# **FY22 WORKPLAN AND BUDGET**

EPA Grant #: CE-99200221-1



# Applicant: Suffolk County Department of Health Services

Submitted by: PEP Management Conference Approved May 11, 2022

> Start Date of Grant October 1, 2022

Prepared by:
Peconic Estuary Partnership Office
Suffolk County Department of Health Services (SCDHS)
Riverhead County Center
300 Center Drive, Suite 250S
Riverhead, NY 11901
(631) 852-2961

Amended Feb 2024 Amended Feb 2025

# Peconic Estuary Partnership

# FY22 Workplan & Budget

FY	22 WORKPLAN AND BUDGET	1
	Applicant:	1
I.	INTRODUCTION	3
Pe	conic Estuary Partnership	3
Ο۱	verall Funding Sources	3
II.	SUMMARY OF FY21 ACCOMPLISHMENTS	4
III.	WORKPLAN	7
1.	CCMP Goals	7
2.	Budget and Staff Elements	7
	Program Office Staff	7
	Budget Summary	7
	Table 1a: Former Budget Summary	8
3.	New and On-Going Project Information – Suffolk County FY22 Workplan	8
	CCMP GOAL: CLEAN WATERS	9
	Water Quality Monitoring (New/Ongoing)	9
	National Atmospheric Deposition Program (New/Ongoing)	10
	CCMP GOAL: HEALTHY ECOSYSTEMS WITH ABUNDANT, DIVERSE WILDLIFE	10
	Performance Measure: Financial and logical support for the Indian Island Wetland Restoration project	10
	*Note: projects that have strikethrough are no longer funded under this award.* CCMP GOAL: HEALTHY— ECOSYSTEMS WITH ABUNDANT, DIVERSE WILDLIFE	11
	Submerged Aquatic Vegetation Long Term Monitoring and Management (SAV Monitoring) (New/Ongoing)	11
4.	Completed Major Projects	11
	PEP Expansion and Monitoring of the Town of Southold Living Shoreline Demonstration Project (Ongoing-Referred to as Nitrogen Mitigation Pilot Assessment (FY15/FY11)	11
	Peconic Estuary Nitrogen Load Reduction Cost Assessment (FY15)	12
IV	BUDGET DETAILS	13
Re	sources Requested	13
1	Non Fodoral Contribution	1 /

### I. INTRODUCTION

## Peconic Estuary Partnership

The Peconic Estuary is one of 28 estuaries in the country designated by U.S. Environmental Protection Agency as an "estuary of national significance" under Section 320 of the Federal Clean Water Act. The National Estuary Program (NEP) was established to protect and restore nationally significant estuaries threatened or impaired by pollution, development, and overuse. The Peconic Estuary was formally accepted as part of the NEP in 1992. Officially commenced in 1993, the Peconic Estuary Program includes numerous stakeholders, representing citizen and environmental groups, businesses and industries, academic institutions, and local, county, state, and federal governments. The EPA, New York State Department of Environmental Conservation (NYSDEC) and the Suffolk County Department of Health Services (SCDHS) are the sponsoring government agencies for the program. Stony Brook University is the host entity, and this grant commences October 1, 2022.

The PEP 2020 Comprehensive Conservation Management Plan (CCMP) guides the priorities of the organization and as such all projects and plans detailed in this workplan relate directly to the actions established to achieve our four goals: strong partnerships and engagement, clean waters, resilient communities prepared for climate change, and a healthy ecosystem with abundant, diverse wildlife.

## **Overall Funding Sources**

The core FY22 budget reflects the following sources of funding:

EPA FY22 Base Funding: \$750,000.00\*

Non-Federal Match: \$750,000.00\*\*

Total: \$1,500,000.00

### **Resources Requested:**

The total Section 320 funds requested in this NEP grant to Suffolk County Department of Health Services (SCDHS) is \$140,987 which will be matched at the required 1:1 rate, making the full budget of the SCDHS award \$281,974.

\*EPA FY22 Base funding will be provided to SCDHS is \$140,987 and SUNY Stony Brook Research Foundation \$609,013.

\*\*The Non-Federal match is provided by NYSDEC, East End Town Funds, and SCDHS. New York State, Suffolk County, and other partners are expected to provide significant support above and beyond the committed match in the budget table in support of Peconic Estuary Partnership goals and objectives. EPA FY22 non-Federal Match will be provided by SCDHS (\$140,987), NYSDEC (\$504,507), and Local Governments (\$104,506). The full budget including non-Federal match, is \$1,500,000.

