

Attachment B Program Narrative
Peconic Estuary Partnership
NEIWPCC Job Cost Code: **TBD**

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QA/QC Plan Required:	Yes
Project Period:	October 1, 2020 - September 30, 2022
Resources Requested:	The total budget requested for this application is \$1,058,760.
Federal Cost:	Current request: \$529,380
Non-Federal Match:	The New York State Department of Environmental Conservation will provide a match of \$529,380. [April 2020 DRAFT does not include match documentation yet, match amount is not final]

Peconic Estuary Partnership

NEIWPCC FY20 Workplan & Budget

EPA Grant # 97230304

Draft date: April 3, 2020

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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. The current hosts of the program are SCDHS and NEIWPCC. In 2019, the Peconic Estuary Program was re-named the Peconic Estuary Partnership (PEP) to more accurately reflect the varied partnerships that allow the NEP to thrive.

The original PEP Comprehensive Conservation and Management Plan (CCMP) was approved by the EPA Administrator on November 15, 2001, with the concurrence of the New York State Governor. The CCMP promotes a holistic approach to protecting, enhancing and restoring the Estuary and its watershed. Priority management topics in the original PEP CCMP included Brown Tide, nutrients, habitat and living resources, pathogens, toxic pollutants, and critical lands protection. These six priority topics, together with public education and outreach, financing, and post-CCMP management, form the basis for the CCMP action plans. As of April 2020, the PEP has submitted an updated final draft CCMP for EPA review to address new issues that have arisen; the 2020 CCMP is anticipated to be published in summer 2020. The tasks in this workplan are structured around the 2020 CCMP goals of strong partnerships and engagement, clean waters, resilient communities prepared for climate change, and a healthy ecosystem with abundant, diverse wildlife.

NEIWPCC

NEIWPCC is a regional commission that helps the states of the northeast preserve and advance water quality. We engage and convene water quality professionals and other interested parties from New England and New York to collaborate on water, wastewater, and environmental science challenges across shared regions, ecosystems, and areas of expertise. We help states find effective ways to achieve their own clean water goals, often filling resource gaps in order to do so. We collaborate with state and federal partners to make efficient and effective use of available resources. NEIWPCC’s mission is to advance clean water in the Northeast through collaboration with, and service to, our member states.

Overall Funding Sources

The core FY20 budget reflects the following sources of funding:

EPA FY20 Base Funding:	\$662,500.00*
Non-Federal Match:	\$662,500.00**
Total:	\$1,325,000.00

Resources Requested:

The total Section 320 funds requested in this **NEP grant to NEIWPCC is \$529,380**, which will be matched at the required 1:1 rate, making the full budget of this award \$1,058,760.

*EPA FY20 Base funding will be provided to Suffolk County Department of Health Services (SCDHS) (\$133,120) and NEIWPCC (\$529,380).

**The non-Federal match is provided by the New York State Department of Environmental Conservation (NYSDEC) 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.

II. SUMMARY OF FY19 ACCOMPLISHMENTS

The FY19 year for the Peconic Estuary Partnership was a year filled with milestones and new beginnings. We began an Organizational Assessment using EPA funds and as a result of our 2017 Program Evaluation. This process is on-going and has thus far resulted in significant progress, including draft Organizational documents which outline the roles and responsibilities of our Committees, draft Guiding Principles, and a partnership willing to make changes for the successful future of the organization. Perhaps, most telling is the unanimous decision by the Policy and Management Committees to change our name from the Peconic Estuary Program to the Peconic Estuary Partnership, thus reflecting the commitment by all members to work together going forward. Additionally, and also as a result of the 2017 Program Evaluation, we have progressed with the Water Quality Assessment and have finalized water quality targets to use in our annual water quality reports which will be released in fall annually, beginning in 2020.

PEP remained on-track to submit the Final Draft of the CCMP to the EPA for approval. Through a long and publicly engaging process, the PEP has been able to develop a document that has extensive public input as well as substantial input from all of our committee members and active partners. We are excited for the new goals and actions we have identified to be rolled out to our watershed.

PEP completed extensive work funded by EPA §320 grants; these projects include: the Peconic Estuary Seagrass Bio-Optical Model, the Living Shoreline Demonstration Project in Greenport, a Climate Ready Assessment which included the Peconic Estuary watershed and the Shinnecock Indian Nation, and Conceptual Habitat Restoration Design Plans in the Towns of East Hampton, Riverhead, Southampton, and Southold. PEP also made substantial progress on diadromous fish passage projects on the Peconic River using partner funding. Additional partner funding has been secured for the Woodhull Dam Fish Passage Construction (planned for fall 2020) and the engineering designs are being developed for the Upper Mills Fish Passage project. Moreover, the PEP is assisting the Town of Brookhaven in their efforts to finalize engineering design and move forward with the construction of the Fish Pass at Forge Road Dam. PEP has also begun to work with the Town of Southampton to right-size the existing culvert at Noyak Road and implement some stormwater control measures on Alewife Creek in Southampton to allow for improved aquatic organism passage and diadromous fish migration.

Our partnership-based work became stronger this year. As Suffolk County released the draft Subwatersheds Wastewater Plan to tackle nitrogen pollution into the estuary, PEP has worked with multiple community organizations and local governments throughout the watershed to highlight this work and teach the public about the importance of nitrogen reduction. PEP has also begun the process of working closely with the NYSDEC Long Island Nitrogen Action Plan (LINAP) to align the goals and actions of each organization to maximize funding opportunities and work products.

Our outreach efforts continued and were further developed in FY19. We created a series of short informative videos for the public and conducted social media campaigns, including #NitrogenActionLI with our LINAP partner to improve our efforts on social media. This has resulted in an increase in followers across our social media channels. We have also expanded our efforts for bi-lingual outreach through a Spanish speaking outreach intern and created a Spanish language video for the public entitled: *La Importancia del Estuario Peconic*. All videos can be found here: <https://www.peconicestuary.org/news-and-blogs/media-library/>. Outreach efforts also resulted in an increase in attendance at Citizens' Advisory Committee meetings and an

increase in reinvigorated and enthusiastic members. Educational programs, citizen science internships, and distributing digital and print outreach materials have expanded PEP's footprint and impact in the watershed.

III. WORKPLAN

CCMP Goals

With a new CCMP being rolled-out, our goals and actions have been updated to reflect current issues affecting the Peconic watershed. Our strong focus will be on reducing nitrogen pollution in our estuary, advancing our on-going diadromous fish passage projects and wetland restoration work, and securing funding for eel grass restoration for both blue carbon initiatives and increased shellfish and juvenile fish nursery habitat.

In order to achieve the goals laid out in this workplan, the program office staff will facilitate committee meetings in conjunction with the Committee Chairs as follows, note meeting frequency may be altered based on Partnership needs: Policy Committee (two meetings annually – one jointly with Management Committee), Management Committee meetings (four meetings annually, one jointly with Policy Committee), Technical Advisory Committee (TAC) meetings (four meetings annually, one jointly with Natural Resource Sub-Committee), Natural Resource Sub-Committee meetings (two meetings annually, one jointly with TAC), Citizens' Advisory Committee (CAC) meetings (three meetings annually), Local Government Committee meetings (two meetings annually), Peconic Bay Scallop Technical Review Committee meetings (six meetings annually).

Budget and Staff Elements

Program Office Staff

The following outlines FY20 §320 budget requests and FY20 tasks to support the Peconic Estuary Partnership Office to implement the CCMP. Costs include salary, fringe and indirect costs (FY2020 rate is 18%, NEIWPCC's indirect rate is approved annually by EPA and the NEIWPCC Executive Committee. We apply the approved indirect rate throughout the life of the grant and thus indirect charges may fluctuate.¹)

Program Director (Ongoing) – \$151,975 requested

Location: Suffolk County Department of Health Services, 300 Center Drive, Room 204N, Riverhead, NY 11901

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

Program Coordinator (Ongoing) – \$121,755 requested

Location: Suffolk County Department of Health Services, 300 Center Drive, Room 204N, Riverhead, NY 11901

¹ NEIWPCC utilizes 2 CFR § 200 to determine its indirect rate and submits the appropriate paperwork to EPA HQs. The rate is approved annually by the NEIWPCC Executive Committee and Commission and EPA HQs. NEIWPCC's current approved indirect rate is 18.00% for FY 2020. NEIWPCC applies its approved indirect rate throughout the life of the grant and thus indirect charges may fluctuate. NEIWPCC does not charge indirect on individual contractual projects and subawards of \$100,000 or greater, office rent, participant support costs, or equipment. The indirect rate may change in subsequent fiscal years. NEIWPCC will charge its approved rate at the time that work occurs.

