

Southeast New England Program Year in Review: 2023



Southeast New England Program

A Note from our EPA SNEP Manager: This has been an incredible year of growth for our Program: from the development of critical infrastructure programs such as the SNEP Natural Infrastructure Grants (SNIG) program and the SNEP Opportunity to Advance Resilience (SOAR) Fund, to adding two new members of the SNEP team - our Program is better suited than ever to address the critical challenges that our region faces to its water, habitat, and communities. This was also the year that we saw the return of in-person SNEP meetings after nearly three years of working fully online during the COVID-19 pandemic. We were thrilled to engage in-person with our parters and municipal leaders in critical discussions during our SNEP Public Forum in June, our Salt Marsh workshop in September, and our Steering Committee meeting in December, in addition to the several press events held throughout the year to announce newly funded grant programs in Massachusetts and Rhode Island. Seeing SNEP's resources, activities and impact grow throughout the years has made me both proud of all that we have accomplished and excited for all that this still left to be done. Thank you all for your continued support of our Program, and for being such a critical piece of the SNEP Team.

-MaryJo Feuerbach; SNEP Chief, Watershed and Nonpoint Source Management Section



Shown here are a portion of the grantees receiving SNEP Base, SWIG, or Network funding and/or technical assistance in Rhode Island for fiscal year 2024 standing with U.S. Senator Reed, U.S. Senator Whitehouse, Congressman Magaziner, EPA Region 1 Administrator Cash, and Providence Mayor Smiley. On October 6, the U.S. Environmental Protection Agency announced the award of \$4.6 Million in SNEP funds for new projects in Rhode Island, and new technical assistance and partner-ships with local organizations working for clean water and healthy coastal ecosystems in Southeast New England through the SNEP Watershed Implementation Grants program, the SNEP Network, and EPA-SNEP base funds. An accompanying event in Massachusetts was hosted on November 1, in New Bedford, MA.

Continued Implementation of the Infrastructure Investment and Jobs Act (IIJA). SNEP has been hard at work this year continuing to implement the mission of the IIJA through the creation of a new effort to support decentralized wastewater treatment in Rhode Island and support stormwater management and habitat resilience in the region. Additionally, EPA-SNEP developed and finalized its Equity Plan and environmental justice (EJ) Web Mapping Application, which laid the ground for the creation and release of its newest program – the SNEP Opportunity to Advance Resilience in Disadvantaged Communities (SOAR) Fund. Together, these efforts represent a total of **\$4,363,000** in additional investment throughout the SNEP region, with **\$1.275M** invested directly into disadvantaged communities. All SNEP IIJA-related projects and programs can now be found on the SNEP website.

<u>Rhode Island Decentralized Wastewater Improvement Grants.</u> In January 2023, SNEP released a funding opportunity to improve onsite wastewater (septic) services in Rhode Island. EPA-SNEP selected two awards totaling **\$915,000** in federal funding.

- **\$465,000** to the Town of Glocester, RI to develop a decentralized wastewater management and incentives program for Chepachet Village to spur increased use of nitrogen reducing onsite wastewater systems; and
- **\$450,000** to the Town of North Kingstown to identify homeowners interested in upgrading at-risk onsite wastewater systems and designing/replacing them with newer, nitrogen reducing onsite wastewater systems.



Development of a SNEP Equity Plan and EJ web application. In response to a request from EPA Headquarters, SNEP was asked to develop an Equity Plan which details past funding to disadvantaged communities and lays out plans to increase support to disadvantaged/underserved communities in the SNEP region. In the report, SNEP committed to allocating a minimum of **\$6 million** in funding to support disadvantaged communities, which represents 40% of the **\$15 million** in BIL funds that SNEP will receive over five years (2022 – 2026 inclusive). The equity plan was accepted by EPA Headquarters. This report additionally includes the development of a programmatic definition for disadvantaged communities to support the newly created SOAR Fund (see next update). The definition and idenfied communities can both be found via this <u>web mapping application</u>.