# II. SUMMARY OF FY21 ACCOMPLISHMENTS Operational Accomplishments

The Research Foundation for SUNY Stony Brook is made PEP Host

In January 2021 the decision was made by the PEP Management Conference to move hosts from NEIWPCC to The Research Foundation for SUNY Stony Brook. This transfer occurred on July 1, 2021, and the FY21 NEP grant was awarded to the Research Foundation for SUNY Stony Brook. During this time, PEP saw a significant increase in local contribution to the program with the New York State contribution increasing from \$200,000 annually to \$450,000 (125% increase) and the local governments in the watershed initiating a three year buy-in which will eventually see their contribution match the federal dollars. In FY21 PEP received \$236,950 of new money from the Local Government Community Preservation Funds. Total new partner funding is \$486,950 during this time. This has allowed PEP to hire an Outreach Coordinator as a direct employee of the program; another first for PEP. This strategic change in program operation has several benefits: firstly, it allows more flexibility in the annual outreach and education programming, secondly it focuses PEP's work on itself and messaging is clear, and thirdly it creates a more cohesive program office and is beneficial to team building. PEP also hired a Program Support Specialist who started in February 2022 which will assist the program office in project management as a result of increased funding and workloads. The status of other operational activities:

- Completion of Organizational Assessment and PEP By-Laws
- Ongoing development of CCMP Tracking System
- Ongoing development of PEP Finance Plan
- Ongoing development of Comprehensive Monitoring Plan

#### Monitoring and Implementation

In Winter 2021, PEP initiated the distribution and educational workshops for the Critical Land Protection Strategy. While Covid19 hindered our ability to reach out to the Towns in our watershed individually for targeted training on this tool, PEP was able to hold a virtual training that was well attended. The recording is available on our website and we continually use our social media platforms and meetings to promote the CLPS tools. The workshop is available here: <a href="https://www.peconicestuary.org/what-you-can-do/homeowner-rewards-program/">https://www.peconicestuary.org/what-you-can-do/homeowner-rewards-program/</a>.

PEP continues to play an active role in regional planning for key issues. PEP holds a seat on the NYS Ocean Acidification Task Force, the Suffolk County Coastal Resilience and Sea Level Rise Task Force, and the Suffolk County Aquaculture Lease Review Committee. The ongoing effort on water quality has expanded in this time period with the release of our first Annual Water Quality Report <a href="https://www.peconicestuary.org/peconicestuary-water-quality-report/">https://www.peconicestuary.org/peconicestuary-water-quality-report/</a>, the establishment of the Water Quality Collaborative as a sub-committee, and the installation of a third platform for tidal warning and continuous water quality monitoring in partnership with USGS. The platform and tide gauge are in place and we anticipate installing the equipment in the FY22 grant period.

Two important projects finally commenced after delays due to Covid19. The first was the engineering design and permitting of the Meetinghouse Creek stormwater wetland restoration. This is a 1.2-acre wetland that will act as a non-point source reduction site with the capture of roughly 6 acres of stormwater run-off. The second project was the Ecosystem Based Model of the Peconic Estuary which will carry out an ECOSIM/ECOPATH model to establish trophic assemblages in the estuary and identify key species as indicators in our watershed. We continued our Homeowner Rewards Program and monofilament recycling program; two long standing programs that serve to not only positively impact our watershed but engage multiple communities to educate them about stormwater management and marine plastic pollution.

Two projects funded by EPA §320 grants that previously had extensions due to the COVID-19 restrictions in New York State have been completed. These are: the Expansion and Monitoring of the Town of Southold Living Shoreline Project and Nitrogen Load Reduction Cost Assessment Project. We are excited to move these projects into the public outreach phase and began outreach events. In November we held an outdoor field visit to the Living Shoreline Project that was attended by over 20 East End Town employees and elected officials to educate them about alternatives to bulkheads and other hardened structures on our shorelines. This was coupled with information and education events with community leaders and local elected officials on the urgency of shoreline adaptation. These events are part of a larger outreach strategy to ensure our communities have the best possible information and tools to make critical decisions for coastal adaptation, defense, and land acquisition now and in the future. PEP is disseminating widely the Critical Land Protection Strategy and the recommendations contained therein as the basis of this outreach.