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.

New York State Coordinator (Ongoing) – \$121,755 requested

Location: New York State Department of Environmental Conservation, Division of Marine Resources/Bureau of Marine Habitat, 205 North Belle Mead Road, Suite 1, East Setauket, NY 11733

Responsibilities: Coordinates NYS participation in the PEP, with an emphasis on habitat protection/restoration, stormwater control, and nutrient management.

Public Education & Outreach Contract (Ongoing) - \$102,000 requested

Current Location: Cornell Cooperative Extension (CCE) of Suffolk County, 423 Griffing Avenue Riverhead, NY 11901

Responsibilities: The Public Education and Outreach Coordinator is currently hired through a contract with CCE, who coordinates and conducts public outreach and education for the Peconic Estuary Partnership. The current Public Education and Outreach Workplan outlines specific tasks to be completed under the contract and contract budget covers costs associated with tasks identified in the contract in addition to supporting part-time outreach assistants.

Refer to the Peconic Estuary Partnership and Cornell Cooperative Extension Contract "Scope of Work 2020" for Tasks and Outcomes dealing with Public Education and Outreach. (The current contract period is January 8, 2020 – December 31, 2020. The workplan for the contract beginning January 1, 2020 will be shared with the Management Conference and EPA once finalized and executed.

NEIWPCC Program Management (Ongoing) - \$27,470 requested

NEIWPCC will continue supporting personnel time for NEIWPCC Lowell staff to manage PEP-related cooperative agreements and contracts and supervise PEP staff. Funding will mainly support the NEIWPCC Project Manager, with additional oversight from the Director of Water Quality Programs. Specific tasks include, but are not limited to:

- Supervise PEP's Program Director, in consultation with the Policy and Management Committees.
- Coordinate with the Program Director on supervision of all PEP staff, including participation in staff performance appraisals. Consult with NYSDEC and SCDHS regarding PEP staff in their offices.
- Support PEP management of all tasks listed in this workplan.
- Coordinate with the Program Director in preparation of the annual work plan and budget.
- Prepare and submit grant applications to EPA in coordination with the Program Director and the Management Conference.
- Lead the hiring process for all open staff positions. Work collaboratively with PEP Program Director—and Management Conference when position appropriate—throughout process.
- Manage program budgets
- Execute and manage PEP contracts and vendor agreements.
- Submit quarterly financial summaries to the Program Director and annual financial summaries to the Management Conference.
- Process invoices and travel reimbursements.
- Communicate with the Program Director and EPA Project Officer on a regular basis.
- Review, comment upon, and submit quarterly progress reports developed by the Program Director and program staff that describe PEP activities and outputs.
- Facilitate coordination with other regional NEP and NEIWPCC activities.

Table 1: Budget Summary

Detailed budget information is available in Appendix A of this workplan.

	FY20 Request	Notes
Personnel	\$258,739	
Fringe	\$99,698	39.9% of MA personnel, 38.5% of NY personnel
Travel	\$0	Supported by FY18 and FY19 funds
Equipment	\$0	
Supplies	\$0	Supported by FY18 and FY19 funds.
Contracts or Subawards	\$102,000	Outreach & Education
Other	\$3,750	Includes costs for printing & production, website development and services, advertising, telephone
Total Direct	\$464,187	
<i>Indirect</i>	\$65,193	<i>For FY20, 18.00% of Total Direct less: subawards over \$100,000, equipment, rental space, and participant support costs)</i>
Total EPA §320 Funds Request	\$529,380	
NYS Match	TBD	
Suffolk County Match	TBD	
Total Project Cost	TBD	

FY2021 Tasks

This workplan includes all projects which PEP plans to be involved with in the coming fiscal year. Each of these projects supports PEP's 2020 CCMP, which also highlights PEP's role as an active partner with other government agencies and nonprofits working in the Peconic. In light of this renewed focus on partnership, much of PEP's staff time will focus on supporting projects directed and funded by partners. In these cases, PEP staff are responsible for providing technical expertise, coordinating projects, and facilitating collaboration as needed; their responsibilities support the ultimate project outcomes but can be accomplished even if the project does not move forward.

Under this workplan, NEIWPCC and PEP commit to the projects which are funded by FY20 §320 funds awarded to NEIWPCC and for which PEP is a lead partner. For all other projects, PEP commits to supporting and facilitating progress on partner projects, but is not responsible for the ultimate project outcomes.

New projects are not currently included in previous years' §320 workplans or awards. FY20 §320 funds are also requested to support **ongoing projects**, unless specified otherwise. There are several ongoing projects for which **no new funds** are requested; these are wholly funded by previous §320 Budgets and Grant Awards awarded to NEIWPCC.

Table 2 outlines the project type, FY20 funding request, and PEP role for each task in the workplan.

Our primary responsibility in this workplan will be towards the tasks highlighted below, for which we are requesting FY20 funds and are lead partner. Changes in scope, funding, and timelines in all other tasks will not require an amendment to this workplan.

Table 2: Summary of all FY21 Tasks

Task Description	Project Type	Funding requested from FY20 §320 award:	PEP Role
Task 1: Organizational Assessment	No new funds	None (funded by FY18 §320 funds)	Lead – project is exclusively PEP.
Task 2: CCMP Tracking System	New	Staff time	Lead – project is exclusively PEP.
Task 3: Financial Plan	New	Staff time	Lead – project is exclusively PEP.
Task 4: PEP Education and Outreach Program	Ongoing	\$102,000 (contract)	Lead – project is exclusively PEP.
Task 5: Continuous Water Quality Monitoring	No new funds	None	Supporting partner (USGS lead)
Task 6: Water Quality Monitoring Assessment	No new funds	None (funded by FY18 §320 funds)	Lead – project is exclusively PEP.
Tasks 7a-d: Implement science-based approaches for monitoring and reducing nitrogen	Ongoing	Staff time	Supporting partner (various leads per project)
Task 7e: Green Infrastructure Homeowner Rewards Program and Resident Nutrient Management	No new funds	None	Lead – project is exclusively PEP
Task 8a-b: Expand non-point source subwatershed management plans to all pathogen-impaired waterbodies and continue to use existing plans	Ongoing	Staff time	Supporting partner
Task 8c: Meetinghouse Creek Engineering Design Services	No new funds	None (funded by FY18 and FY19 §320 funds)	Lead
Task 9: Distribute information and tools developed in the Peconic Estuary Critical Lands Protection Strategy and Climate Ready Action Plan to municipalities within the watershed.	New	Staff time	Lead
Task 10: NYS Ocean Acidification Taskforce – National Ocean Acidification Network	Ongoing	Staff time	Supporting partner
Task 11: Ecosystem-Based Model of the Peconic Estuary	Ongoing	Staff time	Lead partner, NYS-DEC funded project
Task 12a-e: Complete design and construction of diadromous fish passage on the Peconic River and in other priority tributaries in the Peconic Estuary watershed	Ongoing	Staff time	Supporting partner – local governments lead and fund these projects.
Task 13: Develop and Implement Alewife Monitoring Strategy on the Peconic River	Ongoing	Staff time	Lead partner
Task 14: Carry out Eelgrass Aerial	Ongoing	Staff time	Lead partner,

Task Description	Project Type	Funding requested from FY20 §320 award:	PEP Role
Survey			collaboration with LISS
Task 15: Work with the NRS and TAC to prioritize restoration projects identified in the 2017 Habitat Restoration Plan and secure funding for conceptual design plans	New	Staff time	Lead partner
Task 16a-c: Implement priority wetland restoration projects identified in the PEP Habitat Restoration Plan	Ongoing	Staff time	Lead and coordinate projects funded by NYS DEC, Suffolk County, and local governments
Task 17: Living Shoreline Stakeholder Education	Ongoing	Staff time	Lead partner

CCMP GOAL: STRONG PARTNERSHIP AND ENGAGEMENT

Objective A (Over-Arching Priority Objective): Enhance PEP's organizational structure, operational practices, and financial position to support successful implementation of CCMP Actions.