SOAR Fund Established and **\$1.275M** Competed in First Round. The SNEP Opportunity to Advance Resilience (SOAR) Fund is a new grant program designed to improve climate resiliency in disadvantaged communities throughout Southeast New England. The SOAR Fund is intended to support a wide range of project types: planning, implementation, outreach, training, and capacity building/staffing; and prioritizes projects that include strong community input and participation from the outset. EPA-SNEP completed the first round of competition and will announce its first-ever SOAR Fund recipients this winter. The EPA SNEP will release a similar annual grant solicitation for at least the next three years, for a total investment of at least \$5 million in SNEP disadvantaged communities by 2027. For more information, please visit the SNEP website.

<u>Stormwater and Natural Infrastructure Grants.</u> On May 1, 2023, SNEP released the Stormwater and Natural Infrastructure Grant RFA. This RFA set forth a competitive process to solicit projects to implement climate resilient infrastructure that promotes nature-based solutions (NBS), habitat restoration and protection to restore ecosystem services degraded by development, as well as planning related to these topics.

Four projects were selected for funding, worth a total of **\$7,377,036** (\$2,172,522 Federal Funding; \$5,204,514 Matching Funds):

- **\$465,496** to the Massachusetts Audubon Society to protect Buzzards Bay saltmarsh from sea level rise. Project match: **\$132,284**
- **\$600,000** to the Nantucket Land Bank for the stormwater and habitat restoration, and green infrastructure planning of Lily Pond Park. Project match: **\$625,150**
- **\$600,000** to the Bristol County Water Authority to help remove two dams and restore the ecological resilience of the Kickemuit River. Project match: **\$4,121,000**
- **\$507,026** to the Woonasquatucket River Watershed Council for nature-based flood mitigation and stormwater management in the Woonasquatucket River Watershed. Project match: **\$326,080**

For more information on these projects, please visit <u>the SNEP website</u>.



Dam removal in progress as part of the Bristol County Water Aurthority SNIG project. Credit: EPA-SNEP

The SNEP Team Continues to Grow. This year, SNEP is thrilled to welcome Natalie Schafer and Christina Madonia to the SNEP Team! Natalie joined the SNEP team this Fall as our Program's Water Quality Coordinator. She previously worked as a contractor at the EPA Office of Research and Development lab in Narragansett, RI. Natalie earned her Bachelor of Science in Environmental Science with a focus in Data Analytics. Christina Madonia joins as our outreach coordinator and will focus much of her time on supporting efforts in disadvantaged/ underserved communities. Christina joins EPA after working for the Department of Ecology in Washington state. She holds a Bachelor of Science in Conservation Biology and Ecology, and a Master's in Marine and Environmental Affairs.

The SNEP Team now stands strong with a core team of two full-time equivalent staff members and five part-time staffers to support programmatic goals and objectives. Four of these members have been hired with IIJA funds to facilitate, implement, and manage IIJA funds, programs, and projects.



Natalie Schafer (above) and Christina Madonia (right). Photo credit: Natalie and Christina, respectively.





(Above) Breakout room discussion during SNEP Forum. Credit: EPA-SNEP

(Below) Attendees participate in Forum poster session. Credit: EPA-SNEP



Outreach Remains a Critical Piece of our Program.

<u>SNEP Forum.</u> On June 13, 2023, over 90 members of the SNEP community gathered at Bristol Community College in Fall River, MA to discuss ways that SNEP can better address regional environmental challenges. This all-day event featured thirteen community poster presentations and eleven hour-long, focused discussions on a wide range of topics. All presentations and posters are now available on the SNEP Forum website.

Key recommendations from the Forum advised SNEP to 1) assist in the simplification of the grant application process, where possible, 2) develop grant training materials such as template quality assurance project plans (QAPPs), 3) develop technology transfer materials to better "scale up" or geographically expand projects, and 4) provide regional data collection maps, tools, and/or databases.

SNEP has already started to implement some of these recommendations. Specifically, EPA-SNEP has selected a contractor to 1) increase availability of regional water quality data, and 2) create an online web application to allow users to interact with regional habitat and water quality data.

Salt Marsh Workshop. On September 19, 2023, SNEP hosted Massachusetts salt marsh regulators and restoration practitioners in an all-day meeting to discuss opportunities to work together to better navigate the existing salt marsh restoration permitting process. Meeting materials are now available on <u>the SNEP website</u>; and an additional guidance permitting flowchart is in development based on feedback received from workshop participants.



