

FY 2021 -  
FY 2022



# Year in Review: 2021

This has been another an exciting year for our Program under extraordinary circumstances.  
This document highlights FY21 program accomplishments.

## Our Program

In FY21, EPA-SNEP allocated over \$4.4 million in grant funding to support our Program partners, fund EPA-led grant efforts, continue the offering of no-cost regional technical assistance through our SNEP Network; and allocated over \$1.75 million across 14 implementation grants through our Implementation Grants Program this year alone, which leveraged an additional \$1.85 million in matching funds. In a year of entirely remote work, SNEP staff have worked to implement the first year of our strategic plan, which was developed in 2020, in the following ways:

**Watershed-Scale Implementation.** SNEP launched the Pilot Watersheds Initiative with the selection of four inaugural Pilot Watershed grants, one in each of the major SNEP sub-areas (Narragansett Bay, Cape Cod, the Islands, and Buzzards Bay). These Pilots will demonstrate ways to address common regional environmental challenges. Each project will receive \$750,000 over five years. More information about each Pilot can be found on the [SNEP website](#).

**Report to Congress.** We [responded to a Congressional request](#) detailing the goals and structure of our Program. Specifically, summarizing the successes of the SNEP Network in its mission to provide no-cost technical assistance to increase the capacity of community organizations throughout the Region since its inception in 2019.

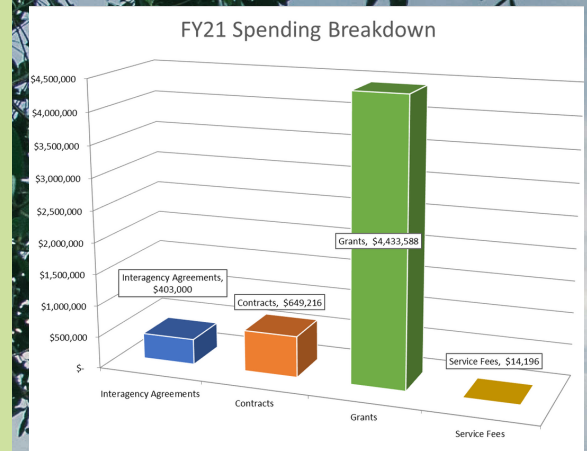
**Tracking Program Success.** We have been engaging with Committee and Subcommittee members to develop program and project metrics and indicators to track the success of future SNEP work. These metrics and indicators will be compiled into a new dashboard, which will be posted to our website. These efforts will support future SNEP project tracking and regional monitoring, and inform our State of the Region report in 2025.

**Renewed Partnerships.** SNEP has renewed its cooperative agreement with Restore America's Estuaries (RAE) to manage our Watershed Implementation Grants (SWIG) program through 2028. Through this effort, RAE will continue to competitively award funding to support local restoration and climate adaptation activities throughout the SNEP region. In FY21, EPA-SNEP provided \$2.2 Million dollars to the SNEP Watershed Implementation Grants program and \$866,000 to the SNEP Network.

**Improved Outreach.** Since launching our newsletter in 2019 we've constantly adapted format and content based on the needs of our community. We've revamped our newsletter to focus more heavily on programmatic updates including those from the SWIG and the Network. SNEP has published six newsletters and seventeen articles on a wide range of topics that are archived on our [website](#). We hosted [five webinars](#) on our Pilot Watersheds, harmful algal blooms, green infrastructure, aquaculture, and blue carbon; and one [three-day workshop](#) aimed at identifying critical actions necessary to bring more effective nitrogen-reducing septic systems closer to general use authorization. The SNEP website has also been updated to more effectively provide information about SNEP including news and events, community action, and research efforts.

**Changes on the H-ORISE-n.** ORISE Fellow David Morgan completed his work with our Program this year. During his time with us, David completed assessments of climate refugia and habitat buffers throughout our region, which will be posted to the SNEP website once peer review is completed. We wish him all the best in his future work! Current ORISE Fellow, Shasten Sherwell, continues her work in Harmful Algal Blooms (HABs) detection and monitoring with specific focus on freshwater cyanoblooms. Shasten has been working closely with SNEP and the [Cyanobacteria Monitoring Collaborative](#) in leading a series of citizen science monitoring trainings throughout the SNEP region with the hope to expand cyanobacteria monitoring efforts and increase HABs detection and awareness.

**Looking Ahead.** With the passage of the Bipartisan Infrastructure Law, SNEP is slated to receive an additional \$3 million per year for the next five years on top of our base budget. This significant increase will allow our Program to have a greater impact in our region, especially with respect to environmental justice, climate change, and infrastructure improvement.