ACTION 1: Finalize and implement the updated PEP Organizational Plan.

Performance Measure: Addition of the updated PEP Organizational Plan to this CCMP document by December 2020 outlining the recommendations adopted by the Policy and Management Committee.

Task 1: Organizational Assessment

Ongoing- no new funds (FY18 Workplan and Budget)

- a. **Estimated Budget:** FY18 §320 funds: \$25,000
- b. **Partners and their roles:** PEP (Lead Partner), CoastWise Partners (Contractor), PEP Management Conference
- c. **Description and Objectives:** The contractor will assist the PEP in examining the relationships between all groups in the Management Conference and provide recommendations about how they can work together more effectively.
- d. **Outputs and Deliverables:** A Final Organizational Strategy Report with Roles and Responsibilities, By-Laws, and Guiding Principles.
- e. **Estimated Milestones:** Completion in December 2020.
- f. **Long Term Outcomes:** A stronger national estuary program whose committees and all members and partners have a clear understanding of how to achieve our mission and how we work together to strengthen the organization.
- g. **Clean Water Act Core Programs:** N/A

ACTION 2: Develop and launch a CCMP Tracking System on PEP Website to report progress in implementing CCMP actions.

Performance Measure: Development and deployment of web-based CCMP Tracking System by December 2021.

Task 2: CCMP Tracking System

New for FY20

- a. **Estimated Budget:** Staff time
- b. **Partners and their roles:** PEP (Lead Partner), PEP TAC
- c. **Description and Objectives:** The PEP is developing a 2020 CCMP to guide its collective work over the next decade. PEP's partner organizations have agreed to be responsible for carrying out the Actions in the CCMP in either leading or supporting roles. To help facilitate implementation of the CCMP, PEP will develop and maintain a new section of the PEP website that shows progress on implementation of Actions.
- d. **Outputs and Deliverables:** An on-line tool for tracking CCMP success.
- e. **Estimated Milestones:** Completion December 2021.
- f. **Long Term Outcomes:** PEP staff, our Management Conference and all partners will be able to easily track out progress of all goals and actions of the CCMP.
- g. **Clean Water Act Core Programs:** N/A

ACTION 4: Secure increased funding as part of a final Financial Plan to ensure successful implementation of all CCMP Actions.

Performance Measure: Release of a final Financial Plan by April 2021 that includes potential sources of new and increased funding, as well as a strategic outline to securing such funding.

Task 3: Financial Plan

New for FY20

- a. **Estimated Budget:** Staff time
- b. **Partners and their roles:** PEP (Lead Partner), USEPA
- c. **Description and Objectives:** The finalization of a Financial Plan as specified in the EPA 2017 Program Evaluation to provide robust funding for PEP to carry out the CCMP Actions. Details within the Financial Plan will outline plans to pursue expanded initiatives to obtain increased funding in support of CCMP implementation.
- d. **Outputs and Deliverables:** A Financial Plan for PEP.
- e. **Estimated Milestones:** Completion April 2021.
- f. **Long Term Outcomes:** Implementation of the Financial Plan for a long term strategy will allow for the financial growth of PEP to diversify funding and allow PEP to grow.
- g. **Clean Water Act Core Programs:** N/A

Objective B (Overarching Priority Objective): Empower local communities to support estuary health, including underrepresented groups.

ACTION 6: Increase community members' awareness of the Peconic Estuary, key issues relating to the CCMP's Goals, and PEP as a resource to help them address the issues.

ACTION 7: Involve community members in citizen science programs to cultivate personal connections to the Peconic Estuary and inspire positive behavioral change to support Estuary health;

ACTION 8: Conduct outreach events and programs that engage community members in learning about the Peconic Estuary and taking action to support Estuary health;

ACTION 9: Incorporate environmental justice considerations into public education and outreach materials and events.

Performance Measures: Includes all listed.

Task 4: PEP Education and Outreach Program

Ongoing

- a. **Budget:** \$102,000
- b. **Partners and their roles:** PEP (lead partner)

For all other project information, refer to the 2020 Annual Education and Outreach Program Workplan for details; 2021 workplan will be shared with the Management Conference and EPA once the contract is executed. (Expected January 2021)

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.

Task 5: Continuous Water Quality Monitoring

Ongoing match-funded project - no new 320 funds

- a. **Estimated Budget:** Approximately \$150,000 annually funded through the USGS and NYSDEC.
- b. **Partners and their roles:** United States Geological Survey (USGS) (Lead Partner and Contracting Entity), PEP (Supporting Partner), NYSDEC (Funding Entity).
- c. **Description and Objectives:** USGS maintains two continuous water quality monitoring stations in the Peconic Estuary, one located at the mouth of the Peconic River under the County Road 105 bridge in [Riverhead](#) and one in [Orient Harbor](#). These two monitoring stations complement the periodic sampling conducted by SCDHS by providing continuous sampling of the water quality conditions within the estuary. The stations provide high frequency measurements of key water quality parameters to allow long-term trend assessment of climate and other incremental changes; estimates of frequency, severity, and duration of hypoxia and anoxia. A third USGS station is being installed in the spring 2020 on the south shore of Shelter Island to provide a tide-warning system and additional water quality monitoring equipment will be added as funding is available.
- d. **Outputs and Deliverables:** USGS produces daily data reports, real-time data downloadable via the internet, incorporated by PEP staff into State of the Bays Report and used by researchers and partner other agencies.
- e. **Estimated Milestones:** Contract is between NYSDEC and USGS, PEP staff provide additional support as needed throughout the year.
- 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, including environmental indicators reports and "State of the Bay" publications, and support 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.

Objective E: Increase understanding of nutrient pollution in groundwater and surface waters, and decrease negative impacts from legacy, current, and future nutrient inputs.

ACTION 17: Plan science-based approaches for monitoring and reducing nitrogen pollution

Task 6: Water Quality Monitoring Assessment

Ongoing- no new funds (FY18 Workplan and Budget)

- a. **Estimated Budget:** FY18 §320 funds: \$25,000
- b. **Partners and their roles:** PEP (Lead Partner), Coastwise Partners (Contractor)
- c. **Description and Objectives:** The Peconic Estuary Partnership has a robust monitoring program that assesses a range of critical indicators throughout the Estuary. Despite the range of monitoring data available, the PEP does not have a regular and detailed way of reporting out on the data collected. The goals of this project are to 1) Review the current Monitoring Strategy and the existing data that is collected, and 2) Work the Peconic Estuary Partnership Water Quality Workgroup to revise the PEP Monitoring Strategy to ensure the data being collected is actually the most relevant data to the PEP, EPA, and stakeholders, and develop a plan for how the wide range of collected data will be reported on regularly.
- d. **Outputs and Deliverables:** Revised Monitoring Strategy that will 1) Evaluate and recommend appropriate indicators of estuarine health to assess the impact of management actions to restore the estuary; (2) Assess available data, and how these data are being used by both the PEP and its partners to understand and report on the status of the estuary; (3) Recommend where additional or alternative indicators and monitoring may be required to comprehensively assess progress of CCMP implementation; and (4) Develop methods and mechanisms to share data among academia, nonprofit organizations and government, including enhancing regular reporting on status and trends.
- e. **Estimated Milestones:** Completion December 2020.
- f. **Long Term Outcomes:** A recommendation of the 2017 Program Evaluation. Long term outcomes will be annually reported resulting in more local governments making better decision for clean water.
- 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.

ACTION 18: Implement science-based approaches for monitoring and reducing nitrogen pollution.

Task 7: Implement science-based approaches for monitoring and reducing nitrogen pollution.

Performance Measure: Phased Implementation of the Suffolk County Subwatershed Wastewater Plan to abate septic-related current and future nitrogen loading.