Attendees (left) and presenters (right) during the SNEP salt marsh workshop hosted in September 2023. Credit: EPA-SNEP

Over \$800k in Base Funds Allocated for Applied Research and Implementation. Innovative research and focused implementation are core tenets of our Program. In furtherance of the SNEP Strategic Plan, SNEP has invested funding to discover new methods to aid our efforts to ensure safe and healthy waters, thriving watersheds and natural lands, and sustainable communities.

<u>SNEP Priority Research Grants.</u> The SNEP Priority Research Grants Request for Applications (RFA) was released on June 5, 2023. The RFA set out a competitive process to select between three and six (3-6) projects that would fill informational/knowledge gaps in the following Priority Research Areas identified by SNEP and its Steering Committee in support of the goals outlined in the SNEP Strategic Plan: 1) Modeling and assessing coastal lake and pond health, 2) Lessons learned from implementing permeable reactive barriers, and 3) Eelgrass viability: flowering and seeding, impacts of climate change, long-term prognosis.

EPA-SNEP selected two projects for funding:

- **\$299,293** to the Rhode Island Department of Environmental Management to study eelgrass flowering and seeding phenology across the SNEP region with the goal of developing a new method to increase resilient eelgrass ecosystems in the region; and
- **\$298,527** to the Cape Cod Commission to develop automated remote sensing methods for water quality mapping using monitoring and satellite imagery data from 2017 to 2026 to better understand changing conditions in Cape Cod and Rhode Island lakes and ponds.

These projects are currently ongoing. For more information, please visit the SNEP website.

<u>SNEP HRU Development and Work on Flow Duration Curves for Proprietary Stormwater Solutions.</u> SNEP has procured contractors to develop a Hydraulic Response Unit (HRU) map of the SNEP region to set the stage for better stormwater pollution and management modeling opportunities in the region; and to develop performance curves for high-flowrate stormwater controls. The development of these new performance curves will determine: 1) how well the new and proprietary controls perform in reducing pollutants, 2) how useful pollutant reduction curves based on long term modeling may be, and 3) what parameters would be required to model these controls for this purpose. Both projects are a continuation of previous SNEP-funded flow-duration curve development. For more information, please visit the SNEP website.

SNEP Continues its Partnership with U.S. Geological Survey. Since 2016, SNEP and the U.S Geological Survey (USGS) have partnered on a variety of ground water and surface water related projects. In 2023, USGS continued research on the effects of sewering on groundwater nitrogen in Falmouth, Massachusetts and Wickford, Rhode Island; concluded a study assessing high priority nitrogen discharge areas in Cape Cod streams; and evaluated the effectiveness of newer nitrogen-reducing innovative/ alternative septic systems in a neighborhood draining to Three Bays, in Massachusetts (funded by EPA's Office of Research and Development). More information on USGS projects can be <u>found here</u>.

Starting in late 2023, USGS began a study to assess the susceptibility of Rhode Island aquifers, streams, ponds, and coastal waters to water-quality impairments from septic-system related wastewater disposal. Through this project USGS will develop a model to evaluate areas in the state that may be susceptible to this kind of pollution to inform future action.

SNEP Pilot Watersheds Draw Increased Attention and Community Support. The Pilot Watershed Initiative (PWI) launched in 2021 to demonstrate how concentrated, collaborative efforts and holistic planning can more effectively address common environmental challenges in coastal southeast New England. Demonstrating watershed scale solutions is a key piece of <u>SNEP's Five-Year Strategic Plan</u> and is ultimately an important part of promoting safe and clean water, healthy habitats, and thriving communities.

SNEP has established five pilot watersheds which together address nutrient enrichment, wetland restoration, stormwater and wastewater management and community capacity. Three years into the program, several of the SNEP pilot watersheds have garnered increased attention, support, and funding from additional funding sources, as demonstrated in the **PROJECT HIGHLIGHTS** below.

PROJECT HIGHLIGHT: Green and Resilient Infrastructure Implementation Program for Martha's Vineyard.

