# SWIG Year in Review - 2022



Watershed Implementation Grants

#### SWIG looks back on 2022 and ahead to 2023

As 2022 draws to a close, Southeast New England Program (SNEP) Watershed Implementation Grants (SWIG) looks back on its fifth year of grantmaking to support clean water, healthy ecosystems and sustainable communities. SWIG is funded through a partnership between the U.S. Environmental Protection Agency (EPA), Region 1, and Restore America's Estuaries (RAE), a national coalition of coastal conservation organizations. The purpose of SWIG is to implement, through grantmaking, the vision and goals of the SNEP Strategic Plan:

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

SWIG works to achieve this vision by funding locally-based partnerships, programs and partnerships that further SNEP's operational priorities:

- Increase local capacity;
- Increase available solutions toward water quality restoration;
- Ensure diverse representation in programmatic decision-making;
- Demonstrate ways to address common challenges at a watershed level; and
- Increase local buy-in by working with community leaders to demonstrate and quantify the direct and indirect benefits of restoration efforts.

SWIG works closely with EPA, the <u>SNEP Network</u>, and other SNEP members and stakeholders to coordinate SNEP funding and technical assistance, ensuring the efficient and effective use of Federal funds to support SNEP goals and priorities.

Since 2018, SWIG has provided more than \$12 million in funding for nearly 60 grassroots projects and partnerships working to restore coastal and watershed environments in Rhode Island and Southeastern Massachusetts. As we enter 2023, SWIG looks forward to another impactful year, supporting local projects to restore clean water, healthy ecosystems and sustainable communities throughout Southeast New England.

Cover: SWIG funding is supporting planning to remove Capewell Mill Dam in Rhode Island's Big River Management Area, to restore cold-water stream habitat for native brook trout and other species.

# 2022 SWIG Awards

This year, SWIG awarded a total of \$1.9 million for 11 grants the two states. As in prior years, we funded a range of project types and organizations. As an annual, competitive grant program, SWIG solicits proposals from throughout the SNEP region. An independent, interdisciplinary application review committee works closely with RAE and EPA to select the awards, funding a portfolio of grants that supports diverse solutions to the region's environmental challenges. The 2022 SWIG grants were selected from more than \$6 million in requests received.

One focus area for SWIG is environmental justice (EJ). Of the 11 grants awarded this year, all but two are either in, or will directly benefit EJ communities. These grants total about \$1.6 million, or 84% of total SWIG grantmaking, including:

**\$183,948 for continued work by the Stormwater Innovation Center** at Roger Williams Park – a vital greenspace for underserved communities in Providence and Cranston, RI.

**\$150,000 to the City of Brockton, MA**, to plan wetland and floodplain restoration along Trout Brook. The project will reduce flooding and facilitate economic re-use of a former railyard.

**\$150,000 to Community Music Works** to build green infrastructure into its new music center in the West End neighborhood of Providence. The facility will serve students from disadvantaged areas of the city with music education and more.



*Kelly Reed of Community Music Works at the site of the new music center.* 

# 2022 SWIG Awards

**\$215,569 to Groundwork Southcoast (GWSC)** to engage local youth in restoring Cook Pond and nearby green spaces in Fall River, MA.

**\$262,077 to New England Interstate Water Pollution Control Commission** (NEIWPCC) for a program to fight infestations of the invasive water chestnut in freshwater ponds in the Blackstone River watershed, working with EJ communities in both Massachusetts and Rhode Island.

In addition to the EJ projects, SWIG funded a variety of other innovative projects in 2022, including:

**\$250,000 to the Town of Gloucester, RI, for wastewater planning for the village of Chepachet.** The project will help rural mill villages throughout Southeast New England seeking to balance economic renewal with environmental improvement.

**\$55,206 to the Center for Coastal Studies** for a community-based project to remove derelict fishing gear from the shores of tiny Cuttyhunk Island, southwest of Cape Cod. Local artists will recycle some of the recovered gear into sculpture that raises awareness of marine pollution.



Susan Inglis and David Bethoney of CFRF are leading the effort to remove ghost fishing gear from Rhode Island waters.

Fishermen from Rhode Island's Point Judith fleet are participating in the ghost gear project.