Task 7a: Long Island Nitrogen Action Plan (LINAP)

Ongoing

- a. **Estimated Budget:** Staff time

- b. **Partners and their roles:** NYSDEC and the Long Island Regional Planning Council (LIRPC), in partnership with numerous local governments and interested organizations on Long Island. PEP (Supporting Partner)
- c. **Description and Objectives:** LINAP will determine nitrogen load reduction targets as well as alternatives and strategies to meet those targets. Through LINAP, PEP will work to provide information that local governments need to reduce nitrogen loading. In the fall of 2017, the LINAP Project Management Team moved forward with a PEP-USGS Solute Transport Modeling project, which will allow for the quantitative analysis of nitrogen loading rates to the Peconic Estuary resulting from wastewater and fertilizer inputs to groundwater in Suffolk County. The Solute Transport Model is anticipated to be complete in 2020. See below Peconic Estuary Solute Transport Model Task for more information. Additionally, PEP and LINAP developed a Cross-walk document outlining specific actions where we can coordinate and future actions.
- d. **Outputs and Deliverables:** Strategy Plan with LINAP identifying areas for collaboration.
- e. **Estimated Milestones:** Quarterly calls/and or meetings between PEP and LINAP.
- f. **Long Term Outcomes:** Streamlined plan that avoids duplication of efforts by partners and achieves a more efficient way forward for achieving nitrogen reduction goals in the Peconic 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.

Performance Measure: Completion of the Peconic Estuary Solute Transport Model analysis to understand historical nitrogen loading and to develop management strategies.

Task 7b: Peconic Estuary Solute Transport Model

Ongoing

- a. **Estimated Budget:** Staff time, NYS 2015 Budget: \$750,000
- b. **Partners and their roles:** USGS, PEP (Supporting Partner), NYSDEC (Contracting Entity)
- c. **Deliverables and Objectives:** Develop a solute transport model to be used in conjunction with the results of the Nitrogen Load Model to establish updated load reduction goals for non-point source loads.
- d. **Outputs and Deliverables:** A USGS report will document model development as well as analytical results for a limited set of representative wastewater management scenarios. The report will be designed with the dual purposes of 1) documenting the models and methods developed as part of the USGS investigation and 2) providing a detailed description of surface-water loading rates under changing land-based nitrogen-input conditions. Preliminary model results will be transmitted as PDFs to stakeholders as needed during the course of this investigation. The USGS will present progress and results of the investigation at technical meetings and public forums upon request. Modeling will proceed collaboratively with NYSDEC and PEP personnel to ensure that the two projects are complementary. An additional USGS report or journal article may be published near the end of the project to compare the solute-transport methods and results from the Cape Cod and Peconic Estuary investigations. Numerical models and data used to represent nitrogen source terms will be publicly disseminated as a separate web-hosted USGS Data Release product, in accordance with USGS policies. PEP staff acts as project manager, coordinating all meetings and working in conjunction with the TAC on technical review of the body of work. PEP staff organize quarterly progress meetings, distribute summary minutes and work with USGS to gather the necessary data inputs for the model.
- e. **Estimated Milestones:** Completion Fall 2021.
- f. **Long Term Outcome:** Reduce nitrogen loads to the Peconic Estuary towards attainment of the Peconic Estuary TMDL and ensure a healthy and productive estuarine ecosystem.

- 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.

Task 7c: Village of Greenport Sewer Extension

Ongoing

- a. **Estimated Budget:** Staff time, 2019 NYS Empire State Development Grant \$390,000
- b. **Partners and their roles:** PEP (Supporting Partner), Village of Greenport (Lead Entity), Safe Harbor Marina (Lead Entity, Property owner).
- c. **Description and Objectives:** Description and Objectives: The Village of Greenport will design and construct an expansion of their municipal sewer system to the marina and homes within the Stirling Basin, reducing current nitrogen pollution input to the nearby Peconic Estuary. PEP will assist the project lead in identifying and applying for funding, coordinating all parties in meetings and updates, and assisting the Village of Greenport as needed and appropriate, coordinating all parties in meetings and updates, and assisting the Village of Greenport as needed and appropriate.
- d. **Outputs and Deliverables:** Engineering design plans for sewer extension project. Additional funding sources identified for construction phase.
- e. **Estimated Milestones:** Engineering and design planned to be completed in 2021.
- f. **Long Term Outcomes:** Reduction of nitrogen into Peconic Bay
- g. **External Constraints:** This project has secured \$390,000 in grant funding from NYS. It will require significantly more funding for the construction. PEP will assist the project lead in identifying and applying for funding but substantially more funding is currently required.
- h. **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.

Performance Measure: Completion of Peconic Estuary Water Quality Monitoring Strategy.

Task 7d: Suffolk County Subwatersheds Wastewater Plan (SWP)

Ongoing

- a. **Estimated Budget:** Staff time
- b. **Partners and their roles:** Suffolk County Department of Health Services (funding agency), Long Island Sound Study, South Shore Estuary Reserve, PEP (Supporting Partner).
- c. **Description and Objectives:** The purpose of the SWP will be to provide a wastewater management plan specific to all parcels within the priority subwatersheds of Suffolk County in order to meet the County's first order of nitrogen load reduction goals for surface water restoration and the protection of groundwater and drinking water. The SWP is an early action element of the LINAP and is expected to guide County wastewater policy by providing a map and narrative depicting the location, number, and location specific- methodology for required sanitary upgrades using a phased approach linked to current and predicted ecological and public health risks. PEP will work to provide information that local governments need to reduce nitrogen loading.
- d. **Outputs and Deliverables:** When the SWP is final, PEP will develop a strategy Plan with Suffolk County identifying two communities in the high need area (Level 1) to focus PEP efforts for Septic Improvement.
- e. **Estimated Milestones:** Quarterly calls/ and or meetings between PEP and Suffolk County.
- f. **Long Term Outcomes:** Streamlined plan that avoids duplication of efforts by partners and achieves a more efficient way forward for achieving nitrogen reduction goals in the Peconic 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.

Performance Measure: Increase funding and expanded outreach for PEP's Homeowner Rewards Program, which provides financial incentives for homeowners to install rain gardens, native plantings, and/or rain barrels on their properties that benefit the environment.

Task 7e: Green Infrastructure Homeowner Rewards Program and Resident Nutrient Management
Ongoing- no new funds (FY19 and FY18 Workplan and Budget)

- a. **Estimated Budget:** §320 funds: \$12,050 (\$6,050 from FY18; \$6,000 from FY19)
- b. **Partners and their roles:** PEP (Lead partner)
- c. **Description and Objectives:** The [Peconic Estuary Partnership \(PEP\) Homeowner Rewards Program](#) provides financial rewards for homeowners, who live within the Peconic Estuary watershed, to add rain gardens, native plantings, and/or rain barrels to their properties. Simultaneously, the program educates the community about the benefits of rain gardens, rain barrels, and native plants for nitrogen reduction, stormwater pollution reduction, and other ecosystem benefits.
- d. **Outputs and Deliverables:** Installation and completion of sustainable landscaping projects on properties within the Peconic Estuary watershed.
- e. **Estimated Milestones:** Annual spring – fall season application period.
- f. **Long Term Outcomes:** Improve public's understanding of benefits of sustainable landscaping and long-term and wide spread behavior change favoring landscaping best management practices. Reductions in fertilizer use, pesticide use, water use, and the promotion of natural vegetation and benefits to pollinators and native fauna.
- g. **Clean Water Act Core Programs:** Elements of this project prevent or mitigate the impacts of nutrient pollution.

Objective F: Reduce current and future inputs of toxics, pathogens, and marine debris into groundwater and surface waters, and minimize their impacts

ACTION 21: Expand non-point source subwatershed management plans to all pathogen-impaired waterbodies and continue to use existing plans

Task 8: Expand non-point source subwatershed management plans to all pathogen-impaired waterbodies and continue to use existing plans

Ongoing, see project descriptions

Performance Measures: Development of strategies and outreach materials to help achieve stormwater reduction goals.

Task 8a: Peconic Estuary Protection Committee (PEPC) (Intermunicipal Agreement for Stormwater Management)

Ongoing

- a. **Estimated Budget:** Staff time, \$15,000 Suffolk County Capital Budget Funds and member municipality dues.
- b. **Partners and their roles:** PEPC Coordinator (Lead), PEP (Supporting Partner), Six East End Towns and the Villages of Sag Harbor, North Haven and Greenport, Suffolk County, NY State Department of Transportation (NYSDOT).

- c. **Description and Objectives:** PEP established a collaboration of East End municipalities to share resources and work together on projects to reduce stormwater runoff, reduce pollution from septic system discharges, agricultural and residential fertilization, groundwater flows, illegal dumping, floatable debris and boat waste.
- d. **Outputs and Deliverables:** Assistance with MS4 compliance. Public signage related to storm drains and the importance of storm water management
- e. **Estimated Milestones:** Bi-monthly PEPC meetings.
- f. **Long Term Outcomes:** The East End municipalities and Suffolk County working together to both ensure MS4 compliance and further non-point source pollution solutions
- g. **Clean Water Act Core Programs:** Elements of this project prevent or mitigate the impacts of nutrient pollution.