The University of Southern New Hampshire Stormwater Center has partnered with the Town of Tisbury, the Martha's Vineyard Commission, and the MA Department of Transportation to determine cost-effective, efficient ways to address stormwater pollution throughout the Town of Tisbury. The Collaborative is working to cap increases of nutrient pollution by drafting local ordinances that mandate stormwater filtration and infiltration strategies and will implement several structural stormwater control measures to further address nutrient pollution guidance, which is now proceeding through review; has developed conceptual designs for bioretention systems and bioswales at several sites in neighboring Oak Bluffs; has installed a rain garden turret on Owen Little Way to restore functionality to an existing bioswale that was in disrepair, and a subsurface gravel filter at the end of Grove St. in Tisbury. In addition, the team has discovered twelve first flush basins installed between 1996 and 1997 and designed to treat the first quarter-inch of rainfall, which contains most of the pollutants from stormwater run-off. The performance status of these twelve basins is currently unknown; but the Collaborative is now working to determine their status and to develop recommendations for their maintenance or rehabilitation, if necessary.



Newly installed rain garden turret to improve functionality of existing bioswale. The large stones in the foreground of this image demonstrate the high volume of stormwater in this area and the importance of functioning stormwater controls. Photo credit: SNEP



PROJECT HIGHTLIGHT: Greater Allen's Cove and Eastern Ninigret Pond Pilot Watershed Program The Town of Charlestown is situated along the south shore of Rhode Island, nestled up against three salt ponds: Ninigret Pond, Green Hill Pond, and Greater Allen's Cove. The salt ponds, which are connected to Block Island Sound via engineered breachways, provide recreational, economic, and environmental benefit to town residents and visitors alike. The beauty and utility of the ponds has drawn people to the area for hundreds of years and has resulted in a high density of houses near them. Despite this density, the area relies on on-site wastewater treatment systems, also known as septic systems, as the primary means of waste treatment. However, traditional septic systems are not designed to remove nitrogen, and this paired with the proximity to the ponds, means the ponds receive excess nitrogen which can lead to several environmental issues such as algal blooms and hypoxia. One potential intervention is upgrading traditional septic systems to Innovative & Alternative septic systems (I/A systems) that are specifically designed to remove nitrogen.



Installation of a Fujiclean denitrifying OWTS to replace a failing conventional septic system. Photo credit: Matthew Dowling

To help reduce the amount of nitrogen entering the ponds, Charlestown, in partnership with the University of Rhode Island, the Salt Pond Coalition, and Save the Bay, competed for and won a Southeast New England Program Pilot Watershed Initiative Grant which started in October 2021. Through this grant the partners are taking a multipronged approach to tackling nitrogen including writing and disseminating guidance documents that can be used by Charlestown and other towns, upgrading at-risk septic systems to I/A systems, installing stormwater control measures (another major source of nitrogen), monitoring both I/A systems and surface water, and educating and engaging both septic system professionals and the public.

Over the last two years the partners have:

- Begun compiling documents and engaging with industry professionals to develop a community watershed management guide that will help communities develop strategies and implement mitigation measures for water quality with a strong focus on septic system management.
- Used a risk-based assessment to determine the most impactful sites for septic system upgrades and received commitments from homeowners to participate in the upgrades.
- Installed eight I/A systems which may reduce nitrogen load to the watershed by 86.6 Kg/year.
- Monitored the performance of newly installed and existing I/A systems by collecting 181 samples.
- Worked with the University of Rhode Island Onsite Wastewater Training Center to develop and implement undergraduate curriculum which has reached over 200 students.
- Provided training for 39 septic system professionals.
- Reached over 300 households through public engagement events such as listening sessions, hosting a recurring "Science Sunday", and a booth at the Charlestown Farmers Market, to educate the public and clear-up common misconceptions about septic systems.

The important work being funded by this grant will continue into 2026. In the future the partners will continue their work on developing a watershed management guidance document, upgrade and monitor additional I/A systems, monitor the surface water in the Ponds, install raingardens and coastal buffers to reduce stormwater impacts, and continue outreach and education for the public, students, and steptic system professionals.