PEP finally saw construction commence on the fish passage project at Woodhull Dam; a longstanding barrier on Little River, a tributary of the Peconic River. Construction began November 1, 2021. This will open up 95 acres of habitat for Alewife (River Herring) when complete. We submitted permits for the fish pass at Upper Mills Dam, a barrier on the main stem of the Peconic River and will begin to seek out funding for construction of this project. Two of our priority wetland restoration projects have begun the design phase as an engineer was awarded the contract for Paul Stoutenburg Preserve wetland restoration and funds were secured to move forward with conceptual designs at Accabonac harbor wetland restoration. These are two high priority projects for habitat restoration in the Peconic watershed.

Our partnership-based work continues to grow. Suffolk County completed the Subwatersheds Wastewater Plan (SWP) and PEP held education and outreach events with our communities to help them access funding to replace old cesspools and outdated septic systems. PEP continued to work with multiple community organizations and local governments throughout the watershed to highlight this work and teach the public about the importance of nitrogen reduction and how to access grant funding for this purpose.

### **PEP Outreach Activities**

PEP continued the highly successful citizen science partnership between Seatuck Environmental and PEP, the Long Island Wildlife Monitoring Network (<a href="https://wildlifemonitoringnetworkli.org/">https://wildlifemonitoringnetworkli.org/</a>). This initiative has held with training, workshops, and led citizen science with partners throughout the PEP watershed. PEP initiated the creation of the Long Island Wildlife Monitoring Network in 2020 to make it easier for partners to collaborate and avoid overlap, and for the public to become aware of all the efforts going on around Long Island and to get involved with multiple citizen science programs. With this brand and central website, citizen participation is increased, data collection centralized, and partner collaboration enhanced.

# PEP Biennial Conference – Planning for a New Decade

Due to the ongoing Covid19 pandemic, PEP held its conference (originally scheduled for Fall 2020) virtually over three days. Attended by over 325 people over three days, the conference was focused on the result of our planning efforts as part of the CCMP update and our new Goals and Actions. A three-day event, the first day focused on CCMP goal: Clean Water for Ecosystem Health and Safe Recreation and featured a panel of NY State and Suffolk County elected officials, as well as PEP staff and key member of local water quality initiatives. The second day focused CCMP goal: Resilient Communities Prepared for Climate Change and featured a panel of Suffolk County and Local Government elected officials, New York State Climate resiliency personnel, The Nature Conservancy, and Professor Minghua Zhang, PhD —Nobel Prize winning scientist for his 2007 Nobel Peace Prize work. The third day focused on CCMP Goal: Health Ecosystems for Abundant, Diverse Wildlife and had a panel consisting of experts from New York State, The Nature Conservancy, Stony Brook University, and Cornell Cooperative Extension. The full conference

recordings can be found here: <a href="https://www.peconicestuary.org/news-and-events/peps-biennial-conference-2021/">https://www.peconicestuary.org/news-and-events/peps-biennial-conference-2021/</a>

# **Long Island Estuary Program Coordination**

In collaboration with the New York Long Island Nitrogen Action Plan (LINAP), PEP has partnered on an island-wide estuary program collaborated outreach effort. This includes LINAP, the Long Island Sound Study, The New York State South Shore Estuary Reserve, and PEP. Aligned outreach messaging targeted to nitrogen reduction on Long Island has led to a greater understanding of this issue. Through this partnership we are working to replicate PEP's long-running Homeowner Rewards Program (<a href="https://www.peconicestuary.org/what-you-can-do/homeowner-rewards-program/">homeowner-rewards-program/</a>) into the other watersheds on Long Island. This partnership will continue through the next year as we move this initiative forward.

### Focusing PEP Priority Areas

In FY21, PEP made the decision to hone in on priority areas in our watershed. As a result of the 2020 Water Quality Monitoring Strategy, PEP Committees identified the need to focused work in embayments around the Peconic using sub-watershed plans developed by PEP over the past several years and in conjunction with Suffolk County and their recently complete County-wide Subwatersheds Wastewater Plan. With particular input from our Local Government Committee and include existing PEP priority habitat projects identified by our Technical Advisory Committee, PEP identified 10 Priority Embayments to focus our efforts on to maximize the value of our spending. These priority areas are: Three Mile Harbor, Accabonac Harbor, Sag Harbor Cove and Haven's Beach, Riverside, Meetinghouse and Terry's Creek, Goose Creek, Mattituck/James' Creek, West Neck Bay and Creek, and Shelter Island Heights. This approach will ensure we remain focused on high need areas while retaining our estuary-wide programs and communications.