## 2022 SWIG Awards

**\$124,000 to the Rhode Island chapter of Trout Unlimited**, which is working with the State of Rhode Island to plan removal of a derelict dam on the upper Pawtuxet River. The project will restore native trout and coldwater stream habitat in the state's Big River Management Area, the western headwaters of Narragansett Bay.

**\$158,456 to the Town of Nantucket** for aliving shoreline" project that will protect a vulnerable coastal road while restoring oysters and estuarine habitat in Sesachacha Pond, a coastal salt pond.



Glenn Place of RI Trout Unlimited and Sal DeCarli of EA Engineering, Science & Technoloty at Capewell Mill Dam.

**\$138,616 to the Association to Preserve Cape Cod**, which is working with the Town of Dennis, MA, on plans to restore more than 70 acres of wetland and estuarine habitat on Weir Creek by replacing two undersized road culverts.

**\$200,000 to the Southern Rhode Island Conservation District** for Westerly's Resilient Riverfront Renewal – working with the Town of Westerly, RI, to restore clean water, improve public access, and foster flood resilience along the Lower Pawcatuck River.



Sen. Jack Reed announced the 2022 SWIG grants at the Botanical Center at Roger Williams Park in Providence.

In addition to these new grants, SWIG continued to oversee a broad portfolio of grants from prior years. Several SWIG projects were successfully completed this year, including some that were delayed by the pandemic. Projects substantially completed in 2022 included:

**Evaluating Nutrient Loadings to the Pawcatuck River and Little Narragansett Bay: \$450,000 to RI Dept. of Environmental Management (RIDEM) and CT Dept. of Energy and Environmental Protection (CTDEEP).** This grant funded monitoring and modeling in order to better understand sources and impacts of nutrient pollution in the Wood-Pawcatuck River system. The grant has given state regulators improved information and tools with which to restore clean water in this important watershed, which lies on the boundary of Rhode Island and Connecticut, affecting coastal water quality and ecosystems in both states.

**Plan to Restore Water Quality in Hundred Acre Cove: \$132,338 to Save The Bay.** Save the Bay worked with three communities in two states (Barrington and East Providence, RI, and Seekonk, MA) to develop a plan to reduce pollution to Hundred Acre Cove (HAC), a poorly-flushed sub-estuary at the head of Narragansett Bay. HAC has been severely impacted by suburban development, for example through the closure of once-productive shellfish beds due to bacterial contamination. Having completed the strategy, Save The Bay will work with the HAC communities to begin implementing its recommendations.

**Permeable Reactive Barrier (PRB) for Lagoon Pond: \$250,000 to Martha's Vineyard Commission.** This is one of several SWIG grants funding the installation and testing of PRBs, an innovative technology for reducing nutrient pollution from coastal groundwater flows. While PRBs are a potentially powerful tool in the right location, they can be difficult to site or position in order to be effective. Martha's Vineyard Commission (MVC) successfully installed a PRB in the town of Vineyard Haven; initial monitoring results are showing excellent results in reducing groundwater nutrient loadings. MVC is developing a siting manual to help communities throughout Southeast New England take advantage of this beneficial new technology.

**Index of Biotic Integrity: \$250,000 to NEIWPCC.** NEIWPCC developed a method for characterizing the environmental quality of small freshwater streams by assessing the species of macroinvertebrates living within them. This Index of Biotic Integrity, or IBI, will provide state agencies in Massachusetts and Rhode Island with an important new tool for evaluating water quality in order to identify areas in need of restoration and to meet state responsibilities under the Clean Water Act.

**Catalyzing Transformative Change in the Taunton River Watershed: \$100,000 to Southeast Regional Planning and Economic Development District (SRPEDD).** The Taunton River is the third-largest tributary of Narragansett Bay, located entirely in Massachusetts and entering the Bay at Fall River. This grant supported SRPEDD's Resilient Taunton Watershed Network (RTWN), which brings together communities throughout the watershed to plan and implement environmental conservation and restoration. With SWIG funding, RTWN conducted numerous workshops and educational activities; municipal bylaw review; assisted in a dam removal project on the river; and identified future restoration opportunities in the watershed.

