with plans to relocate threatened properties, restore vulnerable areas, and re-zone underutilized districts for mixed-use redevelopment.

**Water Quality Monitoring Buoys in Narragansett Bay – $300,000 – R.I. Dept. of Environmental Management**

The Narragansett Bay Fixed-Site Monitoring Network (NBFSMN) is an array of water quality monitoring stations in Narragansett Bay. Since 2005, the Network has operated as a successful multi-agency partnership, coordinated by the RI Dept. of Environmental Management (RIDEM), in partnership with the Narragansett Bay Commission (NBC), Narragansett Bay National Estuarine Research Reserve (NBNERR), University of Rhode Island's Graduate School of Oceanography (URI-GSO) and the Massachusetts Dept. of Environmental Protection.

The NBFSMN includes 14 monitoring stations operated from buoys and from land-based locations such as docks. The stations record water quality data (temperature, salinity, dissolved oxygen, depth, pH, and surface chlorophyll) every 15 minutes at near surface and bottom locations, capturing ecological events that occur on short time scales (hours to days) or during times when it is impractical to deploy field crews. Extensive effort goes into quality control and review of the large dataset generated annually.

In 2018, SWIG provided funding to RIDEM to purchase equipment to upgrade select stations within NBFSMN, and to improve public access to the data. Due to outmoded equipment, real-time data transmission from these stations had been lost. During the first year of the project, RIDEM's Office of Water Resources, working with URI, purchased and operated the upgraded equipment which was initially installed at three stations in the NBFSMN: North Prudence (NP), Conimicut Point (CP) and Poppasquash Point (PP). These stations are detecting improvements in water quality due to nutrient pollution reductions from wastewater treatment plants and other management efforts. The equipment replaced included new buoy structures, electronic components, sondes, sensors, cables, and modems for data transfer.

Installation of the upgrades, which involved calibration, testing and deployment, was completed in early July 2019. The upgrades restored the capability to transmit data in real-time. In addition, RIDEM used remaining SWIG grant funds in combination with other funding to upgrade a fourth station at the Mt. View location in 2020 and enhance its reliability. As a result of SWIG's investment, four important stations in the NBFSMN were upgraded to reliably operate with reduced maintenance and disruptions. A second aspect of this project was enhancing access to NBFSMN data. Following the upgrades and beginning in 2019, RIDEM and URI expanded real-time data sharing via an agreement with the New England Regional

*A monitoring buoy in Narragansett Bay. Photo courtesy of RIDEM.*

Association of Coastal Ocean Observing Systems (NERACOOS). The upgraded station data has been made publicly available in near-real time on the NERACOOS website, which also provides for automated data visualization tools including graphing. As a result of the project, data from seven NBFSMN stations are now available via NERACOOS. During 2020, RIDEM and URI-GSO made use of the NERACOOS visualization tools to more quickly assess water quality conditions during the investigation of fish kills in Narragansett Bay. Looking ahead, RIDEM and URI-GSO will continue to collaborate with NERACOOS and other partners on further enhancements to their data portals. In 2020, SWIG awarded a similar, separate grant of $301,289 to URI-GSO to install and operate additional monitoring stations in Mt. Hope Bay as part of the NBFSMN.

Narragansett Bay Fixed-Site Monitoring Network (NBFSMN) data may be accessed **HERE**.

**Water Quality Restoration on Pleasant Bay – $382,178 (two grants) – Pleasant Bay Alliance**
The Pleasant Bay Alliance is a partnership between four municipalities, Chatham, Harwich, Orleans, and Brewster, working together to restore clean water to Cape Cod's largest estuary, Pleasant Bay. In 2018, the Alliance made history by receiving Massachusetts' first multi-town or watershed-wide permit for water quality management from the Mass. Dept. of Environmental Protection. As nitrogen is the principal ecological concern for Pleasant Bay, the permit outlines the steps the towns will take individually and collectively to address nitrogen pollution. The shared permit structure allows for more efficient and effective management strategies on a watershed basis. In 2018, SWIG funded a number of innovative actions to implement the permit and reduce nitrogen in the Bay, including:

- Studying the potential for using advanced septic systems in Brewster to reduce nitrogen discharge;
- Developing a successful program to reduce nitrogen in Lonnie's Pond, Orleans, through shellfish aquaculture;
- Developing a pilot program for nitrogen "trading" – sharing responsibilities and benefits of nitrogen reduction among the four towns; and
- Updating environmental data and computer models necessary for management, including tidal circulation, water quality and nitrogen loading models.