# FY21 Workplan Items Complete

Expansion and Monitoring of the Town of Southold Living Shoreline Project (FY13 Funds) - Complete

Nitrogen Load Reduction Cost Assessment Project (FY15 Funds) - Complete

Completed Peconic Estuary Protection Committee (PEPC) (Intermunicipal Agreement for Stormwater Management) – Quality Assurance Management Plan. Fulfills CCMP Action 21, Performance Measure: Development of a Quality Assurance Management Plan (QAMP) to enable sampling, analysis, and reporting of ground and surface water by municipalities for use in NYS, Suffolk County, and East End Municipality decision making and management actions. Total project cost: \$85,000 (Suffolk County) + Staff Time (EPA 320 Funds to Suffolk County).

Completed Woodhull Dam Construction: The Permitting Services for Construction of a Fish Passage at the Woodhull Dam, Town of Riverhead contract through Suffolk County Parks is complete and funding for the construction of the dam has been secured through a NYSDEC Water Quality Improvement Grant, Suffolk County Capital Budget, Suffolk County Fund 477, USFWS National Fish Passage Fund, and Town of Southampton CPF funds. Ninety-five (95) acres of freshwater habitat is open. Construction for this project is now nearing completion. Partial completion of Action 29, Performance Measure: Completion of the Woodhull Dam, Forge Road Dam, Upper Mills Dam diadromous fish connectivity projects. Total project cost: \$1,112,855 (Suffolk County, NYSDEC, USFWS) + Staff Time (EPA 320 Funds).

### III. WORKPLAN

#### 1. CCMP Goals

Our new Goals: Strong Partnerships, Resilient Communities, Clean Water, and a Healthy Ecosystem are the four pillars of our foundation, and our renewed focus on partnership will enable us to grow and meet the challenges of the next decade. The new CCMP lays out 8 new Objectives and 35 new Actions that will guide PEP and our partners to address the challenges facing our watershed. The following CCMP Actions will specifically be addressed this year by the portion of the grant addressed in this workplan:

# 2. Budget and Staff Elements

# **Program Office Staff**

All funding to be used for direct PEP Program Office staff time is covered under the SUNY Stony Brook Research Foundation portion of the NEP grant request. For information regarding staff funding of the Peconic Estuary Partnership staff in FY2022, please see the workplan for grant agreement CE-96247000-3 to SUNY Stony Brook Research Foundation. However, time from the following staff will be used toward managing the projects funded via the NEP grant awarded to the Suffolk County Department of Health Services since this award supports the PEP:

Executive Director: Joyce Novak, PhD

Location: Suffolk County Department of Health Services, 300 Center Drive, Room 250S, Riverhead, NY

Responsibilities: Provides overall leadership to the program office, management and administration to the Program on behalf of the Management Conference.

Program Support Specialist: Jade Blennau

Location: Suffolk County Department of Health Services, 300 Center Drive, Room 250S, Riverhead, NY

Responsibilities: Coordinates all projects in Suffolk County and acts as support and lead for a variety of other projects carried out by the program office.

# **Budget Summary**

Table 1 outlines the Summary Budget for the FY22 EPA 320 spending covered under this grant request. Section IV, page 11 has details of this budget.

Table 1: PEP FY22 Revised Budget Summary – Suffolk County Request: updated as of February 2024 including funding for Task 4- Indian Island project using unliquidated funds from Task 2- NADP project as well as funds previously designated for Submerged Aquatic Vegetation Monitoring as recommended and approved by PEP Management Conference due to monitoring program protocol changes.