Watershed Planning and Green Infrastructure at Spectacle Pond: \$187,500 to City of Cranston, RI. This grant funded watershed planning, community outreach, and the installation of a storm water management demonstration project to help restore clean water to Spectacle Pond, an important neighborhood resource in Cranston, and a source of pollution to Roger Williams Park (RWP) in Providence. Storm water pollution into the pond contributes to toxic cyanobacteria blooms locally and in RWP. Prior to this project, street runoff flowed directly into the pond; the City installed an underground infiltration chamber to intercept that runoff, and to show other urban communities an effective means of mitigating this type of pollution.

**Green Infrastructure Training and Employment: \$198,891 to Groundwork Rhode Island (GWRI).** GWRI provides environmental job training and employment opportunities for lower-income adults and youth, while working to improve the urban environment and engage local stakeholders in actions to reduce pollution from storm water and other sources. With this grant, GWRI installed 57 street-side bioretention basins (called bioswales) in Providence to capture road runoff, reduce street flooding, reduce storm water flows and, ultimately, reduce pollution to Narragansett Bay and enhance climate resilience. Many of the storm water installations were in EJ neighborhoods, or areas of benefit to EJ communities, such as the West End of Providence and Roger Williams Park.

Non-Structural Stormwater Approaches: \$108,750 to City of Newport, RI. This grant funded a demonstration project at Braga Park in Newport, adjacent to a drinking water reservoir. The City installed storm water solutions, such as pervious pavement and a bioswale, to show residents how to better manage storm water at their own homes. In addition, the City developed a new guidance manual to help homeowners manage storm water, and is working on a new municipal ordinance that will implement new storm water management standards for residential construction and redevelopment.

Salt Marsh Resilience: \$223,533 to Buzzards Bay **Coalition (BBC).** With this grant, BBC undertook an intensive effort to understand impacts on salt marshes in the Buzzards Bay region, and assess the effectiveness of new restoration methods. BBC sponsored a major conference, bringing together more than 70 salt marsh experts and restoration practitioners from throughout New England, and performed field work and monitoring to implement and monitor restoration techniques.

BBC undertook two pilot projects on Buzzards Bay specifically to test the efficacy of the "runnel" technique for

improving surface drainage in order to restore vegetative communities on salt marsh surfaces. Despite major challenges caused by the Covid-19 pandemic, the project significantly advanced the state of knowledge and practice for salt marsh restoration in the SNEP region.

Buzzards Bay Stormwater Collaborative: \$176,581 to Mass. Maritime Academy

(MMA). MMA used this SWIG grant to establish a program for assisting municipalities with storm water management, while providing new environmental educational opportunities to co-op students at the Academy. MMA partnered with eight towns on Buzzards Bay as well as the Buzzards Bay National Estuary Program and Mass. Coastal Zone Management. Together, they assisted the towns in mapping storm water networks, monitoring storm water discharges, and rectifying outfalls that were contributing to water quality degradation in Buzzards Bay. Following completion of the grant, the Collaborative is continuing to provide technical assistance to communities, improving coordination among them, and establishing the groundwork for additional local funding and partnerships to protect and restore impaired coastal waters and habitat.

Rob Schultz of the City of Newport at the City's stormwater demonstration project at Braga Park.



**Upper Bass River Watershed Restoration Project: \$253,779 to Friends of Bass River (FOBR).** This grant funded field studies, computer modeling, engineering design and planning work needed to replace undersize culverts in the Bass River Watershed, in Yarmouth on Cape Cod. The goal of the work is to restore water quality and estuarine and freshwater habitat, including 57 acres of former cranberry bogs. As a result of this grant, FOBR and the Town received additional funding for the restoration project, and are proceeding with permitting in preparation for construction.

#### Ecosystem Conference for Pleasant Bay: \$8984 to Center for Coastal Studies (CCS).

This project dovetails with SWIG's two prior awards to the Pleasant Bay Alliance for water quality restoration in Cape Cod's largest estuary. In March, CCS hosted a public conference to share the latest science and management information, The Pleasant Bay Ecosystem: Past, Present and Future, attended by nearly 50 Pleasant Bay stakeholders.