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University of Rhode Island students and Town of Charlestown staff sampling a septic tank preceding an LSTA drainfield to determine nitrogen removal. Photo credit: Matthew Dowling



Installation of a denitrifying Fujiclean septic system to a pressurized GSTTM drainfield. A pan lysimeter was installed beneath the GSTTM forms to allow for the collection and monitoring of post soil treatment area effluent for comparive analysis between various soil treatment area types. Photo credit: Matthew Dowling

PROJECT HIGHLIGHT: Buttonwood-to-Bay: A SNEP Pilot Watershed Initiative Project

In 2021, EPA-SNEP awarded **\$750,000** over five years to the Buzzards Bay Coalition (BBC) to address excess nutrients and stream alterations in an urbanized area within the Apponagansett Bay watershed in Massachusetts, which is inclusive of Buttonwood Brook – a highly urbanized waterbody that flows through the City of New Bedford, MA. Buttonwood Brook receives large volumes of stormwater runoff from developed areas that cause bacterial and nutrient pollution, habitat degradation, and localized flooding in downstream communities. These impairments make the brook inaccessible and unsafe for surrounding communities – many of which are identified as SNEP disadvantaged communities.

As part of the Pilot Watershed Initiative, BBC has set out to develop a first of its kind comprehensive restoration plan that leverages a broad coalition of partner organizations including: the City of New Bedford, the Town of Dartmouth, the Buttonwood Zoo, the Friends of Buttonwood Park, the Dartmouth Natural Resources Trust, the Woodwell Climate Research Center, Woods Hole Oceanographic Institute, and the Marine Biological Lab. In addition to restoration efforts, the project will also support the establishment of a Total Maximum Daily Load (TMDL) for Apponagansett Bay, which is a critical step in ensuring that nutrient pollution can be reduced over time.



Dan Goulart, BBC PWI project lead, inspecting and maintaining water quality data loggers in Apponagansett Bay during a routine site visit. Photo credit: EPA-SNEP

To date, BBC has completed 18 months of stream sampling that includes bacteria and nutrients, deployed data loggers in the brook and bay that record key water quality parameters, employed a stakeholder-driven process to develop a watershed-scale implementation site matrix, completed the first-ever stream macroinvertebrate study in Buttonwood Brook, and is making significant progress in the development of a land-use and nitrogen-loading model.

The Buttonwood project will run through the end of FY26 but is already showing promising results and broad community support. One of the broad goals of the SNEP Pilot Watershed Initiative is to provide focused attention and investment on addressing watershed-wide environmental challenges and to ideally spur further investment in the future. As the result of BBC's Pilot Watershed Initiative, BBC has been able to secure an additional \$1.85M in State and Federal funding to support complementary efforts in the watershed. Together with funding from SNEP these projects will restore degraded habitat, improve water quality, and help build community resilience to climate change.



PROJECT HIGHLIGHT: Turning the Tide in the Woonasquatucket River Watershed. The Woonasquatucket River Watershed Council (WRWC) is partnering with numerous state and local organizations to 1) use existing pilot programs that capture and clean stormwater using nature-based solutions to illustrate the importance

of eliminating polluted runoff; 2) build on existing relationships to locate problems and explore creative solutions to improve the health of local waters and increase the resilience of local communities in the face of climate change; and 3) engage students, volunteers, and especially frontline residents and businesses in understanding the issues, monitoring changes, and speaking up for equitable solutions. This project started in 2022 and is currently in Year 2 of project implementation. Of note to date: WRWC has graduated nearly 40 Nuevas Voces/ New Voices resident leaders. Nuevas Voces introduces residents most affected by climate change impacts to environmental justice, emergency preparedness, climate impacts and public health issues that affect them, and amplifies their leadership in their communities. WRWC has since launched Campeones/Climate Combat Champions, a program designed to engage Nuevas Voces graduates in the process of siting, designing, constructing, and maintaining climate resilience projects. In addition to



Senator Jack Reed speaking at lectern during Woonasquatucket River Watershed Council (WRWC) and Farm Fresh RI press event in May 2023. Other speakers at the event included Providence Mayor Brett Smiley, R.I. Lt. Governor Sabina Matos, RI DEM Director Terry Gray, FFRI Executive Director Jesse Rye, and WRWC Executive Director Alicia Lehrer, and SWIG Director Tom Ardito.

WRWC's strong community training and empowerment programs, green infrastructure implementation and maintenance work is ongoing. For example, the Woonasquatucket Greenway Extension is a 1-mile multi-use trail project that will be constructed in 2024 that includes: 1) 3.398-acre stormwater catchment area treating 12,700 cubic feet of stormwater runoff; 2) 12,300 square feet of increased greenspace in a highly urbanized industrial section of Providence, RI; and 3) 7,000 square feet of new nature-based stormwater infrastructure. Additionally, WRWC is gearing up for new implementation work by developing conceptual designs for three additional parks in the watershed and has kicked off both commercial property and homeowner retrofit projects in Providence in partnership with Groundwork Rhode Island.