FY21 EPA §320 Budget (CE-99200221-1)				
Description	FY22 Cost			
Personnel (+fringe)	\$95,987			
Contractual				
Indian Island Wetland Restoration	\$36,586.00			

Other (Subawards)	
NADP Monitoring - Wisconsin State Lab of Hygiene	\$8,414.00
Indirect	\$0.00
Total Suffolk County Request	\$140,987.00
Total Match Suffolk County	\$140,987.00
TOTAL EPA Grant	\$281,974.00

**Table 1a: Former Budget Summary** 

FY21 EPA §320 Budget (CE-99200221-1)					
Description	FY22 Cost				
Personnel (+fringe)	\$95,987				
Other (Subawards)					
SAV Monitoring - CCE	\$35,000.00				
NADP Monitoring - Wisconsin State Lab of Hygiene	\$10,000.00				
Indirect	\$0.00				
Total Suffolk County Request	\$140,987.00				
Total Match Suffolk County	\$140,987.00				
TOTAL EPA Grant	\$281,974.00				

# 3. New and On-Going Project Information – Suffolk County FY22 Workplan

All projects in this grant request are ongoing projects that will be funded with FY22 §320 funds; the PEP Staff will be working on the following funded by previous §320 Budgets and Grant Awards awarded to SCDHS in combination with the current FY22 request. Table 2 outlines the project type, Suffolk County FY22 funding request, and PEP role for each project in the workplan.

Table 2: PEP Projects in the Suffolk County FY22 Workplan Revised February 2024

CCMP Action	Description		Funding requested from FY22 §320 award:	PEP Role
Action 16	Water Quality Monitoring	New/Ongoing	[ · · · · ·	Supporting partner
Action 16	NADP		· ·	Supporting Partner
Action 31	Indian Island Wetland Restoration *updated Feb 2024	New/Ongoing	\$36.586.00	Lead Partner

Table 2a: Former PEP Projects in the Suffolk County FY22 Workplan

CCMP Action	Description	, ,,	Funding requested PEP Role	
			from FY22 §320 award:	
Action 16	Water Quality Monitoring		\$95,987	Supporting partner
Action 16	NADP	New/Ongoing	[ · · · · ·	Supporting Partner
Action 30	SAV Long Term Monitoring	New/Ongoing	\$35,000	Lead Partner

#### **CCMP GOAL: CLEAN WATERS**

**Objective D:** Protect areas with clean water from degradation.

**Action 16:** Identify areas of clean water quality and deliver information that local governments and others can use to protect those areas.

**Performance Measure:** Annual review of water quality data and water quality monitoring programs with assessment and recommendations regarding changes to water quality data collection in order to adequately monitor all waterbodies in the Estuary.

**Performance Measure:** Annual water quality data reports that support partner's efforts to increase local and regional stewardship of areas of clean water quality.

# Water Quality Monitoring (New/Ongoing)

- a. Estimated Budget: \$95,987 §320 funds Request in FY22 budget (+\$79,532 ULO)
- **b. Partners and their roles:** Suffolk County Department of Health Services (SCDHS), Office of Ecology (Lead Partner), PEP (Supporting Partner).
- c. Description and Objectives: SCDHS monitors water quality of surface and marine waters within the Peconic Estuary. The water quality monitoring program conducted by the SCDHS Office of Ecology includes monthly monitoring at approx. 40 Peconic surface water quality stations throughout the year, periodic monitoring of approx. 30-point source and stream stations, and weekly monitoring at the NADP rain and atmospheric deposition gauge. Task funds will be used to support 2 Suffolk County personnel monitoring water quality of surface and marine waters within the Peconic Estuary as part of the Suffolk County Department of Health Services (SCHDS) Surface Water Quality Monitoring Program. The SCDHS Surface Water Quality Monitoring Program data will be analyzed by SCDHS Office of Ecology as part of the PEP Water Quality Monitoring Collaborative; a water quality monitoring report will be produced for the Peconic Estuary Partnership. FY22 funds will be used to support personnel time allocated to this task.
- **d. Outputs and Deliverables:** Routine monitoring conducted in the Peconic Estuary makes it possible for the PEP to have accurate, up-to-date information regarding water quality conditions throughout the Estuary. All Suffolk County Department of Health Services Water Quality Data and Information is available upon request. And presented in the annual report.
- e. Estimated Milestones: Annual water quality summary report.
- f. Long Term Outcomes: Water quality data will be used to assess environmental conditions in the Peconic Estuary and refine management programs as necessary. Based on water quality data, priority projects and research initiatives can be identified and the PEP can continue its success in efforts to

- protect and restore the Estuary. Data collected by these monitoring efforts inform periodic reporting and adaptive management.
- g. Clean Water Act Core Programs: Identifying Polluted Waters and Developing Plans to Restore Them (TMDLs): Assessment of progress toward TMDL goals; refinement of implementation plan and TMDL goals for land-based loads; Elements of this project prevent or mitigate the impacts of nutrient pollution.