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.

Task 8b: Quality Assurance Project Plan Services for a Supplemental Water Quality Sediment Data Collection

Ongoing

- a. **Estimated Budget:** Staff time, \$75,000 2015 SC Capital Budget Funds.
- b. **Partners and their roles:** PEPC Coordinator (Lead), PEP (Co-lead Partner), Tetra Tech, Inc. (Contractor), Six East End Towns and the Villages of Sag Harbor, North Haven and Greenport, Suffolk County, NY State Department of Transportation (NYSDOT), NYSDEC and USEPA.
- c. **Description and Objectives:** The Peconic Estuary Protection Committee received funding for a project that will allow the PEPC to develop a quality assurance management plan (QAMP), approvable by the US EPA and NYS DEC, for water quality sampling and analysis activities; and this project is a necessary step for any data collected by the Peconic Estuary Protection Committee, or its member municipalities, to be used to inform regulations, policies, or guidelines of the US Environmental Protection Agency or NY State Department of Environmental Conservation, such as shellfish bed certification, waterbody classification and impairment designations, total maximum daily loads, and other related nutrient and pathogen related management activities. The PEP is currently contracting through Suffolk County with Tetra Tech, Inc. to complete the services.
- d. **Outputs and Deliverables:** EPA-NYSDEC approved QAMP.
- e. **Estimated Milestones:** Completion Fall 2020.
- f. **Long Term Outcomes:** The PEPC member municipalities will have a QAMP to expand the collection of water quality data and provide the foundation for a long-term water quality monitoring program which will serve as a planning tool to identify and prioritize subwatersheds in the Peconic Estuary that should be targeted for water quality improvement activities, ensure water bodies are properly listed on the NYS Impaired Waters list so that those in need of restoration may receive needed resources, and those that are healthy can be delisted.
- 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.

Performance Measure: Review of current PEP Non-point Source Subwatershed Management Plans and implementation of viable projects.

Task 8c: Meetinghouse Creek Engineering Design Services

Ongoing- no new funds (FY19 and FY18 Workplan and Budget)

- a. **Estimated Budget:** §320 funds: \$208,999 (\$35,280 from FY19; \$173,719 from FY18)
- b. **Partners and their roles:** PEP (Lead Partner), Town of Riverhead (Property Owner, Engineering Supervision)
- c. **Description and Objectives:** The PEP Management Committee committed \$208,999 of EPA §320 Funds from FY18 and FY19 to support engineering and design of the Meetinghouse Creek Main Road Wetland Construction/Restoration project from the 2017 PEP Habitat Restoration Plan. PEP recently completed a Conceptual Habitat Restoration Design for the Meetinghouse Creek project. The conceptual design recommendation is to construct a 1.2-acre stormwater wetland to treat stormwater runoff in the 5.6 acre contributing watershed. This will improve water quality in the downstream wetland and surface waters. Additionally, it will greatly increase the ecological quality of the habitat and improve plant and wildlife diversity. This site is located at a large wetland area that forms the headwaters to Meetinghouse Creek in Riverhead, New York. Meetinghouse Creek is listed as an impaired waterbody on the NYSDEC Priority Waterbodies List. The wetland vegetation at this site is dominated by Phragmites.
- d. **Outputs and Deliverables:** Final design, permitting for the Meetinghouse Creek Main Road Wetland Construction/Restoration project.
- e. **Estimated Milestones:** Contract estimated to begin fiscal year 2020, Engineering design completion by September 2022.
- f. **Long Term Outcomes:** The benefits of habitat restoration efforts will be seen over a long period of time, but will result in enhancement of existing resources and/or restoration of habitats that have been lost or degraded. Significant natural habitats such as wetland complexes will benefit from restoration efforts and stormwater management will improve at this site.
- g. **Clean Water Act Core Programs:** Protecting Wetlands. 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: RESILIENT COMMUNITIES PREPARED FOR CLIMATE CHANGE

Objective C: Help local communities to take meaningful, well informed action to prepare for and adapt to climate change impacts in the Peconic Estuary.

ACTION 11: Provide tools and assistance to local government to mitigate and adapt to the impacts of climate change.

Task 9: Distribute information and tools developed in the Peconic Estuary Critical Lands Protection Strategy and Climate Ready Action Plan to municipalities within the watershed.

New

- a. **Estimated Budget:** Staff time
- b. **Partners and their roles:** PEP (Lead Partner), Local Governments, Anchor QEA and TNC (Supporting Partner)
- c. **Description and Objectives:** PEP completed an update to the Peconic Estuary Critical Lands Protection Strategy and conducted a risk-based climate vulnerability assessment to develop the Peconic Estuary Partnership Climate Vulnerability Assessment and Action Plan consistent with EPA's Climate Ready Estuaries Program. PEP plans to use the information and tools completed in those

reports as a tool for East End municipalities to make decisions related to resiliency and climate adaptation. PEP plans to coordinate training workshops to present information and train appropriate staff within each municipality on the usefulness and application of these tools.

- d. **Outputs and Deliverables:** Meeting minutes and feedback from trainings. One training workshop on the north fork and one training on the south fork. More workshops can be coordinated as needed.
- e. **Estimated Milestones:** At least three workshops to be held in FY21
- f. **Long Term Outcomes:** Educated local governments equipped with tools and information to plan for a changing climate.
- g. **Clean Water Act Core Programs:** N/A

ACTION 13: Collaborate on coastal and ocean acidification monitoring and research

Performance Measure: Participation with the New York Ocean Acidification Task Force to monitor and address ocean acidification locally and regionally.

Task 10: NYS Ocean Acidification Taskforce – National Ocean Acidification Network Ongoing

- a. **Estimated Budget:** Staff time
- b. **Partners and their roles:** PEP (Supporting Partner), NYSDEC (Lead Partner)
- c. **Description and Objectives:** PEP's local and regional partners will work together to ensure that the best available science is used to assess and respond to this emerging threat to NY's estuarine and marine waters and fisheries. PEP will participate on the NY Ocean Acidification (OA) Task Force and act as a NEP coordinator for NY State.
- d. **Outputs and Deliverables:** Collaborative document regarding NYS OA policy.
- e. **Estimated Milestones:** NY OA Task Force Meetings as scheduled.
- f. **Long Term Outcomes:** A cohesive and collaborative approach to OA mitigation in New York. Regional adoption of recommendations from the NY OA Task Force as appropriate for the watershed.
- g. **Clean Water Act Core Programs:** N/A

CCMP GOAL: HEALTHY ECOSYSTEM WITH ABUNDANT, DIVERSE WILDLIFE

Objective G: Expand scientific understanding of the Peconic Estuary ecosystem and deliver information that supports management decision-making

ACTION 23: Conduct scientific studies to expand understanding of the Peconic Estuary ecosystem and support ecosystem-based management.

Performance Measure: Development of an ECOSIM model to characterize the estuarine food web and examine structural changes in ecosystem properties over time.

Performance Measure: Detailed spatial and temporal analysis of the Peconic Estuary trawl survey data to assess how species use the Estuary and how species and communities have responded to local and regional environmental changes over time.

Task 11: Ecosystem-Based Model of the Peconic Estuary Ongoing

- a. **Estimated Budget:** Staff time, \$200,000 NYSDEC FY18 Funds
- b. **Partners and their roles:** PEP (Lead Partner), NYSDEC (Funding Entity), The Research Foundation at Stony Brook University (Contractor).

- c. **Description and Objectives:** Analyze spatial and temporal trends in the Peconic Estuary finfish trawl survey dataset, and develop risk metrics from ecological relationships for the Peconic Estuary that examine whether local and regional environmental changes have increased the vulnerability of individual finfish and mobile invertebrate species, community assemblages, and ecosystem processes. ECOSIM is a quantitative modeling framework that can represent all major ecosystem functional groups and can be used to identify and assess structural changes in the ecosystem in response to environmental change. The proposed study will identify vulnerable species, critical habitats, and ecosystem properties within the Peconic Estuary. This information has direct application to decisions affecting the use, management, and conservation of the natural resources in the bay.
- d. **Outputs and Deliverables:** ECOSIM and ECOPATH Model, plan and facilitate meetings.
- e. **Estimated Milestones:** Model developed by end of FY21, analysis underway.
- f. **Long Term Outcomes:** An understanding of the food web dynamics and organism/habitat interactions will allow for optimized planning for the Peconic Bays.
- g. **External Constraints:** Project is behind schedule due to NYS contracting issues.
- h. **Clean Water Core Programs:** protecting Large Aquatic Ecosystems.