A 2020 SWIG grant, now in process, will support additional work to reduce nitrogen loads through further modeling work and by assessing the potential for applying nitrogen removal credits to stormwater management. A separate 2020 grant to the Center for Coastal Studies funded a conference, held in 2022 due to the pandemic, to report on Pleasant Bay science and management to stakeholders and the scientific community. Thanks to the commitment of the four municipalities and with the support of SWIG, the Pleasant Bay Alliance has become a regional model for intermunicipal collaboration on clean water, and is already serving as  as an example for other communities in the SNEP region.

**Modeling Groundwater in Coastal Environments – $474,633 – University of Rhode Island**
Many SWIG grants are aimed at reducing the impacts of stormwater – overland flows that carry nutrients and other pollution into rivers, streams and coastal waters. But groundwater also flows into coastal waters, both directly and indirectly, and its impact on nutrient pollution is poorly understood. In 2018, SWIG awarded a grant to URI-GSO to study nutrient flows in groundwater, looking comparatively at two coastal areas: Greenwich Bay, on the west shore of Narragansett Bay, and the coastal ponds of Rhode Island's South Shore. The team utilized intensive on-site data collection as well as computer modelling to estimate nutrient flows in groundwater. Despite substantial challenges presented by the pandemic, the researchers successfully completed the study, concluding that groundwater is a significant, unaccounted-for source of nutrients to Narragansett Bay and coastal Rhode Island. These findings will inform the work of water quality managers in Rhode Island and beyond in understanding the role of groundwater in coastal ecology, and in setting targets for water quality restoration where groundwater is a factor in nutrient loadings to estuaries.

**Regional Water Resources Data for Cape Cod – $399,998 – Cape Cod Commission**
Cape Cod is home to a vast array of water quality information – data sets, ecological models and other tools for restoring and conserving clean water. The need to preserve the Cape's exceptional water resources, coupled with a strong regulatory environment, spurred decades of water quality research, modeling and data collection. Today, there is more research and monitoring underway than ever, adding gigabytes of data annually for use in restoring clean water. Until recently, however, there was no central archive where researchers and stakeholders could access this information. In 2018, SWIG awarded a grant to the Cape Cod Commission to create the SNEP region's first comprehensive water resources database. To develop the database, the Commission compiled historical and current datasets from multiple monitoring programs and hundreds of sampling stations around the Cape; developed uniform standards for quality control; and created an online, map-based system that allows users to easily access a wide variety of water quality data. The Commission worked with data users, such as municipalities, state regulators, and the scientific community, to understand users' needs, and built an online toolbox which allows users to explore, filter, and analyze the data, for example by graphing and evaluating water quality trends over time. The Commission is continuing to build the website and database, with a new initiative to incorporate freshwater pond data. The Commission's on-line resource is a major improvement in the availability of water resources data for Cape Cod, useful to stakeholders and resource managers alike, and a model for regional environmental data management nationwide.

Access the Commission's database **HERE.**

**For More Information:**
For more information about SNEP Watershed Implementation Grants, visit snepgrants.org or contact Tom Ardito, SWIG Program Director, at Restore America's Estuaries.

**SNEP Watershed Implementation Grants 2018 – 2021**
These tables list all SWIG grants awarded from 2018 – 2021. More information about specific projects, including final reports and other work products, visit snepgrants.org

| 2018 Grantees | Project Title | Grant |
|---|---|---|
| Town of Bristol | Restoring Silver Creek at the Bristol Golf Course | $300,000 |
| City of Pawtucket | Pine Street "Green Streets" Project | $376,000 |
| RI Dept. of Environmental Management | Water Quality Monitoring Buoys in Narragansett Bay | $300,000 |
| Save the Bay | Plan to Restore Water Quality in 100-Acre Cove | $132,000 |
| University of Rhode Island | Modelling Groundwater in Coastal Environments | $475,000 |
| RIDEM | Modeling Nutrient Loadings to the Pawcatuck River | $450,000 |
| Association to Preserve Cape Cod | Three Bays Stormwater Remediation | $350,000 |
| Buzzards Bay Coalition | Collaboration to Reduce Nitrogen to Buzzards Bay | $419,000 |
| Cape Cod Commission | Regional Water Resources Data for Cape Cod | $400,000 |
| Falmouth Rod & Gun Club | Childs River Dam Removal & River Restoration | $450,00 |
| Martha's Vineyard Commission | Permeable Reactive Barrier for Lagoon Pond | $250,000 |
| Pleasant Bay Alliance | Estuarine Water Quality Restoration on Pleasant Bay | $250,000 |
| New England Interstate Water Pollution Control Commission | Low-Gradient Coastal Index of Biotic Integrity | $250,000 |
| Southeast Regional Planning & Economic Development District | Municipal Collaboration in the Taunton River Watershed | $100,000 |