## SNEP Partnerships:

**U.S. Geological Survey**

**Buzzards Bay National Estuary Program**

**Narragansett Bay Estuary Program**

**Restore America's Estuaries**  
**New England Environmental Finance Center**

## SNEP TEAM:

MaryJo Feuerbach, SNEP Manager  
Ian Dombroski, Program Coordinator  
Adam Reilly, Communications Coordinator  
Margherita Pryor, Watershed Implementation Grants and Policy Coordinator

ORISE Fellow:  
Shasten Sherwell





EPA continued a successful collaboration with USGS through a **\$300,000 interagency agreement awarded in FY21**. This partnership performs critical work throughout the SNEP region by tackling nitrogen pollution in ground and surface water through the implementation of innovative nutrient management practices such as the installation of permeable reactive barriers or of a suite of innovative and alternative septic systems. This collaborative is focused on monitoring the long-term impacts of these innovative approaches.

At a neighborhood on Cape Cod, where homes recently switched from septic systems to a public wastewater system, USGS and EPA have been monitoring groundwater quality to document changes resulting from the switch. A report on background conditions will be published in early 2022 (keep an eye on the project website for the report coming soon!).

Additionally, USGS and EPA launched a similar project in Wickford, RI where a network of monitoring wells were installed at the town library to understand the underground movement of nutrients and how sewerage will help prevent these pollutants from reaching Wickford Harbor.

Finally, work continued on studying nutrients discharging to Cape Cod rivers and we are continuing monitoring efforts in the Three Bays watershed to support nutrient management activities.



*Groundwater sampling in Wickford, RI*

*Photo credit: USGS*

## **Buzzards Bay National Estuary Program**

*Joe Costa, Director*



*Through the Buzzards Bay Stormwater Collaborative, students are trained on basic ArcGIS software skills, like data entry and georeferencing engineering plans, to produce maps they can use in their field work. Participating Massachusetts Maritime Academy students are learning many skills that they can use in their careers. Photo credit: Maura Flaherty*

EPA-SNEP provided \$250,000 in FY21 to support 10 new projects funded by the BBNEP. The following are just a few highlights of their work over the past year:

**Buzzards Bay Targeted Grants** - With support from SNEP, the Buzzards Bay NEP continues to support an ongoing study by the Ecosystem Center at the Marine Biological Laboratory to evaluate the feasibility of applying permeable reactive barrier technology, using wood chips as a carbon source, to reduce nitrogen inputs from advanced treated wastewater effluent under different controlled flow conditions. This work is being undertaken in partnership with the Wareham Water Pollution Control Facility.

**Buzzards Bay Salt Marsh Study** - The Buzzards Bay NEP continues to support efforts by the Buzzards Bay Coalition and scientists at the Woodwell Climate Research Center to study salt marsh loss in Buzzards Bay. The results of this work will help town officials and state and federal managers develop possible mitigation strategies to protect and restore salt marshes. For more information, see the [Salt Marsh Study web page](#).

**Continued Support to the Buzzards Bay Stormwater Collaborative** - In November, with support from SNEP, the NEP awarded Massachusetts Maritime Academy a \$25,000 grant to continue its ongoing support for the Stormwater Collaborative, a partnership of eight municipalities to monitor stormwater discharges and map stormwater networks. The Buzzards Bay NEP continues to provide technical oversight and continued data processing and analysis, and provides free laboratory testing services to municipalities participating in the Stormwater Collaborative. Training videos for the program can be found at the [Buzzards Bay Stormwater Collaborative YouTube channel](#), and the [Buzzards Bay Stormwater Collaborative page](#) has additional information about the collaborative.

**Technical Assistance** - The NEP provided more than 700 map and GIS products to the Buzzards Bay Coalition, area land trusts, and municipalities in their efforts to protect important habitat and open space in Buzzards Bay. The Buzzards Bay NEP continues to work with the Buzzards Bay Coalition Science Advisory Committee and a team of scientists in Woods Hole to identify pressing issues related climate change, nitrogen and toxic pollution, and loss of wetlands habitat and living resources in Buzzards Bay.

*In June 2021, the BBNEP and Buzzards Bay Coalition installed an NGS rod-type elevation benchmark at the Demarest Lloyd State Park (Barneys Joy) in Dartmouth. The salt marsh at Demarest Lloyd is one of 12 sites where historical trends of marsh loss is being documented by the NEP. Photos by Joe Costa.*





# The Narragansett Bay Estuary Program

Mike Gerel, Director

July 2021 public meeting to discuss the Blackstone River

Watershed Needs Assessment Report.