# National Atmospheric Deposition Program (New/Ongoing)

- **a. Estimated Budget:** \$8,414.00: §320 funds request in FY22 budget (edited from \$10,000 previous to February 2024)
- b. Partners and their roles: Suffolk County Department of Health Services, Office of Ecology (Lead Partner) is responsible for sample collection; Wisconsin State Laboratory of Hygiene (cations) and Frontier Global Sciences, Inc. (mercury) are responsible for data analysis; Wisconsin State Laboratory of Hygiene National Atmospheric Deposition Program is responsible for data assessment, reporting, and coordination with the national network; Mercury Deposition analyses are funded through a partnership with New York State Energy Research and Development Authority (NYSERDA), PEP (Supporting Partner).
- c. Description and Objectives: Monitor local atmospheric deposition of major cations in precipitation and local mercury deposition in precipitation at Site ID 96 at Cedar Beach Southold, NY. Objective is to evaluate success of Clean Air Act policies and program in reducing atmospheric deposition of nitrogen in the Peconic region and track progress toward nitrogen TMDL goals.
- d. Outputs and Deliverables: Results published as part of the National Atmospheric Deposition Program system on their website: (http://nadp2.slh.wisc.edu/data/sites/siteDetails.aspx?net=NTN&id=NY96)
- e. Estimated Milestones: Annual Reporting
- f. Long Term Outcomes: To assess the long-term trends of nitrogen and mercury and nitrogen deposition in the Peconic watershed and Estuary. Utilize the results to understand the sources of nitrogen pollution and implement science-based approaches for monitoring and reducing nitrogen pollution. Results will be used to determine implications for coastal acidification.
- g. Clean Water Act Core Programs: Identifying Polluted Waters and Developing Plans to Restore Them (TMDLs): Assessment of progress toward TMDL goals; refinement of implementation plan and TMDL goals for land-based loads; Elements of this project prevent or mitigate the impacts of nutrient pollution.

### CCMP GOAL: HEALTHY ECOSYSTEMS WITH ABUNDANT, DIVERSE WILDLIFE

Objective H: Restore and protect key habitats and species diversity in the Peconic Estuary

**Action 31:** Use available habitat quality assessment and climate change resiliency tools to prioritize wetland restoration projects identified in the 2020 PEP Habitat Restoration Plan, and implement the top priority projects.

### Performance Measure: Financial and logical support for the Indian Island Wetland Restoration project

Task 4 \*updated Feb 2024 (FY21 Funds): Indian Island Wetland Restoration (New/Ongoing)

- a. Estimated Budget: \$36.586.00 §320 funds redistributed Feb 2024
- b. Partners and their roles: Suffolk County (Contracting Entity), PEP (Supporting Partner)

- c. **Description and Objectives:** Restore former tidal wetland area through construction of tidal channel to wetland area.
- d. Outputs and Deliverables: Restore 5 acres of wetlands
- e. **Estimated Milestones:** Estimated to be completed by June 2024.
- f. Long Term Outcomes: Wetland restoration estimated completed in June 2024
- g. Clean Water Act Core Programs: Protecting Wetlands

#### **CCMP GOAL: HEALTHY ECOSYSTEMS WITH ABUNDANT, DIVERSE WILDLIFE**

Objective H: Restore and protect key habitats and species diversity in the Peconic Estuary

Action 30: Monitor and protect existing eelgrass beds; where appropriate, restore and expand eelgrass beds.

**Performance Measure:** Financial and logistical support for the Annual Long-term Eelgrass Monitoring Program to monitor changes in eelgrass density end extent.