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

ACTION 29: Maintain, restore, and enhance viable diadromous fish spawning and maturation habitat in the Peconic Estuary watershed.

Performance Measure: Completion of the Woodhull Dam, Forge Road Dam, and Upper Mills Dam diadromous fish connectivity project on the Peconic River to restore 300 acres of habitat;

Performance Measure: Completion of culvert improvements on Alewife Creek to enhance the largest alewife run on Long Island;

Performance Measure: Completion of priority diadromous fish habitat connectivity projects identified in the PEP Habitat Restoration Plan or Long Island Diadromous Fish Restoration Strategy, or through the Volunteer Alewife Monitoring Survey, in other areas of the Peconic watershed to restore additional habitat.

Task 12: Complete design and construction of diadromous fish passage on the Peconic River and in other priority tributaries in the Peconic Estuary watershed

Ongoing – details in project descriptions

- a. **Estimated Budget:** Staff time, Partner funds (details in project description section)
- b. **Partners & Roles:** PEP, Suffolk County, NYSDEC, East End towns and villages.
- c. **Description and Objectives:** Support fish passage construction in the Peconic River and its tributaries. During the upcoming year PEP and its partners are working towards opening up acres of freshwater spawning area to diadromous fish through the completion of fish passage projects. PEP will continue to support the design, permitting and construction of fish passage throughout the Peconic River and in other priority tributaries in the Peconic Estuary watershed. Descriptions, budgets, and anticipated external constraints for each project are listed below.
- d. **Outputs and Deliverables:** Successful completion of fish passage design, permitting and construction.
- e. **Estimated Milestones:** Completion of Woodhull Dam Fish Passage construction and Upper Mills Fish Passage Engineering Designs 2021, Meetings with project partners for other projects.

- f. **Long Term Outcomes:** Restoring and strengthening ecosystem services, fish and wildlife of the Peconic Estuary will benefit from access to critical habitat, increased biodiversity and restoration of historic food webs.
- g. **Clean Water Act Core Programs:** protecting Large Aquatic Ecosystems.

Task 12a Woodhull Dam: 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 Fun 477. Other sources of grant funding are pending at this time. Ninety-five (95) acres of freshwater habitat will be opened with project completion. The construction of the fish passage project is anticipated to be complete before the end of 2021.

Estimated Budget: \$801,951 (\$278,964 NYSDEC WQIP Funds, \$192,987 Suffolk County Capital Funds (Suffolk County Parks: \$21,987 & Suffolk County Capital Budget: \$171,000), \$330,000 Suffolk County Fund 477).

External Constraints: Suffolk County Parks has a limited number of contracts they can execute each year. Additionally, there have been unforeseen delays due to priorities of the COVID19 health crisis. These factors may combine to create project delays.

Task 12b Upper Mills Dam- PEP is contracting with the selected contractor (L.K. Mclean Associates P.C.) to complete the Engineering Design and Permitting Services for Construction of a Fish Passage at the Upper Mills Dam, Town of Riverhead. The selected design alternative is being developed with the additional information from soil boring and test holes that were conducted in spring 2020. The Upper Mills Dam is an earthen embankment with an asphalt/concrete road on top and two (2) parallel spillways located approximately 2.9 miles from the mouth of the Peconic River in Flanders Bay. The northern banks of the Peconic River at this location are located in the Town of Riverhead, while the southern banks are located in Southampton. The dam is currently owned by PSEG but is maintained by the Town of Riverhead. This project will open forty (40) acres of historic spawning and maturation habitat for diadromous fish within the Peconic River. Target species that will benefit from the restoration are the Alewife (*Alosa pseudoharengus*), Blueback herring (*Alosa aestivalis*), and American eel (*Anguilla rostrata*). The Engineering Designs and Permit Services are anticipated to be completed by February 2021.

Estimated Budget: \$129,000 2013 Suffolk County Capital Budget Funds

External Constraints: Significant delays to this project were the result of land owner (PSEG) approval to carry out survey work for this project.

Task 12c Forge Road Dam- Fish passage design plans at the Forge Rd. Dam are being finalized and permitting is underway. NYSDEC funds have been secured for fish passage construction. The dam is owned by the Town of Brookhaven. PEP is assisting Town of Brookhaven on the implementation of this project. This project will open approximately 115 acres of historic spawning and maturation habitat for diadromous fish within the Peconic River.

Estimate Budget: Staff time, \$307,000 NYSDEC WQIP Funds

Task 12d Lake Montauk – PEP recently completed a conceptual habitat restoration design plan to restore connectivity for diadromous fish species between Lake Montauk and Big Reed Pond by replacing an undersized culvert and between Lake Montauk and Stepping Stones Pond by replacing an undersized, impassable culverts under Old West Lake Drive and removing debris. Suffolk County Capital funds have been secured to replace the culvert that leads to Big Reed Pond and PEP staff will be working with Suffolk

County parks to complete the permitting and construction. PEP staff are also working with partners to secure funding to complete engineering design plan and construction of the culvert leading to Stepping Stones Pond.

Estimated Budget: Staff time, \$50,000 2016 Suffolk County Capital Budget Funds

External Constraints: This project will be contracted through Suffolk County Parks and they currently have limited staff to oversee construction works. This may cause a delay in the contracting process based on priorities identified by Suffolk County in the next two years.

Task 12e Alewife Creek – The Town of Southampton received a Climate Smart Communities Grant award to complete the engineering design and construction of the Alewife Creek Habitat Enhancement project which includes the right-sizing of the existing culvert under Noyac Road, reducing stormwater runoff and enhancing the ability of alewife to reach freshwater spawning habitat in Big Fresh Pond within the Town of Southampton. PEP will assist in guiding the design of the project. Expected project completion is 2024.

Estimated Budget: \$410,000 NYS Climate Smart Communities Grant, \$410,000 Southampton Town Community Preservation Fund

Performance Measure: Development of an alewife survey to monitor the population and assess the success of fish connectivity projects.

Task 13: Develop and Implement Alewife Monitoring Strategy on the Peconic River

Ongoing

- a. **Estimated Budget:** Staff time
- b. **Partners and Roles:** PEP (lead), NYSDEC, Academic and Environmental Partners
- c. **Description and Objectives:** Obtain video footage of alewife coming up the Peconic River to spawn and analyze video footage to estimate alewife abundance. Continue to collect biological data (sex, size and age) on the Peconic River alewife population with the assistance of partners and continue to promote and expand the Long Island Volunteer River Herring Survey. Monitoring activities will be conducted in accordance with the Peconic Estuary Alewife Monitoring QAPP. Abundance data will be used by the Peconic Estuary Partnership and our partners to evaluate the success of fish passage restoration efforts. Additionally, the data will be provided to the New York Department of Environmental Conservation and the Atlantic States Marine Fisheries Commission to aid in stock assessments and the management of alewife.
- d. **Outputs and Deliverables:** Annual alewife monitoring reports.
- e. **Estimated Milestones:** Annual alewife monitoring report winter 2021, Hold two trainings winter 2021 for Volunteer River Herring Survey.
- f. **Long Term Outcomes:** Accurately track alewife abundance in the Peconic River, evaluate the success of fish passage restoration efforts and guide management of the species.
- g. **Clean Water Act Core Programs:** protecting Large Aquatic Ecosystems.

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

Performance Measure: A comprehensive aerial survey of eelgrass in the Peconic Estuary to support future management decisions.