"We truly appreciate being a pilot watershed. This grant is allowing us to truly coordinate our efforts watershed-wide as we have never been able to before."



- Alicia Lehrer, Executive Director of the Woonasquatucket River Watershed Council

Part of this SNEP-funded project included the installation of signs (right) in both English and Spanish that explain the environmental and ecologic benefits of the project installations. Photo credit: EPA-SNEP

PROJECT HIGHLIGHT: Marstons Mills Cranberry Bog Restoration. In 2021, EPA-SNEP awarded \$750,000 over five years to the Barnstable Clean Water Coalition (BCWC) to plan, permit, and implement an ecological restoration



A previously farmed cranberry bog in Marstons Mills, MA slated for hydrologic restoration to freshwater wetlands. Photo-credit: EPA-SNEP

of freshwater wetlands on bogs historically farmed for cranberry. The main goal of this multi-faceted restoration project focuses on reducing the nitrogen load being transported down the Marstons Mills River to the Three Bays estuary. To date, BCWC has partnered with several federal, state, nonprofit, and contracting entities to achieve its goal of storing up to 100 acres of wetland habitat in Marstons Mills. Inter-Fluve was competitively selected to complete design and permitting for the project, which hit the 75% design mark this year. Additionally, Marston Mills has been selected as a Priority Project by the Massachusetts Division of Environmental Restoration. In terms of leveraged funding, The Nature Conservancy provided \$50,000 in non-federal match, and this year BCWC was awarded \$1.27M from the Massachusetts Executive Office of Energy and Environmental Affairs to acquire land slated for restoration. BCWC has also engaged with EPA-Office of Research and

Development, the U.S. Geological Survey, the Town of Barnstable, Horsley Witten Group, the Mashpee Wampanoag Tribe, and Woodwell Climate Research Center.

SNEP Contributes to National Estuary Program Planning Efforts. SNEP is a long-time partner of both the Narragansett Bay Estuary Program and the Buzzards Bay National Estuary Program. Each year, SNEP provides **\$250,000** in supplementary grant support to each National Estuary Program. This year, we're highlighting a portion of the excellent work carried out by each of our partners:

Rhode Island Seagrass Update. The Narragansett Bay Estuary Program (NBEP) has just published an updated analysis of the extent of seagrass in its study areas of Narragansett Bay, Little Narragansett Bay, and the coastal salt ponds. The analysis updates their extensive 2017 State of Narragansett Bay and Its Watershed report with more recent information. In addition, for the first time NBEP presents complete datasets from 2009 through 2021 documenting the extent of seagrass change for Little Narragansett Bay and the coastal salt ponds.

Seagrass gains in the Bay's East and West Passages have occurred even as the Sakonnet and Narrow Rivers have experienced losses, and extent has remained steady along the mouth of the Bay. NBEP is joining with other partners to understand these and potential future anges. <u>Click here</u> to access the full report.



Excerpt of the 2023 Science Update: Seagrass Meadows - Forests under the Sea. Image credit: Narragansett Bay Estuary Program

New Bedford Sea Lab – Training a New Generation of Marine Scientists. The Buzzards Bay National Estuary Program receives **\$250,000** annually in SNEP funds to facilitate projects that implement the goals and objectives of the Buzzards Bay Comprehensive Conservation and Management Plan. Among the projects selected for support in 2024 is the summer school program of the New Bedford Sea Lab Marine Science Program. The program's curriculum runs from the fourth to the ninth grades and is designed to introduce students to a range of marine sciences, as well as to practical outdoor skills such as swimming, sailing and snorkeling. For the 2024 session, Sea Lab will receive almost **\$26,000** to help cover tuition for students in need of financial assistance, as well as for field trips and supplies. Sea Lab is a component of the New Bedford public school system.

In addition to the Sea Lab, other projects selected for support in the coming year include a **\$49,000** subaward to UMass Dartmouth to continue studying the use of aerial drones to monitor salt marsh loss and vegetation changes in Buzzards Bay due to climate stressors, and solicitation for projects under a municipal grant program.