#### Submerged Aquatic Vegetation Long Term Monitoring and Management (SAV Monitoring) (New/Ongoing)

- a. Estimated Budget: \$35,000: §320 funds Request in FY22 budget
- b. Partners and their roles: Cornell Cooperative Extension of Suffolk County (Sub Awardee), Suffolk County (Lead Partner), PEP (Lead Partner)
- c. Description and Objectives: Monitoring of seagrass survival and bed expansion at thirteen eelgrass beds located throughout the estuary. Nine sites are monitored annually and four additional sites are monitored biennially. Long-term measurements of seagrass extent and deep edge location, eelgrass shoot density, measurements of light, temperature, macroalgae cover and sediment conditions are done at these sites. Measurements of light and temperature were only monitored at six of those sites.
- d. **Outputs and Deliverables:** Maps of individual eelgrass beds with shoot density, imagery, and bed alterations on an annual timescale.
- e. Estimated Milestones: Annual report generated in Spring.
- f. Long Term Outcomes: An extensive and accurate record of eelgrass beds on a micro scale to allow for successful management decisions.
- g. Clean Water Act Core Programs: Protecting Wetlands

# 4. Completed Major Projects

<u>PEP Expansion and Monitoring of the Town of Southold Living Shoreline Demonstration Project</u> (Ongoing-Referred to as Nitrogen Mitigation Pilot Assessment (FY15/FY11)

- **a. Estimated Budget:** §320 funds: \$155,000. \$55,000 (FY15) (\$100,000 FY11).
- b. **Partners and their roles:** PEP (Supporting Partner), Cornell Cooperative Extension of Suffolk County (Contractor), Suffolk County Department of Health Services (Contracting Entity)
- c. Description and Objectives: Expansion and Monitoring of the Town of Southold Living Shoreline Demonstration Project. This project involves expansion to an existing Town of Southold Living Shoreline Demonstration Project contract with the Town of Southold Trustees and the Suffolk County Department of Economic Development and Planning. The PEP funded project establishes a larger geography of the project and monitoring services to run in tandem with the existing project to enable the quantification of nitrogen and pathogen uptake results and assessment of the effectiveness of the

<sup>\*</sup>Note: projects that have strikethrough are no longer funded under this award.\*

living shoreline to mitigate nitrogen pollution in the Peconic Estuary. The living shoreline coconut fiber (coir) logs, planting of *Spartina alterniflora* and hatchery cultivated ribbed mussels to provide shoreline stabilization, improve habitat, reduce nitrogen and enhance ecosystem services. Assess the project's ability to improve water quality and use results to develop decision-support information.

- d. **Outputs and Deliverables:** The creation of a living shoreline demonstration project using ribbed mussels and *Spartina alternaflora* in a sheltered embayed coastal habitat. Educational materials for public dissemination and permanent signage at the demonstration site.
- e. **Estimated Milestones:** Completion Fall 2021
- f. Long Term Outcomes: The results from these analyses are intended to be used in recommendations for future nitrogen and pathogen mitigation techniques and nitrogen and pathogen management activities, including those regarding cost-effective nitrogen removal strategies on a subwatershed basis, thus assisting local decision makers determine the most cost-effective means of reducing nitrogen in subwatersheds.
- g. **Clean Water Act Core Programs:** Elements of this project prevent or mitigate the impacts of nutrient pollution. Wetlands Protection.

# Peconic Estuary Nitrogen Load Reduction Cost Assessment (FY15)

- a. **Estimated Budget**: §320 funds: \$87,000 (FY15)
- b. **Partners and their roles:** PEP (Lead Partner), Anchor QEA, LLC. (Contractor), Suffolk County Department of Health Services (Contracting Entity)
- c. **Description and Objectives**: Assessment of the cost per-pound of nitrogen reduction to groundwater for various nature-based nitrogen reduction best management practices (BMPs) currently being employed in the New England and Mid-Atlantic region of the United States that, based on the geographical, environmental needs of the County, have potential to be installed in Suffolk County. The contractor will be responsible for comparing the cost and benefit estimates based on a per-pound of nitrogen reduction for any public or private property owner. This information will be analyzed and developed into a user-friendly tool by the contractor in conjunction with and with approval of the County. This tool will be made available for the public to use and will also be used as a tool for municipalities for geographic and financial planning purposes.
- d. **Outputs and Deliverables**: On-line tool to assess cost per pound of nitrogen in nature-based nitrogen pollution reduction techniques.
- e. **Estimated Milestones**: Completion Fall 2021.
- f. **Long Term Outcomes:** Enable communities and local governments to achieve the most cost-effective measures to reduce nitrogen in the watershed.
- g. Clean Water Act Core Programs: Identifying Polluted Waters and Developing Plans to Restore Them (TMDLs): Assessment of progress toward TMDL goals; refinement of implementation plan and TMDL goals for land-based loads; Elements of this project prevent or mitigate the impacts of nutrient pollution.