Photo credit: Blackstone River Valley National Heritage Corridor.



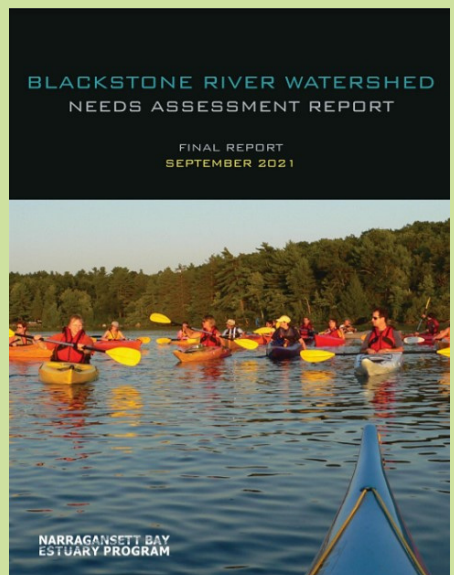
In FY21, EPA-SNEP provided the NBEP with \$250,000, which supported ongoing work highlighted below.

In the past year, NBEP switched to a new host organization, [Roger Williams University](#) in Bristol, RI, prepared the publication of new organizational bylaws and posted an announcement for two new positions (to be announced soon), continued progress on our next 10-year plan, [Vision 2032](#), led exploration into some of the region's most complex issues via our [Science Working Groups](#) and [Science Updates](#); and accelerated our efforts to lead by example and help energize our partnership to [elevate equity](#) in all we do, most notably through publication of a nationally-recognized Environmental Justice [Story Map](#) in the Narragansett Bay Region.

The NBEP successfully deployed SNEP funding to support a wide range of local capacity, planning and implementation projects that advanced water quality and habitat across the Narragansett Bay, Little Narragansett Bay, and Coastal Ponds and their watersheds in Rhode Island and Massachusetts.

Highlights of our SNEP-supported work include:

- Completed fourteen projects, initiated between 2016 and 2020, by state agencies, municipalities, and nonprofits that addressed stormwater quantity and quality, urban heat, watersheds planning, and fish passage. A total of \$460K was awarded for these efforts. Further information on these projects and past work is available [here](#).
- Finished the Blackstone River Watershed Needs Assessment Project in September 2021. Over 18-months the NBEP hosted eight planning sessions during the height of the pandemic, which resulted in the formation of a planning group of more than 50 active members (and a mailing list of over 150), released of a [comprehensive needs assessment](#) that included 20 recommended actions for addressing priority needs, and funded a Blackstone Watershed Manager at Clark University who recently formed the [Blackstone Watershed Collaborative](#) to advance the recommended actions. We are especially proud of this work because it re-programmed money from a failed 2015 West Warwick, RI stormwater project to help the Blackstone community create the tools they need to pursue more projects to continue to heal this long-degraded and underserved watershed. Roughly \$200K in SNEP funds supported this work. More information on the Blackstone Needs Assessment Project is available [here](#).
- Based on outreach to conservation practitioners and funders in our area, released an RFP for \$650K in November 2021 (\$500K of SNEP monies) to fund green infrastructure planning projects. 14 proposals seeking \$920K were received in December. We plan to fund 5 to 10 new projects in January 2022.





# **SNEP Watershed Implementation Grants**

*Tom Ardito, Program Director*

The SNEP Watershed Implementation Grants (SWIG) program, administered by Restore America's Estuaries (RAE), completed another year of grantmaking to support local and regional partnerships working to restore clean water, healthy ecosystems and sustainable communities in Rhode Island and Southeast Massachusetts organizations, municipalities, and community groups. **More than \$1.75 million was awarded to 14 grantees in the two states via the grant program with another \$1.85 million in matching funds coming directly from the grant recipients.** This year's awards were announced in early September, with participation from Senator Jack Reed (RI), Representative Bill Keating (MA-9), and EPA Region 1 Water Division Director, Ken Moraff. Additionally, the 2021 Grants incorporated new measures to ensure increased accessibility for traditionally marginalized groups, such as a match bank, to reduce barriers to entry for applicants.

RAE also renewed its cooperative agreement with EPA to administer SWIG through 2028. In continuing the partnership, RAE looks forward to continuing to fund high-impact environmental projects, building the region's capacity for meaningful action, and expanding access to these critical funds for coastal resilience and restoration.