SNEP Watershed Implementation Grants (SWIG) Accomplishments for 2023

As 2023 came to a close, the SWIG program completed another successful year of grantmaking and grantee support throughout Southeast New England. The SWIG program provides grants to implement the goals of the SNEP Strategic Plan, and is administered by Restore America's Estuaries (RAE) under a cooperative agreement with EPA.

The 2023 SWIG program calendar was similar to those of prior years; we released the Request for Proposals (RFP) in February and announced awards

in October and November. RAE's experience running the SWIG program since 2018 has shown that a consistent annual calendar facilitates the accessibility and utility of the program for grantees. In 2023, the SWIG program again experienced strong demand with **\$10.5M** in requests for an available **\$3.2M** in grants.



The new Community MusicWorks Center in Providence taking shape. SWIG funded water management features and plantings on the site that will minimize stormwater runoff while contributing to climate resilience in this environmental justice neighborhood. The building itself is built from cross-laminated timber panels – a high-tech wood construction method that is carbon neutral, while providing excellent acoustics. Photo credit: Restore America's Estuaries

RAE expanded the SWIG Application Review Committee ("committee") this year to better ensure geographic representation throughout the region and to incorporate diverse expertise and perspectives into the evaluation of applications. The committee now represents federal, state and municipal government; non-profit organizations; private foundations; and the private sector. With 20 members, RAE does not anticipate intentionally expanding the committee further, although there will always be some opportunities for new members to join as other members leave. RAE worked with the committee in the fall to assess its experience with the 2023 SWIG application materials, and to recommend improvements that will be incorporated into the 2024 SWIG program grant process.

Another major program improvement initiated by RAE this year is the development and implementation of a new online platform that will, for the first time, integrate grant applications, grantee reporting, and RAE's grants oversight and

administration. The new SWIG program portal utilizes Blackbaud, the grantmaking platform used by many of the largest private charitable foundations. RAE has found with other grant programs that the new system greatly improves the applicant experience, while increasing the efficiency of oversight and administration.

In addition to awarding new grants, RAE continued providing oversight, administration and technical support for grants awarded in prior years, with a number of closures of successful SWIG-funded projects. Since 2018, SWIG has funded 73 restoration projects totaling more than **\$15M**. In many instances, we have worked with grantees to help resolve problems that arise during the course of these long and complex projects, and to amend grant agreements as necessary to ensure that applicants can successfully accomplish SNEP goals.

The SWIG program is now gearing up for the 2024 award cycle. The 2024 RFP will be released in mid-February, with **\$2.8M** in awards anticipated this year.

For a complete list of FY23 SWIG Awards, please visit the <u>SWIG website</u>. Of the **\$3.2M** in grants awarded, more than 90% will directly benefit Environmental Justice communities.



SNEP Network Accomplishments for 2023

In 2023, the SNEP Network worked directly with SNEP communities and partners to provide no-cost training and technical assistance to advance their stormwater/watershed, ecological restoration, funding and financing needs, and climate resilience projects. This year, the SNEP Network delivered **training to over 500 participants**, responded to **over 40 technical assistance requests** from SNEP communities, and worked with five new SNEP communities to address their stormwater management challenges. To date, the SNEP Network has awarded free, in-depth technical assistance to **over 30 community assistance projects** and helped **secure a total of over \$2M** for communities to advance their projects to the next phases of design and implementation.





Site Visit with Groundworks Southcoast at Brooklawn Park in New Bedford, MA. Photo Credit: Kimberly Groff; SNEP Network Massachusetts Liaison, Kimberly Groff Consulting.

The SNEP Network also welcomed two new partners who have been actively engaged in recent Network projects and initiatives. The Narragansett Bay Estuary Research Reserve joins the SNEP Network with expertise in facilitation, community engagement, and outreach. The SNEP Network also welcomed Groundwork Southcoast, a nonprofit organization based in New Bedford, Massachusetts that works with community members and youth to build racial and social equity through hands-on environmental projects. Groundwork Southcoast will be an integral part of the Network's development of communications, outreach, and solutions that address local community needs.