### IV. BUDGET DETAILS

### **Resources Requested**

The total 320 funds requested in this PEP grant to Suffolk County Department of Health Services is \$140,987. This grant will be complimented by a request for PEP support to SUNY Stony Brook Research Foundation for \$609,013 and together these two components make up the full Peconic Estuary Partnership FFY2022 workplan for a total §320 request of \$750,000 with a local match of \$750,000 for a total grant of \$1,500,000. Details of expenditures can be found in Table 3.

No trips are anticipated under this grant request and no travel funds are requested here.

Note: updates as of February 2024 include funding Task 4- Indian Island project with unliquidated funds from Task 2- NADP project as well as transferring funds previously designated for Submerged Aquatic Vegetation Monitoring as recommended and approved by PEP Management Conference due to monitoring program protocol changes.

Table 3: Detailed budget and spending FY22 Suffolk County request revised February 2024

BUDGET DETAIL 2022 Workplan-revised	Total Requested from EPA	Total Match Provided by Applicant	Total ULO used	Total
Personnel and Fringe				
Water Quality Monitoring Ongoing Personnel				
Monitoring Personnel: Chemist	\$36,385.00	\$36,385.00	\$32,242.00	\$105,012.00
Monitoring Personnel: Boat Operator	\$24,384.00	\$24,384.00	\$20,478.00	\$69,246.00
Fringe				
Monitoring Personnel: Chemist	\$18,884.00	\$18.884.00	\$15,230.00	\$52,998.00
Monitoring Personnel: Boat Operator	\$16,334.00	\$16,334.00	\$11,582.00	\$44,250.00
SUB-TOTAL	\$95,987.00	\$95,987.00	\$79,532.00	\$271,506.00
<u>Contractual</u>				
Indian Island Wetland Restoration	\$36,586.00	\$0.00	\$0.00	\$36,586.00
SUB-TOTAL	\$36,586.00	\$0.00	\$0.00	\$36,586.00
<u>Other</u>				
Ongoing Atmospheric Deposition Monitoring via NADP (Subaward)	\$8,414.00	\$0.00	\$0.00	\$8,414.00
Suffolk County Projects	\$0.00	\$45,000.00	\$0.00	\$45,000.00
SUB- TOTAL	\$8,414.00	\$45,000.00	\$0.00	\$53,414.00
TOTAL	\$140,987	\$140,987	\$79,532	\$361,506.00

Table 3a: Previous Detailed budget and spending FY22 Suffolk County request before revision February 2024

BUDGET DETAIL 2022 Workplan- previous	Total Requested from EPA	Total Match Provided by Applicant	Total ULO used	Total
Personnel and Fringe				
Water Quality Monitoring				
Ongoing Personnel				
Monitoring Personnel: Chemist	\$36,385.00	\$36,385.00	\$32,242.00	\$105,012.00
Monitoring Personnel: Boat Operator	\$24,384.00	\$24,384.00	\$20,478.00	\$69,246.00
Fringe				
Monitoring Personnel: Chemist	\$18,884.00	\$18.884.00	\$15,230.00	\$52,998.00
Monitoring Personnel: Boat Operator	\$16,334.00	\$16,334.00	\$11,582.00	\$44,250.00
SUB-TOTAL	\$95,987.00	\$95,987.00	\$79,532.00	\$271,506.00
Other				
Ongoing Atmospheric Deposition Monitoring via NADP (Subaward)	\$10,000.00	\$0.00	\$0.00	\$10,000.00
Ongoing SAV Monitoring via Cornell Cooperative Extension (Subaward)	\$35,000.00	\$0.00	\$0.00	\$35,000.00
Suffolk County Projects	\$0.00	\$45,000.00	\$0.00	\$45,000.00
SUB-TOTAL	\$45,000.00	\$45,000.00	\$0.00	\$90,000.00
TOTAL	\$140,987	\$140,987.00	\$79,532.00	\$361,506.00

## 1. Non-Federal Contribution

# (a) Suffolk County Match

Suffolk County Department of Health Services will provide the required 1:1 for this grant application totaling \$140,987 as detailed in the previous table. Suffolk County's expenditures to fund water quality monitoring and water quality protection and restoration through the Suffolk County General Budget and Suffolk County Capital Budget funding are approved to be allocated as the required 1:1 local match for Suffolk County's USEPA National Estuary Program Peconic Estuary Partnership Support grant.