RAE's biennial Coastal Restoration Summit will be held in New Orleans in December, 2022. The conference will highlight the work of SNEP partners while providing opportunities for funding, implementation, and networking, including a designated conference track focused on SNEP. Stay tuned for program and registration information in the New Year!

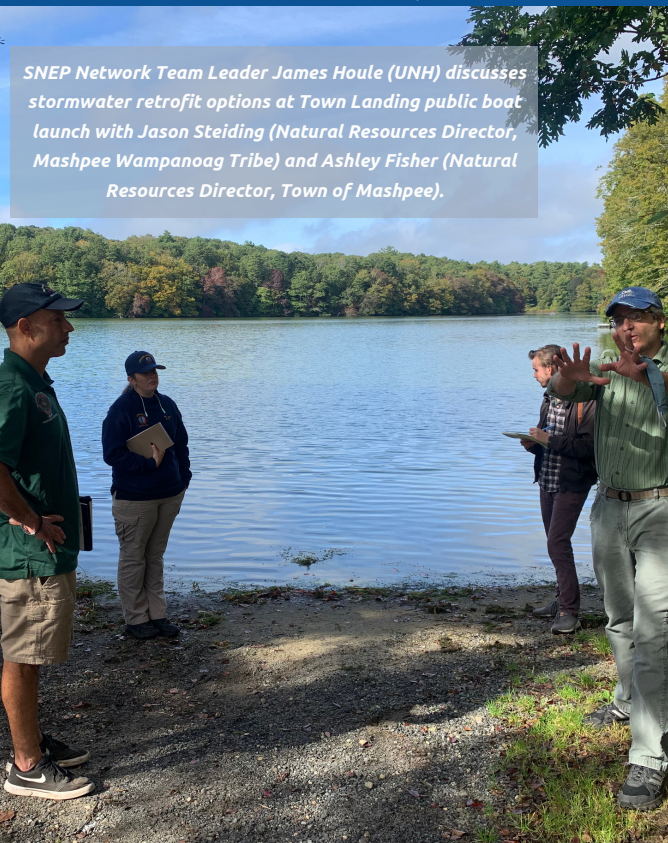


*Wetlands restoration in partnership with  
the Falmouth Rod and Gun Club  
Photo credit: Falmouth Rod and Gun Club*

## **SNEP Network**

*Martha Sheils, Director*

*SNEP Network Team Leader James Houle (UNH) discusses  
stormwater retrofit options at Town Landing public boat  
launch with Jason Steiding (Natural Resources Director,  
Mashpee Wampanoag Tribe) and Ashley Fisher (Natural  
Resources Director, Town of Mashpee).*



Through continued collaboration among Network Partners, community stakeholders and organizations, and government entities, the Network engaged with **104 SNEP municipalities** through no-cost community assistance projects, webinars/trainings, and web portal requests.

With an eye towards environmental justice and climate resilience, the Network improved its internal processes to better support and provide meaningful technical services to SNEP communities. The Network expanded its pre-approved consultant pool list of services and added 7 new consultants to meet expanded community needs. Moreover, the Network incorporated environmental justice and climate resilience components in the application and the evaluation process for the new round of community technical assistance projects. **In FY21, the Network started projects with communities such as the Wampanoag Tribe of Gay Head Aquinnah, the Mashpee Wampanoag Tribe, and Providence, RI** to advance their climate resilience, stormwater and watershed management, and financing goals.

To support communities in building their local capacity, the Network offered **21 professional development opportunities that were made available to municipalities, Tribes, Non-governmental organizations, and government entities.** This includes successfully completing a Leadership Exchange with the Town of Wareham, delivering webinars on topics such as stormwater management, nature-based solutions and sustainable financing, developing tools and resources such as the Stormwater Retrofit Manual and the Planning to Action Climate Toolkit, and providing over 35 scholarships for municipal representatives and community stakeholders and champions to participate in an Association of Climate Change Officers professional training course.

**Network Partners worked hand in hand with communities to provide technical services to 9 community projects** (5 in Rhode Island, 1 in Massachusetts, and 2 with Tribal Nations) focusing on stormwater financing, climate resilience, stormwater planning, and capacity building. Since it's inception, the Network has taken on over 20 community assistance projects throughout the SNEP Region, meeting communities where they are at, and advancing projects to the implementation and funding/financing phase. These include 2 Pilot Projects on the Maidford River and Taunton River Watersheds.