Planning a Ghost Gear Removal Program for Rhode Island: \$17,385 to Commercial Fisheries Research Foundation (CFRF). CFRF convened commercial fishers, regulators and other stakeholders to initiate Rhode Island's first effort to tackle the problem of "ghost gear" – lost or abandoned fishing gear which continues to kill marine life long after its useful life, and is a significant source of plastic pollution in the ocean and on shore. CFRF hosted a workshop of experts and stakeholders to develop a sustainable plan for removing ghost gear from Rhode Island waters, and is now working with the fishing community and others to begin implementing the plan.

implementing the plan.



This young humpback whale was killed by a fishing net lodged in its sinus area. SWIG's 2022 grant to CCS will help prevent marine mammal mortality from ghost fishing gear.

# Looking Ahead

SWIG expects to release its 2023 Request for Proposals (RFP) in February this year, as it has since 2018. This year we expect to award about \$3 million in grants; once again, the grants will range up to \$500,000, and will fund diverse partnerships, programs and projects to restore clean water, healthy ecosystems and sustainable communities in Southeast New England. As in prior years, SWIG will seek to distribute funds equitably throughout the region, with attention to geographic diversity as well as environmental justice considerations. SWIG will work to ensure that all grants are awarded for cost-effective, high-impact projects that make a real and positive difference for Southeast New England's environment as well as for SNEP communities. As in the past, RAE will exercise rigorous oversight to assure that SWIG funds are used consistent with federal requirements and best practices in grants and project management.

#### Thanks to our partners!

Restore America's Estuaries extends its sincere thanks to our SWIG partners, without whom this program would not be possible: the U.S. Environmental Protection Agency, Region 1; the SNEP Network; the Narragansett Bay and Buzzards Bay National Estuary Programs; the R.I. Dept. of Environmental Management and Mass. Dept. of Environmental Protection; and all other SNEP partners and stakeholders. We would especially like to thank the members of the SWIG Application Review Committee, who support RAE and EPA in selecting each year's awards.



Coastal resilience is one focus of the SWIG program. This house on Buzzards Bay is one of many in the region threatened by coastal erosion and sea level rise.

#### SWIG Application Review Committee

- <u>Mass. Dept. of Environmental</u>
  <u>Protection</u>
- <u>Mass. Office of Coastal Zone</u>
  <u>Management</u>
- <u>Narragansett Bay Estuary</u>
  <u>Program</u>
- <u>Narragansett Bay National</u> <u>Estuarine Research Reserve</u>
- <u>R.I. Coastal Resources</u>
  <u>Management Council</u>
- <u>R.I. Dept. of Environmental</u> <u>Management</u>
- R.I. Infrastructure Bank
- R.I. Natural History Survey
- **SNEP Network**
- <u>U.S. Environmental Protection</u>
  <u>Agency</u>
- U.S. Fish & Wildlife Service

# Past and Current SWIG Grants

2018 Grantees	Project Title	Grant
Town of Bristol	<u>Restoring Silver Creek at the Bristol Golf Course</u>	\$300,000
City of Pawtucket	Pine Street "Green Streets" Project	\$376,490
RI Dept. of Environmental Management	<u>Water Quality Monitoring Buoys in</u> <u>Narragansett Bay</u>	\$300,000
Save the Bay	<u>Plan to Restore Water Quality in 100-Acre Cove</u>	\$132,338
University of Rhode Island	Modelling Groundwater in Coastal Environments	\$474,663
CT Dept. of Energy & Environmental Protection	<u>Modeling Nutrient Loadings to the Pawcatuck River</u>	\$450,000
Association to Preserve Cape Cod	Three Bays Stormwater Remediation	\$350,000
Buzzards Bay Coalition	<b><u>Collaboration to Reduce Nitrogen to Buzzards Bay</u></b>	\$419,006
Cape Cod Commission	<u>Regional Water Resources Data for Cape Cod</u>	\$399,998
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	<u>Estuarine Water Quality Restoration on</u> <u>Pleasant Bay</u>	\$250,000
New England Interstate Water Pollution Control Commission	Low-Gradient Coastal Index of Biotic Integrity	\$250,000
Southeast Regional Planning & Economic Development District	<u>Municipal Collaboration in the Taunton</u> <u>River Watershed</u>	\$100,000