Notable project accomplishments in 2023 include:

- Aquidneck Island Climate Resilience Leadership Exchange: Building upon the Network's climate resilience work with the City of Newport, Town of Middletown, and Town of Portsmouth in Rhode Island, Network partners worked with the Rhode Island Infrastructure Bank to organize an Aquidneck Island Leadership Exchange to foster peer-to-peer learning, collaboration, and regional coordination on high priority topics. This leadership exchange reopened the lines of communication amongst island-wide leadership and resulted in an informal agreement between the municipalities and Naval Station Newport to coordinate efforts to increase regional climate resilience.
- <u>Stormwater Planning Series 2023</u>: Based on the success of the popular stormwater planning series in prior years, the SNEP Network offered the Stormwater Planning Series, a facilitated planning series that pairs communities with a SNEP Network Partner to learn how to develop a conceptual design for a nature-based retrofit options to four new communities: Hopkinton, RI, Coventry, RI, Swansea, MA, and Westport, MA. This interactive training series provides communities with the knowledge and foundational skills to identify, select, and develop a conceptual design for low-cost, green infrastructure solutions that makes use of the <u>New England Stormwater Retrofit Manual</u> a SNEP Network tool.
- <u>Collaboration with the Wampanoag Tribe of Gay Head Aquinnah (WTGHA)</u>: SNEP Network Partners assisted the WTGHA with the development of a draft policy to ensure the continued opportunity for Tribal members to engage in cultural practices related to harvesting naturally growing plants for sustenance, medicinal, and spiritual purposes. This draft policy allows for the review of disturbance activities on Reservation and Trust Lands and provides a basis for preventing undue harm to Culturally Significant Species.
- <u>Collaboration with the Mashpee Wampanoag Tribe</u>: The Network worked with the Mashpee Wampanoag Tribe and the Town of Mashpee to build community support for a nutrient inactivation treatment that will address excess phosphorus and improve water quality in Santuit Pond. To date, the Santuit Pond project team submitted a Watershed-Based Plan, completed a monitoring report, received two Municipal Vulnerability Preparedness grants to design and implement stormwater measures, developed <u>a web-based learning hub</u>, conducted public outreach, and applied for additional grant funds.

New SNEP Network Resources:

Maidford River Restoration Case Study | Canoe River Aquifer Project Case Study | StewMap Fact Sheet



Eyes on the Horizon: Looking Ahead to 2024.

Heading into 2024, SNEP is well equipped to continue to grow and deliver for our region. We will continue to carry out the implementation of the Infrastructure Investment and Jobs Act through new and existing programs and opportunities. Through our new outreach coordinator, our program plans to be more proactive in its community engagement and on-the-ground presence, most critically, to ensure that all community members have a sufficient awareness of and access to federal funds. The SOAR Fund will deliver new funding to continue to address climate resiliency in disadvantaged communities; and EPA-SNEP will develop an ecohealth tracking tool that allows people to view water quality and habitat data collected across the region. Finally, SNEP will continue to prepare for the development and release of its first-ever State of the Region report slated for 2025.

Big things are on the horizon. As we reflect on the work done this year, we continue to find ourselves thankful for the support of all our partners and the opportunity to improve the health and resilience of our communities and Tribes across southeastern New England. We look forward to the work to come.

Wishing You a Very Happy and Healthy New Year! -The SNEP Team



SNEP Network Partners attend the SNEP Network quarterly meeting at Save the Bay in Providence, RI to discuss the program's initiatives for the fifth and final year of the current SNEP Network and plans for amplifying and celebrating the SNEP Network's accomplishments. (Photo Credit: Martha Sheils, SNEP Network)



Opening day at the restored Bristol Golf Park. The Town used SWIG funding to restore wetlands on its municipal golf course, reducing stormwater pollution to Bristol Harbor and the Warren River. In the process of redesigning the course, the Town greatly improved its aesthetics and playability. Photo credit: Restore America's Estuaries.



In April, the Center for Coastal Studies used funds from a SWIG grant to recover "ghost gear"—abandoned fishing gear – from the shores of Cuttyhunk Island. Artists transformed some of the waste to create an exhibit that was shown in New Bedford and on Cuttyhunk during the summer. The piece in the foreground is by Constance Olds. Photo credit: Restore America's Estuaries



Town of Charlestown's Farmer's Market Stand on 8/10/2023. This week focused on pollutant's impacts on groundwater & well water quality. Photo credit: Kristen Hemphill