Task 14: Carry out Eelgrass Aerial Survey

Ongoing

- a. **Estimated Budget:** Staff time; \$100,000 NYSDEC Environmental Protection Fund (additional funds to be contributed by Long Island Sound Study)
- b. **Partners and their roles:** PEP (Co-Lead Partner), LISS (Co-Lead Partner), NYS Department of Environmental Conservation (Funding and Contracting Entity)
- c. **Description and Objectives:** Coordinate with Long Island Sound Study to conduct an aerial survey to evaluate the current extent of eelgrass habitat in the Peconic Estuary and Long Island Sound watersheds and any increases or decreases in eelgrass habitat extent since the last aerial surveys.
- d. **Outputs and Deliverables:** Aerial maps of eel grass extent in the Peconic Estuary and eelgrass habitat report
- e. **Estimated Milestones:** Aerial survey anticipated to be conducted spring 2021
- f. **External Constraints:** Funding will be required to ground-truth the aerial surveys. This funding has not yet been identified.
- g. **Long Term Outcomes:** Continual partnership between the two NEPs for a common goal will benefit both programs and allow for temporal alignment with eelgrass bed assessments every five years.
- h. **Clean Water Act Core Programs:** protecting Large Aquatic Ecosystems.

Action 31: Use available habitat quality assessment and climate change resiliency tools to prioritize wetland restoration projects identified in the 2017 PEP Habitat Restoration Plan, and implement the top projects.

Performance Measure: Completion of design and construction of ongoing, priority restoration projects (Indian Island Wetland Restoration, Narrow River/ Broad Meadows Wetland Restoration, Cedar Creek Wetland Restoration, Paul Stoutenburgh Wetland Restoration, and Meetinghouse Creek Wetland Restoration) to restore at least 65 acres of habitat.

Performance Measure: Identification of the top five projects from the Habitat Restoration Plan that have yet to be initiated and funds secured for conceptual design plans.

Task 15: Work with the Natural Resources Subcommittee and Technical Advisory Committee to prioritize restoration projects identified in the 2017 Habitat Restoration Plan and secure funding for conceptual design plans

New

- a. **Estimated Budget:** Staff time
- b. **Partners and their Roles:** PEP (Lead Partner), NYSDEC, Suffolk County, East End Towns, Environmental and Academic Partners
- c. **Description and Objectives:** The 2017 Habitat Restoration Plan is a comprehensive plan that is a culmination of numerous stakeholder meetings and communications with the East End Towns and partners. Then plan outlines goals, objectives, actions to guide habitat restoration and protection in the Peconic Estuary watershed over the next 10 years. The 2017 Peconic Estuary Partnership Habitat

Restoration Plan also includes a list of priority habitat restoration projects that align with the defined goals/objectives, potential funding sources, and habitat restoration resources. The overall goal of the 2017 Peconic Estuary Partnership Habitat Restoration Plan is to protect and restore Peconic Estuary habitats to support ecosystem function. A number of wetland and shoreline restoration projects are listed in the 2017 Habitat Restoration Plan. These projects largely seek to restore/recreate lost marsh habitat, remove barriers to tidal flow and sediment supply, enhance the habitat by increasing native wetland communities, and allow for natural marsh migration necessitated by rising seas. There are several available tools that can help to prioritize these projects, including the Long Island Tidal Wetland Trends Analysis, other ongoing marsh health assessment work, and the recently completed PEP Critical Lands Protection Strategy. PEP Staff will work with the PEP Natural Resources Subcommittee (NRS) and Technical Advisory Committee (TAC) to prioritize projects and identify funding for the top priority projects.

- d. **Outputs and Deliverables:** Identification of the top priority projects and identification of potential funds (not all secured) to complete conceptual design plans.
- e. **Estimated Milestones:** Meetings with the PEP NRS and TAC to identify the top priority projects.
- f. **External Constraints:** Securing funds for all projects is subject to availability of funds in the next fiscal year, stakeholder participation, etc.
- g. **Long Term Outcomes:** The benefits of habitat restoration efforts will be seen over a long period of time, but will result in enhancement of existing resources and/or restoration of habitats that have been lost or degraded.
- h. Clean Water Act Core Programs: Wetland Protection

Action 33: Implement living shoreline projects, monitor for ecological and financial benefits, and use model projects to educate planners and homeowners on the benefits of living shorelines over hardened shorelines

Performance Measure: Dissemination of monitoring results from two pilot living shoreline projects;

Performance Measure: Development of user-friendly living shoreline guides for homeowners.

Task 16: Implement priority wetland restoration projects identified in the PEP Habitat Restoration Plan

Ongoing

Task 16a: Complete Engineering Design Plans for Paul Stoutenburgh Habitat Restoration Project

Ongoing

- a. **Estimated Budget:** Staff time, \$100,000 2017 Suffolk County Capital Budget Funds
- b. **Partners & Roles:** PEP (Lead Entity), Town of Southold, Suffolk County (Contracting Entity), Contractor TBD.
- c. **Description and Objectives:** Engineering design of a habitat restoration project at Paul Stoutenburgh Preserve in the Town of Southold. This project involves improving the tidal flow into the wetland and removal of 6 acres of invasive *Phragmites* and restoration to native vegetation within the larger Paul Stoutenburgh Preserve (formerly Arshamomaque Pond Preserve).
- d. **Outputs and Deliverables:** Final engineering design, and permitting of wetland habitat restoration at site.
- e. **Estimated Milestones:** RFP released and contract finalized end of year 2021
- f. **External Constraints:** Suffolk County contracting can be a time-consuming process. This timeline is subject to the ability of Suffolk County to complete this process.

- g. **Long Term Outcome:** The benefits of habitat restoration efforts will be seen over a long period of time, but will result in enhancement of existing resources and/or restoration of habitats that have been lost or degraded.
- h. Clean Water Act Core Programs: Wetland Protection

Task 16b: Complete Engineering Design and Construction of Indian Island Wetland Restoration Project

Ongoing

- a. **Estimated Budget:** Staff time; \$1,406,666 from partner awards and match: NYSDEC WQIP/AHR Grant (\$788,000 award & \$262,666 match; \$56,000 FY00 Grant), \$300,000 Suffolk County 1/4% Funds
- b. **Partners and Roles:** PEP (project coordinator), NYSDEC (Funding and Contracting Entity), Suffolk County (Lead Partner)
- c. **Description and Objectives:** This project aims to restore a tidal wetland located within the Indian Island County Park that adjoins with Terry Creek and Flanders Bay. Dredging of nearby creeks in the 1940s-1970s accounted for nearly 1 million cubic yards of dredge material being placed over 54 acres at Indian Island County Park- wiping out an entire tidal wetland ecosystem. This project seeks to excavate approximately 6,400 cubic yards of previously placed dredge materials from the site, install tidal channels and restore the area to a productive salt marsh ecosystem. The restored marsh system will be established based on similar local reference high and low marsh elevations; with particular focus to allow for marsh migration and vegetation shifts in response to sea level rise. PEP is assisting Suffolk County and providing technical guidance on the design plans.
- d. **Outputs and Deliverables:** Final engineering design, permitting, and implementation of wetland restoration at site
- e. **Estimated Milestones:** Project expected to be completed December 2021
- f. **External Constraints:** This project has experienced severe delays to date. The funds are currently expiring in December 2021. If this work is not completed in this time frame the possibility exists that it will not move forward as funding will be lost.
- g. **Long Term Outcomes:** The benefits of habitat restoration efforts will be seen over a long period of time, but will result in enhancement of existing resources and/or restoration of habitats that have been lost or degraded.
- h. Clean Water Act Core Programs: Wetland Protection

Task 16c: Work with Partners to Secure Funds for Narrow River Wetland Restoration Project

Ongoing

- a. **Estimated Budget:** Staff time
- b. **Partners and their roles:** PEP (Lead), NYSDEC (property owner), Town of Southold (property owners), Ducks Unlimited, TNC
- c. **Description and Objectives:** PEP recently completed a conceptual design plan for wetland restoration at Narrow River/Broad Meadows marsh. Narrow River is a tributary of the Peconic Bay and flows south from the Town's Whitcom Marsh Preserve under Route 25 and along the eastern side of Narrow River Rd in Orient, NY. NY State owns most of the properties on the east side of Narrow River Rd and the Town and County own farm land development rights on both sides of the road that includes tributaries to Narrow River. An earthen dam was constructed after the 1938 hurricane to prevent tidal flooding of the lands north of the dam. The western-most section of the dam blocked the tidal flow from Narrow River to the large meadow area north of the dam known as Broad Meadows and Whitcom Marsh Preserve north of Route 25. The dam was modified overtime to include culverts, but these culverts are no longer functioning as originally designed and allow very little water to drain to the south. Additionally, the wetlands north of the earthen dam and culvert to Whitcom Marsh Preserve, which were historically used for duck hunting, are currently choked with

Phragmites. Remediation of the culvert and earthen dam is needed to improve the tidal exchange throughout the extent of the river and increase the salinity of the river. These actions will help to eradicate the *Phragmites* and will promote the re-establishment of native vegetation and important waterfowl and wading bird habitat. The potential extent of the restoration area is 80 acres. PEP is working with partners to secured funding for engineering design plans and construction.