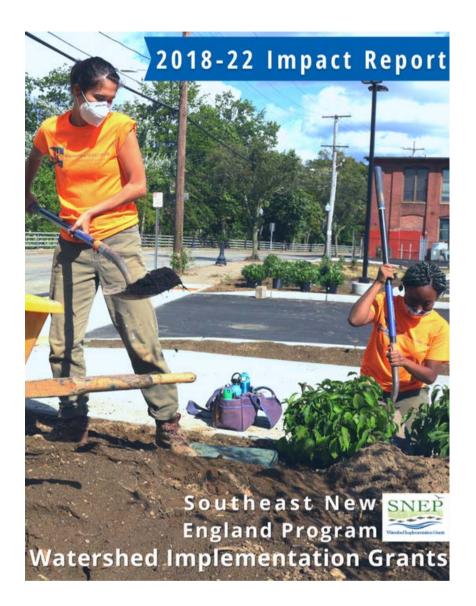
2019 Grantees	Project Title	Grant
Audubon Society of RI	Providence Stormwater Innovation Center	\$177,532
City of Cranston	Green Infrastructure at Spectacle Pond	\$187,500
Groundwork Rhode Island	Green Infrastructure Training & Employment	\$198,891
City of Newport	Non-Structural Stormwater Approaches	\$108,750
Northern Rhode Island Conservation District	<u>Healthy Farm, Healthy Watershed</u>	\$113,976
Town of Warren	Storm Water Management at Public Right-of-Ways	\$25,000
Woonasquatucket River Watershed Council	<u>Woonasquatucket River Greenway</u>	\$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	<b>Buzzards Bay Stormwater Collaborative</b>	\$176,581
Woods Hole Oceanographic Institution	Validation of Permeable Reactive Barrier	\$298,598
Buzzards Bay Coalition	<u>Prevent Nutrients from Composting in Coastal</u> <u>Waters</u>	\$27,695

2020 Grantees	Project Title	Grant
Town of Warren	Market to Metacom Sustainable Design	\$90,000
City of Providence	<u>Woonasquatucket River Greenway</u>	\$250,000
RI Division of Marine Fisheries	<b>Oyster Conservation &amp; Planning</b>	\$150,000
Town of South Kingstown	<u>Green Hill Pond Stormwater Management</u>	\$100,000
University of Rhode Island	<u>Mt. Hope Bay Water Quality Monitoring</u>	\$301,289
Pleasant Bay Alliance	<u>Estuarine Water Quality Restoration on</u> <u>Pleasant Bay</u>	\$132,178
Buzzards Bay Coalition	<b><u>Collaboration to Reduce Nitrogen in Buzzards Bay</u></b>	\$118,275
Friends of Brass River	Upper Bass River Watershed Restoration	\$253,779
Mt. Holyoke College	<u>Bioreactors for Nitrogen Removal at</u> <u>Cranberry Farms</u>	\$232,352
Center for Coastal Studies	Ecosystem Research in Pleasant Bay	\$8,984
Mass Audubon	<u>Estuarine Water Quality Restoration on</u> <u>Pleasant Bay</u>	\$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	<b>Roth Woodlands Stream Restoration</b>	\$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	<u>Truman Drive Green Infrastructure Parkway</u>	\$187,500
Town of Middletown	Maidford River & Floodplain Restoration	\$121,800
Groundwork Rhode Island	<b><u>Green Infrastructure Maintenance</u></b>	\$238,274
Commercial Fisheries Research Foundation	<u>Ghost Gear Removal Program for Rhode Island</u>	\$17,385
City of Cranston	<b>Green Infrastructure at Spectacle Pond</b>	\$150,000
Clean Ocean Access	Land to Sea Speaker Series	\$15,000
Town of Tiverton	<b><u>Tiverton Fogland Beach Resiliency Project</u></b>	\$34,700
City of Pawtucket	<u>Tidewater Landing - Green Space and</u> <u>Redevelopment</u>	\$300,000

# **Read our Last Report!**

SWIG's 2018-2022 Impact Report covered the first four years of SWIG grantmaking. Click the image below to read the full report.



# How to Apply

Our 2023 Request for Proposals will be released in February. <u>Click here</u> to receive notice as soon as it's announced! For more information about SNEP Watershed Implementation Grants, including all current and past SWIG-funded projects, <u>click</u> <u>here!</u>

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