| 2019 Grantees | Project Title | Grant |
|---|---|---|
| Audubon Society of RI | Providence Stormwater Innovation Center | $177,534 |
| City of Cranston | Green Infrastructure at Spectacle Pond | $187,500 |
| Groundwork Rhode Island | Green Infrastructure Training & Employment | $198,891 |
| City of Newport | Non-Structural Stormwater Approaches | $108,750 |
| Northern Rhode Island Conservation District | Healthy Farm, Healthy Watershed | $113,976 |
| Town of Warren | Storm Water Management at Public Right-of-Ways | $25,000 |
| Woonasquatucket River Watershed Council | Woonasquatucket River Greenway | $245,000 |
| Association to Preserve Cape Cod | Three Bays Stormwater Remediation | $245,000 |
| Buzzards Bay Coalition | Fostering Salt Marsh Resilience | $223,533 |
| Falmouth Rod & Gun Club | Childs River Dam Removal & River Restoration | $245,000 |
| Mass. Maritime Academy | Buzzards Bay Stormwater Collaborative | $176,581 |
| Woods Hole Oceanographic Institution | Validation of Permeable Reactive Barrier | $298,598 |
| Buzzards Bay Coalition | Prevent Nutrients from Composting in Coastal Waters | $27,695 |

| 2020 Grantees | Project Title | Grant |
|---|---|---|
| Town of Warren | Market to Metacom Sustainable Design | $91,875 |
| City of Providence | Woonasquatucket River Greenway | $250,000 |
| RI Division of Marine Fisheries | Oyster Conservation & Planning | $150,000 |
| Town of South Kingstown | Green Hill Pond Stormwater Management | $100,000 |
| University of Rhode Island | Mt. Hope Bay Water Quality Monitoring | $301,289 |
| Pleasant Bay Alliance | Estuarine Water Quality Restoration on Pleasant Bay | $132,178 |
| Buzzards Bay Coalition | Collaboration to Reduce Nitrogen in Buzzards Bay | $118,275 |
| Friends of Brass River | Upper Bass River Watershed Restoration | $253,779 |
| Mt. Holyoke College | Bioreactors for Nitrogen Removal at Cranberry Farms | $232,352 |
| Center for Coastal Studies | Ecosystem Research in Pleasant Bay | $8,984 |
| Mass Audubon | Estuarine Water Quality Restoration on Pleasant Bay | $150,000 |

| 2021 Grantees | Project Title | Grant |
|---|---|---|
| Groundwork Southcoast | New Bedford North End Resilience District | $100,000 |
| Mass Audubon | Broad Meadow Brook Wetland and Stream Restoration | $74,800 |
| Sheriff's Meadow Foundation | Roth Woodlands Stream Restoration | $138,842 |
| Harwich Conservation Trust | Hinckleys Pond Eco-Restoration Project | $146,700 |
| Association to Preserve Cape Cod | Stormwater Management at Public Boat Ramps | $148,871 |
| Bristol County Water Authority | Kickemuit River Estuary Restoration | $80,000 |
| City of Woonsocket | Truman Drive Green Infrastructure Parkway | $187,500 |
| Town of Middletown | Maidford River & Floodplain Restoration | $121,800 |
| Groundwork Rhode Island | Green Infrastructure Maintenance | $238,274 |
| Commercial Fisheries Research Foundation | Ghost Gear Removal Program for Rhode Island | $17,385 |
| City of Cranston | Green Infrastructure at Spectacle Pond | $150,000 |
| Clean Ocean Access | Land to Sea Speaker Series | $15,000 |
| Town of Tiverton | Tiverton Fogland Beach Resiliency Project | $34,700 |
| City of Pawtucket | Tidewater Landing - Green Space and Redevelopment | $300,000 |

# THANKS TO OUR PARTNERS!

The success of the SNEP Watershed Implementation Grants program would not be possible without support from Restore America's Estuaries' project partners: The U.S. Environmental Protection Agency, Region 1, and the SNEP Network.

EPA

RESTORE AMERICA'S ESTUARIES

SNEP NETWORK


*Restoring salt marsh resilience on Buzzards Bay. Photo courtesy of BBC.*