- d. **Outputs and Deliverables:** Project funds secured
- e. **Estimated Milestones:** Quarterly meetings with projects partners.
- f. **External Constraints:** Securing implementation funding could be a challenge due to the high cost of the project and the unique hydrology the project plan presents.
- g. **Long Term Outcomes:** The benefits of habitat restoration efforts will be seen over a long period of time, but will result in enhancement of existing resources and/or restoration of habitats that have been lost or degraded.
- h. **Clean Water Act Core Programs:** Wetland Protection

Task 17: Living Shoreline Stakeholder Education

Ongoing

- a. **Estimated Budget:** Staff time
- b. **Partners and their roles:** PEP (Lead Partner), NYS DEC (Partner – permitting and wetland consulting – potential funder), NY Sea Grant (Partner – research and living shoreline expertise), Cornell Cooperative Extension (Living Shoreline expertise).
- c. **Description and Objectives:** The PEP working with the NYSDEC and NY Sea Grant, is developing living shoreline guides to encourage the appropriate use of living shorelines in place of hardened approaches for erosion control, and encourage, where appropriate, modification of existing shoreline erosion control structures into living shorelines. The living shoreline guides will provide information on the benefits of living shorelines, information on the projects established in the Peconic Estuary and the region, and information on how a stakeholder could establish a living shoreline. Details of the task scope are being finalized. The goal is to use the guides to work with various property owners on living shoreline projects.
- d. **Outputs and Deliverables:** Living shoreline guides for stakeholders.
- e. **Estimated Milestones:** Completion of guides in 2022.
- f. **External Constraints:** There are potential permitting issues with permitting by NYS DEC on private property. PEP is working with DEC on several possibilities, including potential 'group' permitting or 'group submission' of permits for ease of this project.
- g. **Long Term Outcomes:** Create a series of adjacent property owners who will install living shorelines in place of hardened shorelines. Each completed living shoreline project will serve as a demonstration to promote and track benefits of living shorelines as an alternative to hardened shoreline.
- h. **Clean Water Act Core Programs:** Wetland Protection

IV. BUDGET DETAILS

1. Resources Requested

The total requested in this PEP budget amendment to NEIWPCC is **\$529,380**. Attachment A provides the FFY2020 itemized budget and overall grant budget. This grant will be complimented by a request for PEP support to SCDHS in the amount of **\$133,120**, and together these two components make up the full Peconic Estuary Partnership FFY2020 workplan for a total grant request of **\$662,500**.

Non-Federal Match: NYSDEC will provide **\$XXXX** (estimated to be spent during the grant period). Suffolk County will provide **\$XXX**.

Trips Anticipated for FFY2020:

Date	Meeting/Event	Purpose	Destination	Number of Staff	Estimated Cost
October 4-8, 2020	RAE	Restore Americas Estuaries Conference	Providence, Rhode Island	3 (Program Director and Coordinators)	\$1,200 each; \$3,600 total
October TBD, 2020	ANEP Annual Meeting	Tech Transfer	Providence, Rhode Island	3 (Program Director and Coordinators)	Included in above cost.
November 12-13, 2020	NEIWPCC All Staff meeting	PEP Director, NYS Coordinator and PEP Coordinator attend NEIWPCC All Staff meeting	Bedford, MA	3 (Program Director and Coordinators)	\$400 each; \$1,200 total
February/March TBD, 2021	NEP meeting - EPA HQ	Tech Transfer	Washington, DC	1 (Program Director)	\$1,500
March 25-26, 2021	NEIWPCC All Staff meeting	PEP Director, NYS Coordinator and PEP Coordinator attend NEIWPCC All Staff meeting	Bedford, MA	3 (Program Director and Coordinators)	\$400 each; \$1,200 total
September TBD, 2021	Annual staff performance appraisals	Conduct annual performance appraisals for PEP-NEIWPCC staff	Riverhead, NY East Setauket, NY	1 (NEIWPCC Project Manager)	\$500

Trips Taken During FFY2019:

Date	Meeting/Event	Purpose	Destination	Number of Staff	Final Cost
October 1-4, 2019	NEP	Tech Transfer	Dewy Beach, DE	2 (NYS Coordinator and PEP Coordinator)	\$600 each; \$1,200 total
September 30, October 1-4, 2019	ANEP & NEP	Tech Transfer	Dewy Beach, DE	1 (Program Director)	\$850

Trips Expected to Occur Between Date of Submission and End of FFY2019:

Approximate Date	Meeting/Event	Purpose	Destination	Number of Staff	Estimated Cost
September, TBD, 2020	Annual staff performance appraisals	Conduct annual performance appraisals for PEP-NEIWPCC staff	Riverhead, NY and East Setauket, NY	1 (NEIWPCC Project Manager)	\$500

Appendix A: Detailed Budget

See attached excel budget.

Appendix B: Match Documentation

See attached files. **[April 2020 DRAFT]**

does not include match documentation yet, match amount is not final]

DRAFT Budget**Peconic Estuary Partnership****Base Project and Budget Period: 10/01/2020-09/30/2023****Contract Period 10/01/2020-09/30/2023****Revised 3/30/2020**

	Total		Total
Personnel	Hrs	Rate	\$258,739
Division Director (MA)	30	\$85.40	\$2,562
Information Officer (MA)	20	\$44.33	\$887
Environmental Analyst (MA)	300	\$44.33	\$13,299
Program Director (NY)	1,490	\$62.41	\$92,991
Environmental Analyst (NY)	1,490	\$50.00	\$74,500
Environmental Analyst (NY)	1,490	\$50.00	\$74,500
Fringe		Notes (if any)	\$99,698
Full time (39.0% of MA Personnel)			\$6,532
Full time (38.5% of NY Personnel)			\$93,166
Travel		Notes (if any)	\$0
Equipment		Notes (if any)	\$0
Supplies		Notes (if any)	\$0
Contracts		Notes (if any)	\$102,000
Contract 1 (Under \$100,000)			
Contract 3 (Over \$100,000)		Outreach & Ed	\$102,000
Other		Notes (if any)	\$3,750
Printing & Production			\$500
Website Development/Services			\$1,000
Conferences and meetings			\$1,000
Workshop (Attendee meal)			\$0
Conference 1 (Attendee meal)			\$0
Conference 2 (Attendee meal)			\$0
Conference & Meeting Registration			\$0
Telephone			\$500
Advertising			\$750
Computer Support			\$0
Total Direct			\$464,187
Indirect (18.00% of Total Direct less: subawards over \$100,000, equipment, rental space, and participant support costs)			\$65,194
Total Costs			\$529,380
Match Required (100%)			\$529,380
Total Project			\$1,058,760
FTE's			2.47

Personnel: NEIWPCC does not provide annual salary and other confidential information.

Fringe Benefits: Costs for health and accident insurance, FICA, unemployment, worker's compensation and retirement are based on historical data and are calculated, annually, as a percentage of personnel costs. The fringe rates for NEIWPCC full time and part time staff in NY and MA are 38.5% and 39.0%, respectively, as of the date of submission. NEIWPCC cannot guarantee these rates beyond the base period.

Travel: Costs are charged on an actual cost basis, or on a per diem basis in lieu of actual costs incurred, or on a combination of the two, the method used is applied to an entire trip, and results in charges consistent with those normally allowed in like circumstances, per 2 CFR §200. NEIWPCC travel policies include actual mileage reimbursement at the federal IRS rate.

Indirect Cost: The Commission utilizes 2 CFR § 200 to determine its indirect rate and submits the appropriate paperwork to EPA HQs. The rate is approved annually by the NEIWPCC Executive Committee and Commission and EPA HQs. NEIWPCC's current approved indirect rate is 18.00% for FY 2020. NEIWPCC applies its approved indirect rate throughout the life of the grant and thus indirect charges may fluctuate. NEIWPCC does not charge indirect on individual contractual projects and subawards of \$100,000 or greater, office rent, participant support costs, or equipment. The indirect rate may change in subsequent fiscal years. NEIWPCC will charge its approved rate at the time that work occurs.